Report on the status of waterbird populations in the AEWA area for the period 2013-2018

Through Resolution 7.1, the 7th Session of the Meeting of the Parties (MOP7) to AEWA adopted, amongst other things, the format for national reports on the implementation of AEWA for the period 2018-2020 as presented in document AEWA/MOP 7.17.

Document AEWA/MOP 7.17 envisages a module on the status of native and non-native waterbird species, but it was agreed that this module will be developed by the Technical Committee and approved by the Standing Committee in early 2019. The format for reporting on Article 12 of the European Union's Birds Directive (EU BD) for the period 2013-2018 was agreed as the basis for this module, while focusing only on some fields of the EU reporting template, notably those in Annex B, chapters 1-5.

The alignment of the AEWA population status reporting module with the EU BD Article 12 template for 2013-2018 will, on the one hand, allow reporting of all necessary information by the AEWA Contracting Parties needed for the assessment of the status of AEWA populations, and, on the other hand, will require the EU members states that are Contracting Parties to AEWA to report only once their national data for the native species listed in Annex 2 of AEWA, providing that access to the EU BD Article 12 national reports will be granted to the UNEP/AEWA Secretariat. If any EU Member State with overseas territories within the AEWA area has not reported on the AEWA-listed species in those territories, data should be submitted through the AEWA reporting process.

Unlike the EU BD Article 12 template, the AEWA population status reporting module should request similar type of information for non-native waterbird species as for native species. The EU members states will therefore, like all other AEWA Contracting Parties, need to fill out the AEWA population status reporting module with respect to the status of the non-native waterbird species occurring in their territories, including overseas territories within the AEWA area.

In order to be able to use the national data reported by the AEWA Contracting Parties for the 8th edition of the AEWA Conservation Status Report, this reporting module has been set up separately in the CMS Family Online Reporting System and the deadline for submission of the national population status reports has been set by MOP7 at 30 June 2020.

1. GENERAL INFORMATION

Name of reporting Contracting Party

››› HUNGARY

Date of entry into force of AEWA in the Contracting Party

››› 01 Mar 2003

Report on the status of waterbird populations in the AEWA area for the period 2013-2018 [Contracting Party: Hungary]

2. INSTITUTIONAL INFORMATION

Please indicate the Designated National Respondent (DNR) and the other contributors to the Report on the population size and trend of AEWA-listed (native) and non-native waterbird species in the Agreement area for the period 2013-2018.

Name and title of the DNR
››› Mr. Zoltan Czirak, national focal point of AEWA

 Affiliation (institution, department, organisation)
››› Ministry of Agriculture

Mailing address - Street and number
››› Kossuth tér 11.

Postal code
››› 1055

City
››› Budapest

Country
››› HUNGARY

Telephone
››› +36-30-650-1945

E-mail
››› zoltan.czirak@am.gov.hu

Website
››› www.termeszetvedelem.hu

3. AEWA-LISTED (NATIVE) WATERBIRD SPECIES

Please report on each species in the drop-down menu. This list contains all AEWA waterbird species that occur in your country. Should you identify any omissions, please contact the UNEP/AEWA Secretariat.

Hungary
White-headed Duck / Oxyura leucocephala

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Mute Swan / Cygnus olor

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available

☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2013-2018

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	300
Maximum	450
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
National Park Directorates' databases

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2008-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	300
Maximum	450
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Albert, L., Hajtó, L. and Szinai., P. (2004): Status of the Mute Swan (Cygnus olor)
in Hungary at the beginning of the 21st Century. Aquila 111: 19-41.MME

Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ No

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ Non-breeding/wintering numbers estimate is available

Latest non-breeding/wintering numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2013-2018

Numbers [Individuals. Raw numbers, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	1500
Maximum	3000
Best single value	

Type of estimate
☑ Best estimate

Method used for non-breeding/wintering numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Hungarian Waterfowl Monitoring database
Pellinger A., Hadarics T., Tatai S. (2017): A bütykös hattyú (Cygnus olor)
áttelelő állománya a Kisalföldön 2016/2017 telén = Wintering population of
Mute Swans (Cygnus olor) on the Little Hungarian Plain in the Winter of
2016/2017. Rence 2, p. 99-109.
http://www.birding.hu/

You have attached the following Web links/URLs to this answer.

http://
http://www.birding.hu/ - www.birding.hu/

Previous non-breeding/wintering numbers estimate

Please indicate whether a previous estimate of the non-breeding/wintering numbers is

available

☑ No previous non-breeding/wintering numbers estimate is available

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases
http://map.mme.hu/maps/map2

You have attached the following Web links/URLs to this answer.

http://map.mme.hu/maps/map2 - http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	500

Maximum	700
Best single value	700

Method used for long-term breeding numbers trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases
http://map.mme.hu/maps/map2

You have attached the following Web links/URLs to this answer.

http://map.mme.hu/maps/map2 - http://map.mme.hu/maps/map2

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ Yes

Is short-term and/or long-term non-breeding/wintering numbers trend estimate available?
☑ Yes

Please indicate whether estimate of the non-breeding/wintering numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Non-breeding/wintering numbers trend estimate is available for:
☑ Short-term trend

Short-term non-breeding/wintering numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and

indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term non-breeding/wintering numbers trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2017): Magyar Vízivad Közlemény No. 29. Soproni Egyetem Kiadó,
304 p.
Hungarian Waterfowl Monitoring database

Long-term non-breeding/wintering numbers trend estimate

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2013-2018

Range size [Total surface area of the range size in km2]
››› 29214

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://map.mme.hu/maps/map2

You have attached the following Web links/URLs to this answer.

http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term range trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases
http://map.mme.hu/maps/map2

You have attached the following Web links/URLs to this answer.

http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	500
Maximum	700
Best single value	700

Method used for long-term range trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases
http://map.mme.hu/maps/map2

You have attached the following Web links/URLs to this answer.

http://map.mme.hu/maps/map2

Tundra Swan / Cygnus columbianus

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Greylag Goose / Anser anser

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2013-2018

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	3300
Maximum	4800
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates' databases
"A közösségi jelentőségű természeti értékek hosszú távú megőrzését és
fejlesztését, valamint az EU Biológiai Sokféleség Stratégia 2020
célkitűzéseinek hazai szintű megvalósítását megalapozó stratégiai vizsgálatok"
programme

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2008-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	2100
Maximum	3300
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates databases
Breeding bird (MME RTM) database.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ Non-breeding/wintering numbers estimate is available

Latest non-breeding/wintering numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2015-2018

Numbers [Individuals. Raw numbers, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	20000
Maximum	45000
Best single value	

Type of estimate
☑ Best estimate

Method used for non-breeding/wintering numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2017): Magyar Vízivad Közlemény No. 29. Soproni Egyetem Kiadó,
304 p.
Hungarian Waterfowl Monitoring database
National Park Directorates' databases

Previous non-breeding/wintering numbers estimate

Please indicate whether a previous estimate of the non-breeding/wintering numbers is available
☑ No previous non-breeding/wintering numbers estimate is available

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Hungarian Waterfowl Monitoring database 2015-2018: 13000-16000. I
considered only the January data. Assuming that a large part of geese do not
necessarily occur on good wetlands, I corrected the value upwards.

Population trend

Breeding numbers

Report on the status of waterbird populations in the AEWA area for the period 2013-2018 [Contracting Party: Hungary]

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Increasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	45
Maximum	57
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	500
Maximum	560
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]

››› Expert opinions
Magyar, G., Hadarics, T., Waliczky, Z., Schmidt, A., Nagy, T. & Bankovics, A.
(1998): Nomenclator avium Hungariae. Magyarország madarinak névjegyzéke.
KTM Természetvédelmi Hivatal Madártani Intézete – Magyar Madártani és
Természetvédelmi Egyesület – Winter Fair, Budapest – Szeged. P. 202.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Short-term trend is increasing. According to the former national report
(2013), the baseline was 2007 (2100-3300), to what the current values (3300-
4800) were compared to.
Long-term trend is increasing. According to the Magyar et al. (1998) and
Ecsedi (2004), the baseline was 1980 (500-800), to what the current values
(3300-4800) were compared to.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ Yes

Is short-term and/or long-term non-breeding/wintering numbers trend estimate available?
☑ Yes

Please indicate whether estimate of the non-breeding/wintering numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Non-breeding/wintering numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term non-breeding/wintering numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Increasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	13
Maximum	36
Best single value	

Method used for short-term non-breeding/wintering numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetemi
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database
National Park Directorates' databases

Long-term non-breeding/wintering numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1988-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	478
Maximum	594
Best single value	

Method used for long-term non-breeding/wintering numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2006): A vonuló vízivad populációk fenntartásának alapjai
Magyarországon. Doktori Értekezés. Mellékletek, 305 p.
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetemi
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database
National Park Directorates' databases

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Short-term trend is based on Hungarian Waterfowl Monitoring database 2007-
2018. I considered only the January data. Hungarian Waterfowl Monitoring
database 2015-2018: 15000-18000. Between 2007 and 2018 there is a
continuous and slight increase. The baseline was 2007, when 13224 greylag
goose wintered in the country. This value (13224) was the baseline, to what

the current Hungarian Waterfowl Monitoring database values (15000-18000)
were compared to.
Long-term trend is increasing. According to Faragó's study (2016) the baseline
was 1988 (2592), to what the current Hungarian Waterfowl Monitoring
database values (15000-18000) were compared to.

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2013-2018

Range size [Total surface area of the range size in km2]
››› 20280

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates' databases
http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases

http://map.mme.hu/maps/map2

You have attached the following Web links/URLs to this answer.

http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	20
Maximum	30
Best single value	30

Method used for long-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Magyar, G., Hadarics, T., Waliczky, Z., Schmidt, A., Nagy, T. & Bankovics, A.
(1998): Nomenclator avium Hungariae. Magyarország madarinak névjegyzéke.
KTM Természetvédelmi Hivatal Madártani Intézete – Magyar Madártani és
Természetvédelmi Egyesület – Winter Fair, Budapest – Szeged. P. 202.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases
http://map.mme.hu/

You have attached the following Web links/URLs to this answer.

http://map.mme.hu/

Bean Goose / Anser fabalis

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ Non-breeding/wintering numbers estimate is available

Latest non-breeding/wintering numbers estimate

Year or period [Year or period when numbers were last determined]

››› 2015-2018

Numbers [Individuals. Raw numbers, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	500
Maximum	3000
Best single value	

Type of estimate
☑ Best estimate

Method used for non-breeding/wintering numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2017): Magyar Vízivad Közlemény No. 29. Soproni Egyetem Kiadó,
304 p.
Hungarian Waterfowl Monitoring database
National Park Directorates' databases

Previous non-breeding/wintering numbers estimate

Please indicate whether a previous estimate of the non-breeding/wintering numbers is available
☑ Previous non-breeding/wintering numbers estimate is available

Year or period [Year or period when numbers were previously determined]
››› 2011-2012

Numbers [Individuals. Raw numbers, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	5000
Maximum	13000
Best single value	

Type of estimate
☑ Best estimate

Method used for non-breeding/wintering numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Faragó, S. (2012): Results of Geese Monitoring in Hungary in the season
2011/2012. Hungarian Waterfowl Publications 22: 11-50

Changes in the non-breeding/wintering numbers estimates

Has there been a change between the previous and the latest non-breeding/wintering numbers estimate?
☑ Yes

Please clarify the nature of change [More than one option from the list below is possible]

☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ Yes

Is short-term and/or long-term non-breeding/wintering numbers trend estimate available?
☑ Yes

Please indicate whether estimate of the non-breeding/wintering numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Non-breeding/wintering numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term non-breeding/wintering numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Decreasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	88
Maximum	97
Best single value	

Method used for short-term non-breeding/wintering numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetem
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database
National Park Directorates' databases

Long-term non-breeding/wintering numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1986-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	97
Maximum	99
Best single value	

Method used for long-term non-breeding/wintering numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó, S. (2006): A vonuló vízivad populációk fenntartásának alapjai
Magyarországon. Doktori Értekezés. Mellékletek, 305 pp.
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetem
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database
National Park Directorates' databases

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Short-term trend is based on Hungarian Waterfowl Monitoring database 2007-
2018. I considered only the January data. Hungarian Waterfowl Monitoring
database 2015-2018: 400-1500. Between 2007 and 2018 the trend is
decreasing. The baseline was 2007, when 12800 bean goose wintered in the
country. This value (12800) was the baseline, to what
the current Hungarian Waterfowl Monitoring database values (400-1500)
were compared to.
Long-term trend is decreasing. According to Faragó's study (2016) the
baseline was 1986 (54829), to what the current Hungarian Waterfowl
Monitoring database values (400-1500) were compared to.

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Greater White-fronted Goose / Anser albifrons

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ Non-breeding/wintering numbers estimate is available

Latest non-breeding/wintering numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2015-2018

Numbers [Individuals. Raw numbers, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	120000
Maximum	200000
Best single value	

Type of estimate
☑ Best estimate

Method used for non-breeding/wintering numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetem
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database
National Park Directorates' databases

Previous non-breeding/wintering numbers estimate

Please indicate whether a previous estimate of the non-breeding/wintering numbers is available
☑ Previous non-breeding/wintering numbers estimate is available

Year or period [Year or period when numbers were previously determined]
››› 2011-2012

Numbers [Individuals. Raw numbers, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	120000
Maximum	200000
Best single value	

Type of estimate
☑ Best estimate

Method used for non-breeding/wintering numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
›› Faragó, S. (2012): Results of Geese Monitoring in Hungary in the season
2011/2012. Hungarian Waterfowl Publications 22: 11-50.
National Park Directorates' databases

Changes in the non-breeding/wintering numbers estimates

Has there been a change between the previous and the latest non-breeding/wintering numbers estimate?
☑ No

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ Yes

Is short-term and/or long-term non-breeding/wintering numbers trend estimate available?
☑ Yes

Please indicate whether estimate of the non-breeding/wintering numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Non-breeding/wintering numbers trend estimate is available for:
☑ Short-term trend

☑ Long-term trend

Short-term non-breeding/wintering numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term non-breeding/wintering numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetem
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database
National Park Directorates' databases

Long-term non-breeding/wintering numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1987-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	168
Maximum	544
Best single value	

Method used for long-term non-breeding/wintering numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó, S. (2006): A vonuló vízivad populációk fenntartásának alapjai
Magyarországon. Doktori Értekezés. Mellékletek, 305 pp.
Hungarian Waterfowl Monitoring database
National Park Directorates' databases

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available

››› Short-term trend is based on Hungarian Waterfowl Monitoring database 2007-
2018. I considered only the January data. It seems the trend is stable.
Long-term trend is increasing. According to Faragó's study (2016) the baseline
was 1987 (27954), to what the current Hungarian Waterfowl Monitoring
database values (75000-180000) were compared to.

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Lesser White-fronted Goose / Anser erythropus

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ Passage numbers estimate is available [Passage numbers are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

Latest passage numbers estimate

Year or period
[Year or period when numbers were last determined]
››› 2013-2018

Passage numbers
[Individuals. Raw numbers, i.e. not rounded. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	100
Maximum	200
Best single value	

Type of estimate
☑ Best estimate

Method used for passage numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Hortobágy National Park Directorate's database
National Park Directorates' databases
http://www.termeszetvedelem.hu/_user/browser/File/FajmegorzesiTervek/L
WfG_NAP_HUN_pdf_last_2014_02_11.pdf
http://www.termeszetvedelem.hu/_user/browser/File/FajmegorzesiTervek/Ki
s_lilik_ENG.pdf

Previous passage numbers estimate

Please indicate whether a previous estimate of passage numbers is available
☑ No previous passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ Non-breeding/wintering numbers estimate is available

Latest non-breeding/wintering numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2015-2018

Numbers [Individuals. Raw numbers, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	20
Maximum	30
Best single value	

Type of estimate
☑ Best estimate

Method used for non-breeding/wintering numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2017): Vízivad Közlemények No. 29. Soproni Egyetem Kiadó, 304 p.
Hortobágy National Park Directorate's database
Hungarian Waterfowl Monitoring database
http://www.termeszetvedelem.hu/_user/browser/File/FajmegorzesiTervek/L
WfG_NAP_HUN_pdf_last_2014_02_11.pdf
http://www.termeszetvedelem.hu/_user/browser/File/FajmegorzesiTervek/Ki
s_lilik_ENG.pdf
http://www.birding.hu/

Previous non-breeding/wintering numbers estimate

Please indicate whether a previous estimate of the non-breeding/wintering numbers is available
☑ No previous non-breeding/wintering numbers estimate is available

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ Yes

Passage numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term passage numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Ecsedi Z. (2004): A Hortobágy madárvilága. Hortobágy Természetvédelmi
Egyesület, Winter Fair, Balmazújváros-Szeged, 602 p.
Expert opinions
Faragó S. (2017): Vízivad Közlemények No. 29. Soproni Egyetem Kiadó, 304 p.
Hortobágy National Park Directorate's database
Hungarian Waterfowl Monitoring database
National Park Directorates' database
http://www.termeszetvedelem.hu/_user/browser/File/FajmegorzesiTervek/L
WfG_NAP_HUN_pdf_last_2014_02_11.pdf
http://www.termeszetvedelem.hu/_user/browser/File/FajmegorzesiTervek/Ki
s_lilik_ENG.pdf

Long-term passage numbers trend estimate

Trend period [since ca. 1980or a period as close as possible to that]
››› 1985-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Report on the status of waterbird populations in the AEWA area for the period 2013-2018 [Contracting Party: Hungary]

Minimum	11
Maximum	66
Best single value	

Method used for long-term trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Ecsedi Z. (2004): A Hortobágy madárvilága. Hortobágy Természetvédelmi
Egyesület, Winter Fair, Balmazújváros-Szeged, 602 p.
Expert opinions
Faragó S. (2006): A vonuló vízivad populációk fenntartásának alapjai
Magyarországon. Doktori Értekezés. Mellékletek. 305 p.
Faragó S. (2017): Vízivad Közlemények No. 29. Soproni Egyetem Kiadó, 304 p.
Hortobágy National Park Directorate's database
Hungarian Waterfowl Monitoring database
http://www.termeszetvedelem.hu/_user/browser/File/FajmegorzesiTervek/L
WfG_NAP_HUN_pdf_last_2014_02_11.pdf
http://www.termeszetvedelem.hu/_user/browser/File/FajmegorzesiTervek/Ki
s_lilik_ENG.pdf

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ Yes

Is short-term and/or long-term non-breeding/wintering numbers trend estimate available?
☑ Yes

Please indicate whether estimate of the non-breeding/wintering numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Non-breeding/wintering numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term non-breeding/wintering numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term non-breeding/wintering numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2017): Vízivad Közlemények No. 29. Soproni Egyetem Kiadó, 304 p.
Hortobágy National Park Directorate's database
Hungarian Waterfowl Monitoring database
http://www.termeszetvedelem.hu/_user/browser/File/FajmegorzesiTervek/L
WfG_NAP_HUN_pdf_last_2014_02_11.pdf
http://www.termeszetvedelem.hu/_user/browser/File/FajmegorzesiTervek/Ki
s_lilik_ENG.pd
http://www.birding.hu/

Long-term non-breeding/wintering numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1987-2018

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	87
Maximum	89
Best single value	

Method used for long-term non-breeding/wintering numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Ecsedi Z. (2004): A Hortobágy madárvilága. Hortobágy Természetvédelmi
Egyesület, Winter Fair, Balmazújváros-Szeged, 602 p.
Expert opinions
Faragó S. (2006): A vonuló vízivad populációk fenntartásának alapjai
Magyarországon. Doktori Értekezés. Mellékletek. 305 p.
Faragó S. (2017): Vízivad Közlemények No. 29. Soproni Egyetem Kiadó, 304 p.
Hortobágy National Park Directorate's database
Hungarian Waterfowl Monitoring database
http://www.termeszetvedelem.hu/_user/browser/File/FajmegorzesiTervek/L
WfG_NAP_HUN_pdf_last_2014_02_11.pdf
http://www.termeszetvedelem.hu/_user/browser/File/FajmegorzesiTervek/Ki
s_lilik_ENG.pd

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Short-term trend is based on Hungarian Waterfowl Monitoring database 2007-
2018 + Hortobágy National Park Directorate's database + birding.hu on-line
database. I considered only the January data. The values are strongly
fluctuating .
Long-term trend is based on Hortobágy National Park Directorate's database
+ Faragó (2006). The baseline was 1987, when 187 lwfg was counted in the
country. This value (187) was the baseline, to what the current values (20-30)
were compared to. Faragó's study (2017) also determined long-term decline.

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Long-tailed Duck / Clangula hyemalis

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ Non-breeding/wintering numbers estimate is available

Latest non-breeding/wintering numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2013-2018

Numbers [Individuals. Raw numbers, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	10
Maximum	20
Best single value	

Type of estimate
☑ Best estimate

Method used for non-breeding/wintering numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› www.birding.hu

Previous non-breeding/wintering numbers estimate

Please indicate whether a previous estimate of the non-breeding/wintering numbers is available
☑ No previous non-breeding/wintering numbers estimate is available

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans

and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ Yes

Is short-term and/or long-term non-breeding/wintering numbers trend estimate available?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Common Scoter / Melanitta nigra

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ Non-breeding/wintering numbers estimate is available

Latest non-breeding/wintering numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2013-2018

Numbers [Individuals. Raw numbers, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	5
Maximum	20
Best single value	

Type of estimate
☑ Best estimate

Method used for non-breeding/wintering numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details,

etc.]
››› www.birding.hu

Previous non-breeding/wintering numbers estimate

Please indicate whether a previous estimate of the non-breeding/wintering numbers is available
☑ No previous non-breeding/wintering numbers estimate is available

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ Yes

Is short-term and/or long-term non-breeding/wintering numbers trend estimate available?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Common Goldeneye / Bucephala clangula

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ Non-breeding/wintering numbers estimate is available

Latest non-breeding/wintering numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2015-2018

Numbers [Individuals. Raw numbers, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	8000
Maximum	10000
Best single value	

Type of estimate
☑ Best estimate

Method used for non-breeding/wintering numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetem
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database
National Park Directorates' databases

Previous non-breeding/wintering numbers estimate

Please indicate whether a previous estimate of the non-breeding/wintering numbers is available
☑ Previous non-breeding/wintering numbers estimate is available

Year or period [Year or period when numbers were previously determined]
››› 2008-2012

Numbers [Individuals. Raw numbers, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	12000
Maximum	18000
Best single value	

Type of estimate
☑ Best estimate

Method used for non-breeding/wintering numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates databases. Faragó, S. (2012): Results of Hungarian
Waterfowl Monitoring in the season 2011/2012. Hungarian Waterfowl

Changes in the non-breeding/wintering numbers estimates

Has there been a change between the previous and the latest non-breeding/wintering numbers estimate?
☑ No

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ Yes

Is short-term and/or long-term non-breeding/wintering numbers trend estimate available?
☑ Yes

Please indicate whether estimate of the non-breeding/wintering numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Non-breeding/wintering numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term non-breeding/wintering numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term non-breeding/wintering numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetemi
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database

Long-term non-breeding/wintering numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1996-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	35
Maximum	65
Best single value	

Method used for long-term non-breeding/wintering numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2006): A vonuló vízivad populációk fenntartásának alapjai
Magyarországon. Doktori Értekezés. Mellékletek, 305 p.
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetemi
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database
National Park Directorates' databases

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› In the short-term trend, I checked the Hungarian Waterfowl Monitoring
database values between 2007 and 2018. I considered only January data. The
values are strongly fluctuating.
Long-term trend is decreasing. According to Faragó's study (2016) the
baseline was 1996 (3997), to what the current Hungarian Waterfowl
Monitoring database values (1400-2600) were compared to. I considered only
January data. Faragó's study (2017) also determined long-term decline.

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Smew / Mergellus albellus

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ Non-breeding/wintering numbers estimate is available

Latest non-breeding/wintering numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2015-2018

Numbers [Individuals. Raw numbers, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	500
Maximum	1000
Best single value	

Type of estimate
☑ Best estimate

Method used for non-breeding/wintering numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetem
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database
National Park Directorates' databases

Previous non-breeding/wintering numbers estimate

Please indicate whether a previous estimate of the non-breeding/wintering numbers is available
☑ Previous non-breeding/wintering numbers estimate is available

Year or period [Year or period when numbers were previously determined]
››› 2008-2012

Numbers [Individuals. Raw numbers, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	600
Maximum	1500
Best single value	

Type of estimate
☑ Best estimate

Method used for non-breeding/wintering numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates databases
Faragó, S. (2012): Results of Hungarian Waterfowl Monitoring in the season
2011/2012. Hungarian Waterfowl Publications 22: 62-284

Changes in the non-breeding/wintering numbers estimates

Has there been a change between the previous and the latest non-breeding/wintering numbers estimate?
☑ Yes

Please clarify the nature of change [More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to the use of different method

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ Yes

Is short-term and/or long-term non-breeding/wintering numbers trend estimate available?
☑ Yes

Please indicate whether estimate of the non-breeding/wintering numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Non-breeding/wintering numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term non-breeding/wintering numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Decreasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	0
Maximum	68
Best single value	

Method used for short-term non-breeding/wintering numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetem
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database
National Park Directorates' databases

Long-term non-breeding/wintering numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1996-2018

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	29
Maximum	82
Best single value	

Method used for long-term non-breeding/wintering numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]

››› Expert opinions
Faragó S. (2006): A vonuló vízivad populációk fenntartásának alapjaibMagyarországon. Doktori Értekezés. Mellékletek, 305 p.
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetemi Kiadó, 304 p.
Hungarian Waterfowl Monitoring database
National Park Directorates' databases

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Short-term trend is based on Hungarian Waterfowl Monitoring database 2007-2018. I considered only the January data. Hungarian Waterfowl Monitoring database 2015-2018: 50-200. Between 2007 and 2018 the trend is decreasing. The baseline was 2007, when 154 smew wintered in the country. This value (154) was the baseline, to what the current Hungarian Waterfowl Monitoring database values (50-200) were compared to. Faragó's study (2017) also determined short-term decline.
Long-term trend is decreasing. According to Faragó's study (2016) the baseline was 1996 (282), to what the current Hungarian Waterfowl Monitoring database values (50-200) were compared to. Faragó's study (2017) also determined long-term decline.

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Goosander / Mergus merganser

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2013-2018

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	2
Maximum	10
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates' databases

http://www.birding.hu/

You have attached the following Web links/URLs to this answer.

http://www.birding.hu/

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2004-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	1
Maximum	1
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. p. 278.
Annual reports of the Hungarian Checklist and Rarities Committee.
Barabás, L. (2013): Breeding distribution of Hungarian Duck species. Hungarian
Waterfowl Publications 23: 79-120.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available

☑ Non-breeding/wintering numbers estimate is available

Latest non-breeding/wintering numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2015-2018

Numbers [Individuals. Raw numbers, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	1200
Maximum	1500
Best single value	

Type of estimate

☑ Best estimate

Method used for non-breeding/wintering numbers estimate

☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetem
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database

Previous non-breeding/wintering numbers estimate

Please indicate whether a previous estimate of the non-breeding/wintering numbers is available

☑ No previous non-breeding/wintering numbers estimate is available

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available

››› Hungarian Waterfowl Monitoring database 2015-2018: 500-1000. I considered only the January data. Considering that many parts of Danube river where the species wintered are not covered by this program, I corrected the value upwards. I have also compared to wintering smews, therefore I raised the values independently from the previous results.

Population trend

Breeding numbers

Please indicate whether:

☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available

Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Increasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	100
Maximum	900
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278.
Annual reports of the Hungarian Checklist and Rarities Committee.
Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Expert opinions
National Park Directorates' databases

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	100
Maximum	900
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. p. 278.
Annual reports of the Hungarian Checklist and Rarities Committee.
Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Expert opinions
National Park Directorates' databases

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Short-term trend is increasing. According to MME Nomenclator (2008) and
Hungarian National Report (2013) the baseline was 2007 (1-1), to what the
current values (2-10) were compared to.
First breeding in 2004: MME Nomenclator Bizottság (2008): Magyarország
madarainak névjegyzéke. Nomenclator avium Hungariae. Magyar Madártani
és Természetvédelmi Egyesület, Budapest. P. 278. Annual reports of the
Hungarian Checklist and Rarities Committee.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ Yes

Is short-term and/or long-term non-breeding/wintering numbers trend estimate available?
☑ Yes

Please indicate whether estimate of the non-breeding/wintering numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Non-breeding/wintering numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term non-breeding/wintering numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Increasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	260

Maximum	619
Best single value	

Method used for short-term non-breeding/wintering numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetem
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database

Long-term non-breeding/wintering numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1996-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	279
Maximum	658
Best single value	

Method used for long-term non-breeding/wintering numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2006): A vonuló vízivad populációk fenntartásának alapjai
Magyarországon. Doktori Értekezés. Mellékletek, 305 p.
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetemi
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database
National Park Directorates' databases

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Short-term trend is based on Hungarian Waterfowl Monitoring database 2007-
2018. I considered only the January data. Hungarian Waterfowl Monitoring
database 2015-2018: 500-1000. Between 2007 and 2018 there is a
continuous and slight increase. The baseline was 2007, when 139 common
merganser wintered in the country. This value (139) was the baseline, to what
the current Hungarian Waterfowl Monitoring database values (500-1000)
were compared to.
Long-term trend is increasing. According to Faragó's study (2016) the baseline
was 1996 (132), to what the current Hungarian Waterfowl Monitoring
database values (500-1000) were compared to.

Breeding range size and trend

Does the species occur in the country during the breeding season?

☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 703

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Increasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	100
Maximum	700
Best single value	

Method used for short-term range trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and

indicate them as such.]

Minimum	100
Maximum	900
Best single value	900

Method used for long-term range trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. p. 278.
Annual reports of the Hungarian Checklist and Rarities Committee.
Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
http://map.mme.hu/maps/map2

Red-breasted Merganser / Mergus serrator

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ Non-breeding/wintering numbers estimate is available

Latest non-breeding/wintering numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2013-2018

Numbers [Individuals. Raw numbers, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	30
Maximum	50
Best single value	

Type of estimate

☑ Best estimate

Method used for non-breeding/wintering numbers estimate
☑ Based mainly on expert opinion with very limited data

Previous non-breeding/wintering numbers estimate

Please indicate whether a previous estimate of the non-breeding/wintering numbers is available
☑ No previous non-breeding/wintering numbers estimate is available

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ Yes

Is short-term and/or long-term non-breeding/wintering numbers trend estimate available?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Common Shelduck / Tadorna tadorna

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2013-2018

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	15
Maximum	38
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
National Park Directorates' databases

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2010-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	5
Maximum	10
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species. Hungarian
Waterfowl Publications 23: 79-120.
MME Nomenclator Bizottság (2008) Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. p. 278.
Breeding bird (MME RTM) database.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ Non-breeding/wintering numbers estimate is available

Latest non-breeding/wintering numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2013-2018

Numbers [Individuals. Raw numbers, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	100
Maximum	200
Best single value	

Type of estimate
☑ Best estimate

Method used for non-breeding/wintering numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Faragó

Previous non-breeding/wintering numbers estimate

Please indicate whether a previous estimate of the non-breeding/wintering numbers is available
☑ No previous non-breeding/wintering numbers estimate is available

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Increasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	200
Maximum	280
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278.
National Park Directorates' databases
http://map.mme.hu/maps/map2
http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel
entes_2013_anyagai/Tadorna_tadorna.pdf

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1996-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	1400
Maximum	3700
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]

››› Expert opinion
Hadarics T. (1996): Bütykös ásólúd (Tadorna tadorna) fészkelése
Magyarországon. Breeding of Shelduck in Hungary. Túzok 1. (3), p.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278.
National Park Directorates' databases
http://map.mme.hu/
http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel
entes_2013_anyagai/Tadorna_tadorna.pdf

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Short-term trend is increasing. According to MME Nomenclator Bizottság
(2008) and national report (2013) the baseline was 2007 (5-10), to what the
current values (15-38) were compared to.
First breeding in 1996. Long-term trend is increasing.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ Yes

Is short-term and/or long-term non-breeding/wintering numbers trend estimate available?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2013-2018

Range size [Total surface area of the range size in km2]
››› 913

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Increasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	50
Maximum	100
Best single value	

Method used for short-term range trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278.
National Park Directorates' databases
http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1996-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	100
Maximum	100

Best single value	100

Method used for long-term range trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Hadarics T. (1996): Bütykös ásólúd (Tadorna tadorna) fészkelése
Magyarországon. Breeding of Shelduck in Hungary. Túzok 1. (3), p.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278.
National Park Directorates' databases
http://map.mme.hu/maps/map2
http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel
entes_2013_anyagai/Tadorna_tadorna.pdf

Red-crested Pochard / Netta rufina

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2013-2018

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	300
Maximum	500
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates' databases
"A közösségi jelentőségű természeti értékek hosszú távú megőrzését és
fejlesztését, valamint az EU Biológiai Sokféleség Stratégia 2020
célkitűzéseinek hazai szintű megvalósítását megalapozó stratégiai vizsgálatok"
programme

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period

[Year or period when numbers were previously determined]
››› 2008-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	80
Maximum	100
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species. Hungarian
Waterfowl Publications 23: 79-120.
Breeding bird (MME RTM) database.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› National Park Directorates' databases + data collected under the "A közösségi
jelentőségű természeti értékek hosszú távú megőrzését és fejlesztését,
valamint az EU Biológiai Sokféleség Stratégia 2020 célkitűzéseinek hazai szintű
megvalósítását megalapozó stratégiai vizsgálatok" programme.
In the frame of the "A közösségi jelentőségű természeti értékek hosszú távú
megőrzését és fejlesztését, valamint az EU Biológiai Sokféleség Stratégia 2020
célkitűzéseinek hazai szintű megvalósítását megalapozó stratégiai vizsgálatok"
programme a new monitoring program was started in 2017. Several sample
areas were selected where the red-crested pochard could be breed.
Experienced observers surveyed these areas and tried to prove that this
species breed in these areas. This and the "Madáratlasz Térképezés"
programmes and the national park directorates databases are the most
important survey program of this species. According to the National Park
Directorates' databases the Hungarian population is 257-414 breeding pairs.
According to the mentioned above programmes I corrected the value upwards.

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Increasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	275
Maximum	400
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1983-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	29900
Maximum	49900
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Expert opinions
Haraszthy László (szerk.) (2000): Magyarország madarai. Mezőgazda Kiadó,
Budapest, 448.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Short-term trend is increasing. According to MME Nomenclator Bizottság
(2008) and 2013 naional report the baseline was 2007 (80-100), to what the
current values (300-500) were compared to.
Long-term trend is increasing. According to Barabás (2013) and Haraszthy
(2000) the baseline was 1980 (0), to what the current values (300-500) were
compared to.
First breeding in 1983. Kárpáti L. (1987): Üstökösréce (Netta rufina) fészkelése
a Fertő hazai oldalán. Madártani Tájékoztató 1987 (január-június), p. 29-31.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?

☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2013-2018

Range size [Total surface area of the range size in km2]
››› 5062

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Increasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	20
Maximum	30
Best single value	

Method used for short-term range trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases
http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	2000
Maximum	3000
Best single value	

Method used for long-term range trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases
http://map.mme.hu/maps/map2

Common Pochard / Aythya ferina

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2013-2018

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	500
Maximum	1000
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate

☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates' databases
"A közösségi jelentőségű természeti értékek hosszú távú megőrzését és
fejlesztését, valamint az EU Biológiai Sokféleség Stratégia 2020
célkitűzéseinek hazai szintű megvalósítását megalapozó stratégiai vizsgálatok"
programme

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2000-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	2000
Maximum	3000
Best single value	

Method used for breeding numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species. Hungarian
Waterfowl Publications 23: 79-120.
Breeding bird (MME RTM) database.
National Park Directorates' databases.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› National Park Directorates' databases + data collected under the "A közösségi
jelentőségű természeti értékek hosszú távú megőrzését és fejlesztését,
valamint az EU Biológiai Sokféleség Stratégia 2020 célkitűzéseinek hazai szintű
megvalósítását megalapozó stratégiai vizsgálatok" programme. In the frame of
the "A közösségi jelentőségű természeti értékek hosszú távú megőrzését és
fejlesztését, valamint az EU Biológiai Sokféleség Stratégia 2020 célkitűzéseinek
hazai szintűmegvalósítását megalapozó stratégiai vizsgálatok" programme a

new monitoring program was started in 2017. Several sample areas were selected where the common pochard could be breed. Experienced observers surveyed these areas and tried to prove that this species breed in these areas. This programme and the national park directorates databases are the most important survey program of this species.
In 2017 every national park directorates surveyed and estimated the breeding population of common pochard. They found 315 breeding pairs, however they estimated the national population 654. Therefor, considering wet and dry years, I estimated the national breeding population 500-1000 pairs.

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ Non-breeding/wintering numbers estimate is available

Latest non-breeding/wintering numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2015-2018

Numbers [Individuals. Raw numbers, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	2000
Maximum	2500
Best single value	

Type of estimate
☑ Best estimate

Method used for non-breeding/wintering numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetem Kiadó, 304 p.
Hungarian Waterfowl Monitoring database
National Park Directorates' databases

Previous non-breeding/wintering numbers estimate

Please indicate whether a previous estimate of the non-breeding/wintering numbers is available
☑ Previous non-breeding/wintering numbers estimate is available

Year or period [Year or period when numbers were previously determined]
››› 2008-2012

Numbers [Individuals. Raw numbers, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	12000
Maximum	18000
Best single value	

Type of estimate
☑ Best estimate

Method used for non-breeding/wintering numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates databases. Faragó, S. (2012): Results of Hungarian
Waterfowl Monitoring in the season 2011/2012. Hungarian Waterfowl
Publications 22: 62-284

Changes in the non-breeding/wintering numbers estimates

Has there been a change between the previous and the latest non-breeding/wintering numbers estimate?
☑ Yes

Please clarify the nature of change [More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Hungarian Waterfowl Monitoring database 2015-2018: 500-900. I considered
only the January data. Considering that many parts of Danube river where the
species wintered are not covered by this program, I corrected the value
upwards.

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Decreasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either

interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	67
Maximum	75
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	80
Maximum	87
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Short-term trend is decreasing. According to MME Nomenclator Bizottság
(2008) and national report (2013) the baseline was 2007 (2000-3000), to what
the current values (500-1000) were compared to.
Long-term trend is decreasing. According to Barabás (2013) and Ecsedi (2004)

the baseline was 1980 (4000-5000), to what the current values (500-1000)
were compared to.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ Yes

Is short-term and/or long-term non-breeding/wintering numbers trend estimate available?
☑ Yes

Please indicate whether estimate of the non-breeding/wintering numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Non-breeding/wintering numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term non-breeding/wintering numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term non-breeding/wintering numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions

Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetemi
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database

Long-term non-breeding/wintering numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1996-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either
interval (minimum - maximum) and/or best single value. In cases when only best single value is available,
ideally provide lower and upper confidence limits in the data fields for minimum and maximum and
indicate them as such.]

Minimum	66
Maximum	81
Best single value	

Method used for long-term non-breeding/wintering numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details,
etc.]
››› Expert opinions
Faragó S. (2006): A vonuló vízivad populációk fenntartásának alapjai
Magyarországon. Doktori Értekezés. Mellékletek, 305 p.
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetemi
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database
National Park Directorates' databases

Additional information (optional)

**Please provide any additional or complementary information to the data provided above in this
section, if available**
››› In the short-term trend, I checked the Hungarian Waterfowl Monitoring
database values between 2007 and 2018. I considered only months during
migration. The values are strongly fluctuating.
Long-term trend is decreasing. According to Faragó's study (2016) the
baseline was 1996 (2668), to what the current Hungarian Waterfowl
Monitoring database values (500-900) were compared to. I considered only
January data. Faragó's study (2017) also determined long-term decline.

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

**Please indicate whether estimate of the breeding range size and short-term (last 12 years)
and/or long-term (since ca. 1980) range trend is available**
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2013-2018

Range size [Total surface area of the range size in km2]
››› 4336

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates' databases
http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Decreasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	20
Maximum	30
Best single value	

Method used for short-term range trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databasesf
http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	20
Maximum	40

Best single value	40

Method used for long-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Ecsedi Z. (2004): A Hortobágy madárvilága. Hortobágy Természetvédelmi
Egyesület, Winter Fair, Balmazújváros-Szeged, 602 p.
Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases
http://map.mme.hu/maps/map2

Ferruginous Duck / Aythya nyroca

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2013-2018

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	800
Maximum	1500
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates' databases
"A közösségi jelentőségű természeti értékek hosszú távú megőrzését és
fejlesztését, valamint az EU Biológiai Sokféleség Stratégia 2020
célkitűzéseinek hazai szintű megvalósítását megalapozó stratégiai vizsgálatok"
programme

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period

[Year or period when numbers were previously determined]
››› 2000-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	800
Maximum	1500
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species. Hungarian
Waterfowl Publications 23: 79-120.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. p. 278.
Breeding bird (MME RTM) database.
National Park Directorates' databases.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ No

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› National Park Directorates' databases + data collected under the "A közösségi
jelentőségű természeti értékek hosszú távú megőrzését és fejlesztését,
valamint az EU Biológiai Sokféleség Stratégia 2020 célkitűzéseinek hazai szintű
megvalósítását megalapozó stratégiai vizsgálatok" programme. In the frame of
the "A közösségi jelentőségű természeti értékek hosszú távú megőrzését és
fejlesztését, valamint az EU Biológiai Sokféleség Stratégia 2020 célkitűzéseinek
hazai szintűmegvalósítását megalapozó stratégiai vizsgálatok" programme a
new monitoring program was started in 2017. Several sample areas were
selected where the ferruginous duck could be breed. Experienced observers
surveyed these areas and tried to prove that this species breed in these areas.
This programme and the national park directorates databases are the most
important survey program of this species. In 2017 every national park
directorates surveyed and estimated the breeding population of ferruginous
duck. They found 446 breeding pairs, however they estimated the national
population 948. Therefor, considering wet and dry years, I estimated the
national breeding population 800-1500 pairs.

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available,

ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	60
Maximum	88
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Short-term trend is stable, the value is the same as it was in 2013 national
report.
Long-term trend is increasing. According to Barabás (2013) and Ecsedi (2004)
the baseline was 1980 (500-800), to what the current values (800-1500) were
compared to.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2013-2018

Range size [Total surface area of the range size in km2]
››› 8536

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates' databases
http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term range trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases
http://map.mme.hu/

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	10
Maximum	20
Best single value	20

Method used for long-term range trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Ecsedi Z. (2004): A Hortobágy madárvilága. Hortobágy Természetvédelmi
Egyesület, Winter Fair, Balmazújváros-Szeged, 602 p.
Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases
http://map.mme.hu/

Tufted Duck / Aythya fuligula

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2013-2018

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	0
Maximum	50
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information

[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates' databases
"A közösségi jelentőségű természeti értékek hosszú távú megőrzését és
fejlesztését, valamint az EU Biológiai Sokféleség Stratégia 2020
célkitűzéseinek hazai szintű megvalósítását megalapozó stratégiai vizsgálatok"
programme
http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2000-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	70
Maximum	100
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species. Hungarian
Waterfowl Publications 23: 79-120.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. p. 278.
Breeding bird (MME RTM) database.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› National Park Directorates' databases + data collected under the "A közösségi
jelentőségű természeti értékek hosszú távú megőrzését és fejlesztését,
valamint az EU Biológiai Sokféleség Stratégia 2020 célkitűzéseinek hazai szintű
megvalósítását megalapozó stratégiai vizsgálatok" programme + data

collected uner the "Madáratlast Térképezés" programme.

In the frame of the "A közösségi jelentőségű természeti értékek hosszú távú megőrzését és fejlesztését, valamint az EU Biológiai Sokféleség Stratégia 2020 célkitűzéseinek hazai szintű megvalósítását megalapozó stratégiai vizsgálatok" programme a new monitoring program was started in 2017. Several sample areas were selected where the tufted duck could be breed. Experienced observers surveyed these areas and tried to prove that this species breed in these areas. This and the "Madáratlasz Térképezés" programmes and the national park directorates databases are the most important survey program of this species.

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ Non-breeding/wintering numbers estimate is available

Latest non-breeding/wintering numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2015-2018

Numbers [Individuals. Raw numbers, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	3000
Maximum	3500
Best single value	

Type of estimate
☑ Best estimate

Method used for non-breeding/wintering numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetem Kiadó, 304 p.
Hungarian Waterfowl Monitoring database
National Park Directorates' databases

Previous non-breeding/wintering numbers estimate

Please indicate whether a previous estimate of the non-breeding/wintering numbers is available
☑ Previous non-breeding/wintering numbers estimate is available

Year or period [Year or period when numbers were previously determined]

››› 2011-2012

Numbers [Individuals. Raw numbers, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	8000
Maximum	12000
Best single value	

Type of estimate
☑ Best estimate

Method used for non-breeding/wintering numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates databases. Faragó, S. (2012): Results of Hungarian
Waterfowl Monitoring in the season 2011/2012. Hungarian Waterfowl
Publications 22: 62-284

Changes in the non-breeding/wintering numbers estimates

Has there been a change between the previous and the latest non-breeding/wintering numbers estimate?
☑ Yes

Please clarify the nature of change [More than one option from the list below is possible]
☑ Due to the use of different method

Please indicate which reason for change is predominant
☑ Due to the use of different method

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Decreasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	29

Maximum	33
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases
http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	0
Maximum	100
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Short-term trend is decreasing. According to MME Nomenclator Bizottság
(2008) the baseline was 2008 (30-70), to what the current values (20-50) were
compared to.
Long-term trend is decreasing. According to Barabás (2013) and MME
Nomenclator Bizottság (2008) the baseline was 1980 (15-25), to what the
current values (0-50) were compared to.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca.

1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ Yes

Is short-term and/or long-term non-breeding/wintering numbers trend estimate available?
☑ Yes

Please indicate whether estimate of the non-breeding/wintering numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Non-breeding/wintering numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term non-breeding/wintering numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term non-breeding/wintering numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni EgyetemiKiadó, 304 p.
Hungarian Waterfowl Monitoring database
National Park Directorates' databases

Long-term non-breeding/wintering numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1996-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	74
Maximum	87
Best single value	

Method used for long-term non-breeding/wintering numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2006): A vonuló vízivad populációk fenntartásának alapjai
Magyarországon. Doktori Értekezés. Mellékletek, 305 p.
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetemi
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database
National Park Directorates' databases

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› In the short-term trend, I checked the Hungarian Waterfowl Monitoring
database values between 2007 and 2018. I considered only months during
migration. The values are strongly fluctuating.
Long-term trend is decreasing. According to Faragó's study (2016) the
baseline was 1996 (3827), to what the current Hungarian Waterfowl
Monitoring database values (500-1000) were compared to. I considered only
January data. Faragó's study (2017) also determined long-term decline.

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2013-2018

Range size [Total surface area of the range size in km2]
››› 2400

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates' databases
http://map.mme.hu/maps/map2
http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel
entes_2013_anyagai/Aythya_fuligula.pdf

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2013-2018

Short-term trend direction
☑ Decreasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	60
Maximum	100
Best single value	

Method used for short-term range trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases
http://map.mme.hu/maps/map2
http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel
entes_2013_anyagai/Aythya_fuligula.pdf

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	10
Maximum	30
Best single value	30

Method used for long-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases
http://map.mme.hu/
http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel
entes_2013_anyagai/Aythya_fuligula.pdf

Greater Scaup / Aythya marila

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ Non-breeding/wintering numbers estimate is available

Latest non-breeding/wintering numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2015-2018

Numbers [Individuals. Raw numbers, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	40
Maximum	100
Best single value	

Type of estimate
☑ Best estimate

Method used for non-breeding/wintering numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details,

etc.]
››› Expert opinions
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetem
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database
http://www.birding.hu/

Previous non-breeding/wintering numbers estimate

Please indicate whether a previous estimate of the non-breeding/wintering numbers is available
☑ No previous non-breeding/wintering numbers estimate is available

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Hungarian Waterfowl Monitoring database + birding.hu on-line database. I
considered only the January data.

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ Yes

Is short-term and/or long-term non-breeding/wintering numbers trend estimate available?
☑ Yes

Please indicate whether estimate of the non-breeding/wintering numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Non-breeding/wintering numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term non-breeding/wintering numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term non-breeding/wintering numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetemi
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database
http://www.birding.hu/

Long-term non-breeding/wintering numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1996-2018

Long-term trend direction
☑ Fluctuating

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term non-breeding/wintering numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetemi
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database
http://www.birding.hu/

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› According to the Hungarian Waterfowl Monitoring database and the

birding.hu on-line database, the values are strongly fluctuating in short- and long-term trend too.

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Garganey / Spatula querquedula

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2013-2018

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	500
Maximum	700
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinion
National Park Directorates' databases
"A közösségi jelentőségű természeti értékek hosszú távú megőrzését és
fejlesztését, valamint az EU Biológiai Sokféleség Stratégia 2020
célkitűzéseinek hazai szintű megvalósítását megalapozó stratégiai vizsgálatok"
programme
http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2000-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the

data fields for minimum and maximum and indicate them as such.]

Minimum	800
Maximum	1500
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. p. 278.
Barabás, L. (2013): Breeding distribution of Hungarian Duck species. Hungarian
Waterfowl Publications 23: 79-120.
Breeding bird (MME RTM) database.
National Park Directorates' databases.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› National Park Directorates' databases + data collected under the "A közösségi
jelentőségű természeti értékek hosszú távú megőrzését és fejlesztését,
valamint az EU Biológiai Sokféleség Stratégia 2020 célkitűzéseinek hazai szintű
megvalósítását megalapozó stratégiai vizsgálatok" programme + data
collected uner the "Madáratlast Térképezés" programme. In the frame of the
"A közösségi jelentőségű természeti értékek hosszú távú megőrzését és
fejlesztését, valamint az EU Biológiai Sokféleség Stratégia 2020 célkitűzéseinek
hazai szintű megvalósítását megalapozó stratégiai vizsgálatok" programme a
new monitoring program was started in 2017. Several sample areas were
selected where the garganey could be breed. Experienced observers surveyed
these areas and tried to prove that this species breed in these areas. This and
the "Madáratlasz Térképezés" programmes and the
national park directorates databases are the most important survey program
of this species.
According to the National Park Directorates' databases the Hungarian
population is 413-703 breeding pairs. According to the mensioned above programmes I corrected the value.

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Decreasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	33
Maximum	53
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases
http://map.mme.hu/maps/map2
http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel
entes_2013_anyagai/Anas_querquedula.pdf

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	53
Maximum	58
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Ecsedi Z. (2004): A Hortobágy madárvilága. Hortobágy Természetvédelmi
Egyesület, Winter Fair, Balmazújváros-Szeged, 602 p.
Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Short-term trend is decreasing. According to Barabás (2013) and national
report (2013) the baseline was 2007 (800-1500), to what the current values
(500-700) were compared to.
Long-term trend is decreasing. According to Barabás (2013) and MME
Nomenclator Bizottság (2008) the baseline was 1980 (1200-1500), to what
the current values (500-700) were compared to.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2013-2018

Range size [Total surface area of the range size in km2]
››› 4077

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Decreasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	20
Maximum	30
Best single value	

Method used for short-term range trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases
http://map.mme.hu/maps/map2
http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel
entes_2013_anyagai/Anas_querquedula.pdf

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	40
Maximum	60
Best single value	60

Method used for long-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Ecsedi Z. (2004): A Hortobágy madárvilága. Hortobágy Természetvédelmi
Egyesület, Winter Fair, Balmazújváros-Szeged, 602 p.
Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases
http://map.mme.hu/maps/map2

Northern Shoveler / Spatula clypeata

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2013-2018

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	50
Maximum	150
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
National Park Directorates' databases
"A közösségi jelentőségű természeti értékek hosszú távú megőrzését és
fejlesztését, valamint az EU Biológiai Sokféleség Stratégia 2020
célkitűzéseinek hazai szintű megvalósítását megalapozó stratégiai vizsgálatok"
programme
http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2010-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value.
In cases when only best single value is available, ideally provide lower and upper confidence limits in the
data fields for minimum and maximum and indicate them as such.]

Minimum	150
Maximum	320
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species. Hungarian
Waterfowl Publications 23: 79-120.
National Park Directorates' databases.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Additional information (optional)

**Please provide any additional or complementary information to the data provided above in this
section, if available**
››› National Park Directorates' databases + data collected under the "A közösségi

jelentőségű természeti értékek hosszú távú megőrzését és fejlesztését,
valamint az EU Biológiai Sokféleség Stratégia 2020 célkitűzéseinek hazai szintű
megvalósítását megalapozó stratégiai vizsgálatok" programme + data
collected uner the "Madáratlast Térképezés" programme. In the frame of the
"A közösségi jelentőségű természeti értékek hosszú távú megőrzését és
fejlesztését, valamint az EU Biológiai Sokféleség Stratégia 2020 célkitűzéseinek
hazai szintű megvalósítását megalapozó stratégiai vizsgálatok" programme a
new monitoring program was started in 2017. Several sample areas were
selected where the northern shoveler could be breed. Experienced observers
surveyed these areas and tried to prove that this species breed in these areas.
This and the "Madáratlasz Térképezés" programmes and the
national park directorates databases are the most important survey program
of this species.
According to the National Park Directorates' databases the Hungarian
population is 200-300 breeding pairs. According to the mensioned above programmes I corrected the value
downward.

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ Passage numbers estimate is available [Passage numbers are expected to be reported for a small number of species
where it is feasible to determine the numbers of individuals passing through the country by applying targeted
migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans
and cranes]

Latest passage numbers estimate

Year or period
[Year or period when numbers were last determined]
››› 2015-2018

Passage numbers
[Individuals. Raw numbers, i.e. not rounded. Provide either interval (minimum - maximum) and/or best
single value. In cases when only best single value is available, ideally provide lower and upper confidence
limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	4200
Maximum	8400
Best single value	

Type of estimate
☑ Best estimate

Method used for passage numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetem
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database
National Park Directorates' databases

Previous passage numbers estimate

Please indicate whether a previous estimate of passage numbers is available
☑ No previous passage numbers estimate is available

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available

››› Hungarian Waterfowl Monitoring database 2015-2018: 3000-6000. I
considered only months during migration. Considering that many wetland
areas are not covered by this program, I corrected the value upwards by 40%.

Please indicate whether estimate of staging numbers is available

☑ No staging numbers estimate is available

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas
where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available

☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:

☑ Short-term and/or long-term breeding numbers trend estimate is available

**Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or
long-term (since ca. 1980) trend is available**

Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction

☑ Decreasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either
interval (minimum - maximum) and/or best single value. In cases when only best single value is available,
ideally provide lower and upper confidence limits in the data fields for minimum and maximum and
indicate them as such.]

Minimum	53
Maximum	67
Best single value	

Method used for short-term breeding numbers trend estimate

☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details,
etc.]

››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases
http://map.mme.hu/maps/map2
http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel
entes_2013_anyagai/Anas_clypeata.pdf

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	75
Maximum	90
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Ecsedi Z. (2004): A Hortobágy madárvilága. Hortobágy Természetvédelmi
Egyesület, Winter Fair, Balmazújváros-Szeged, 602 p.
Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases
http://map.mme.hu/

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Short-term trend is decreasing. According to Barabás (2013) and national
report (2013) the baseline was 2007 (150-320), to what the current values (50-
150) were compared to.
Long-term trend is decreasing. According to Barabás (2013) and MME
Nomenclator Bizottság (2008) the baseline was 1980 (500-600), to what the
current values (50-150) were compared to.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ Yes

Passage numbers trend estimate is available for:

☑ Short-term trend
☑ Long-term trend

Short-term passage numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetem
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database
National Park Directorates' databases

Long-term passage numbers trend estimate

Trend period [since ca. 1980or a period as close as possible to that]
››› 1996-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	0
Maximum	30
Best single value	

Method used for long-term trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2006): A vonuló vízivad populációk fenntartásának alapjai
Magyarországon. Doktori Értekezés. Mellékletek, 305 p.
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetemi
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database

National Park Directorates' databases

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2013-2018

Range size [Total surface area of the range size in km2]
››› 7192

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term range trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases
http://map.mme.hu/maps/map2
http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel
entes_2013_anyagai/Anas_clypeata.pdf

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	30
Maximum	60
Best single value	60

Method used for long-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Ecsedi Z. (2004): A Hortobágy madárvilága. Hortobágy Természetvédelmi
Egyesület, Winter Fair, Balmazújváros-Szeged, 602 p.
Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases
http://map.mme.hu/maps/map2

Gadwall / Mareca strepera

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2013-2018

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	160
Maximum	400
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates' databases
"A közösségi jelentőségű természeti értékek hosszú távú megőrzését és
fejlesztését, valamint az EU Biológiai Sokféleség Stratégia 2020
célkitűzéseinek hazai szintű megvalósítását megalapozó stratégiai vizsgálatok"
programme
http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2000-20120

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	160
Maximum	400
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Konyhás, S. és Ecsedi, Z. (2004): Kendermagos réce. In: Ecsedi, Z. [szerk.] A
Hortobágy madárvilága. Hortobágy Természetvédelmi Egyesület, BalmazújvárosSzeged. p. 164-166
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. p. 278.
National Park Directorates' databases.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ No

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› National Park Directorates' databases + data collected under the "A közösségi
jelentőségű természeti értékek hosszú távú megőrzését és fejlesztését,
valamint az EU Biológiai Sokféleség Stratégia 2020 célkitűzéseinek hazai szintű
megvalósítását megalapozó stratégiai vizsgálatok" programme + data
collected uner the "Madáratlast Térképezés" programme. In the frame of the
"A közösségi jelentőségű természeti értékek hosszú távú megőrzését és
fejlesztését, valamint az EU Biológiai Sokféleség Stratégia 2020 célkitűzéseinek
hazai szintű megvalósítását megalapozó stratégiai vizsgálatok" programme a
new monitoring program was started in 2017. Several sample areas were
selected where the gadwall could be breed. Experienced observers surveyed
these areas and tried to prove that this species breed in these areas. This and
the "Madáratlasz Térképezés" programmes and the
national park directorates databases are the most important survey program
of this species.
According to the National Park Directorates' databases the Hungarian
population is 127-289 breeding pairs. According to the mentioned above
programmes I corrected the value downwards.

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ Passage numbers estimate is available [Passage numbers are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

Latest passage numbers estimate

Year or period
[Year or period when numbers were last determined]
››› 2015-2018

Passage numbers
[Individuals. Raw numbers, i.e. not rounded. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	3220
Maximum	6300
Best single value	

Type of estimate
☑ Best estimate

Method used for passage numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetem
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database

National Park Directorates' databases

Previous passage numbers estimate

Please indicate whether a previous estimate of passage numbers is available
☑ No previous passage numbers estimate is available

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Hungarian Waterfowl Monitoring database 2015-2018: 2300-4500. I
considered only months during migration. Considering that many wetland
areas are not covered by this program, I corrected the value upwards by 40%.

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Expert opinions

MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases
http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	220
Maximum	300
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Ecsedi Z. (2004): A Hortobágy madárvilága. Hortobágy Természetvédelmi
Egyesület, Winter Fair, Balmazújváros-Szeged, 602 p.
Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Long-term trend is increasing. According to Barabás (2013) and MME
Nomenclator Bizottság (2008) the baseline was 1980 (50-100), to what the
current values (160-400) were compared to.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?

☑ Yes

Passage numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term passage numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Increasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetem
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database
National Park Directorates' databases

Long-term passage numbers trend estimate

Trend period [since ca. 1980or a period as close as possible to that]
››› 1996-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	3438
Maximum	6823
Best single value	

Method used for long-term trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2006): A vonuló vízivad populációk fenntartásának alapjai
Magyarországon. Doktori Értekezés. Mellékletek, 305 p.

Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetemi
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database
National Park Directorates' databases
Short-term trend is based on Hungarian Waterfowl Monitoring database 2007-
2018. I considered only the migration months. Hungarian Waterfowl
Monitoring database 2015-2018: 2300-4500. Between 2007 and 2018 the
trend is increasing. The baseline was 2007, when 1924 gadwall wintered in
the country. This value (1924) was the baseline, to what
the current Hungarian Waterfowl Monitoring database values (2300-4500)
were compared to. Faragó's study (2017) also determined short-term decline.
Long-term trend is decreasing. According to Faragó's study (2016) the
baseline was 1996 (65), to what the current Hungarian Waterfowl Monitoring
database values (2300-4500) were compared to. I considered only spring and
autumn months. Faragó's study (2017) also determined long-term decline.

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas
where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 5965

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinion
http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either

interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term range trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	20
Maximum	40
Best single value	40

Method used for long-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
http://map.mme.hu/maps/map2

Eurasian Wigeon / Mareca penelope

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ Passage numbers estimate is available [Passage numbers are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

Latest passage numbers estimate

Year or period
[Year or period when numbers were last determined]
››› 2015-2018

Passage numbers
[Individuals. Raw numbers, i.e. not rounded. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	8000
Maximum	10000
Best single value	

Method used for passage numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinion
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetem
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database

Previous passage numbers estimate

Please indicate whether a previous estimate of passage numbers is available
☑ No previous passage numbers estimate is available

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Hungarian Waterfowl Monitoring database 2015-2018: 2000-3000. I
considered only months during migration (typically march). This value is very
low therefor I corrected the value upwards.

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ Non-breeding/wintering numbers estimate is available

Latest non-breeding/wintering numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2013-2018

Numbers [Individuals. Raw numbers, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	500
Maximum	2000

Best single value	

Type of estimate
☑ Best estimate

Method used for non-breeding/wintering numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Previous non-breeding/wintering numbers estimate

Please indicate whether a previous estimate of the non-breeding/wintering numbers is available
☑ No previous non-breeding/wintering numbers estimate is available

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ Yes

Passage numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term passage numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetem
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database

Long-term passage numbers trend estimate

Trend period [since ca. 1980or a period as close as possible to that]
››› 1996-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	33
Maximum	56
Best single value	

Method used for long-term trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2006): A vonuló vízivad populációk fenntartásának alapjai
Magyarországon. Doktori Értekezés. Mellékletek, 305 p
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetem
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ Yes

Is short-term and/or long-term non-breeding/wintering numbers trend estimate available?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Mallard / Anas platyrhynchos

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2013-2018

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	30000
Maximum	60000
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates' databases

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2000-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	50000
Maximum	
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species. Hungarian
Waterfowl Publications 23: 79-120.
Faragó, S. & Gosztonyi, L. (2009): Population Trend, Phenology and Dispersion of
Common Waterfowl Species in Hungary Based on a Ten Year Long Time Series of
the Hungarian Waterfowl Monitoring. Acta Silv. Lign. Hung., Vol. 5: 83-107.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to improved knowledge/more accurate data

Please indicate which reason for change is predominant
☑ Due to improved knowledge/more accurate data

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› National Park Directorates' databases

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ Passage numbers estimate is available [Passage numbers are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

Latest passage numbers estimate

Year or period
[Year or period when numbers were last determined]
››› 2015-2018

Passage numbers
[Individuals. Raw numbers, i.e. not rounded. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	42000
Maximum	70000
Best single value	

Type of estimate
☑ Best estimate

Method used for passage numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinion
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetemi
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database
National Park Directorates' databases

Previous passage numbers estimate

Please indicate whether a previous estimate of passage numbers is available
☑ No previous passage numbers estimate is available

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Hungarian Waterfowl Monitoring database 2015-2018: 30000-50000. I
considered only months during migration (typically october-november).
Considering that many wetland areas are not covered by this program, I
corrected the value upwards by 40%.

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas
where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ Non-breeding/wintering numbers estimate is available

Latest non-breeding/wintering numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2013-2018

Numbers [Individuals. Raw numbers, i.e. not rounded). Provide either interval (minimum - maximum)
and/or best single value. In cases when only best single value is available, ideally provide lower and upper
confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	42000
Maximum	70000
Best single value	

Type of estimate
☑ Best estimate

Method used for non-breeding/wintering numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Previous non-breeding/wintering numbers estimate

Please indicate whether a previous estimate of the non-breeding/wintering numbers is available
☑ No previous non-breeding/wintering numbers estimate is available

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction

☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	40
Maximum	70
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Short-term trend is stable, according to national park directorates' databases

and mentioned above publications.
Long-term trend is decreasing. According to Barabás (2013) and MME
Nomenclator Bizottság (2008) the baseline was 1980 (min. 100000), to what
the current values (30000-60000) were compared to.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ Yes

Passage numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term passage numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetemi
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database National Park Directorates' databases

Long-term passage numbers trend estimate

Trend period [since ca. 1980or a period as close as possible to that]
››› 1996-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either

interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	29
Maximum	57
Best single value	

Method used for long-term trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2006): A vonuló vízivad populációk fenntartásának alapjai
Magyarországon. Doktori Értekezés. Mellékletek, 305 p
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetemi
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database
National Park Directorates' databases
In the short-term trend, I checked the Hungarian Waterfowl Monitoring
database values between 2007 and 2018. I considered only months during
migration. It seems that there is no significant change therefor the short-term
trend is stable.
Long-term trend is decreasing. According to Faragó's study (2016) the
baseline was 1996 (70244), to what the current Hungarian Waterfowl
Monitoring database values (30000-50000) were compared to. I considered
only spring and autumn months.

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ Yes

Is short-term and/or long-term non-breeding/wintering numbers trend estimate available?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2013-2018

Range size [Total surface area of the range size in km2]

››› 93011

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Ecsedi Z. (2004): A Hortobágy madárvilága. Hortobágy Természetvédelmi
Egyesület, Winter Fair, Balmazújváros-Szeged, 602 p.
Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases
http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Stable

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Report on the status of waterbird populations in the AEWA area for the period 2013-2018 [Contracting Party: Hungary]

Method used for long-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases
http://map.mme.hu/maps/map2

Northern Pintail / Anas acuta

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2013-2018

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	0
Maximum	20
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates' databases
"A közösségi jelentőségű természeti értékek hosszú távú megőrzését és
fejlesztését, valamint az EU Biológiai Sokféleség Stratégia 2020
célkitűzéseinek hazai szintű megvalósítását megalapozó stratégiai vizsgálatok"
programme

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2010-2012

Population unit

☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	0
Maximum	40
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species. Hungarian
Waterfowl Publications 23: 79-120.
National Park Directorates' databases.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› National Park Directorates' databases + data collected under the "A közösségi
jelentőségű természeti értékek hosszú távú megőrzését és fejlesztését,
valamint az EU Biológiai Sokféleség Stratégia 2020 célkitűzéseinek hazai szintű
megvalósítását megalapozó stratégiai vizsgálatok" programme.
In the frame of the "A közösségi jelentőségű természeti értékek hosszú távú
megőrzését és fejlesztését, valamint az EU Biológiai Sokféleség Stratégia 2020
célkitűzéseinek hazai szintű megvalósítását megalapozó stratégiai vizsgálatok"
programme a new monitoring program was started in 2017. Several sample
areas were selected where the northern pintail could be breed. Experienced
observers surveyed these areas and tried to prove that this species breed in
these areas. This programme and the national park directorates databases are
the most important survey program of this species.

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ Passage numbers estimate is available [Passage numbers are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

Latest passage numbers estimate

Year or period
[Year or period when numbers were last determined]
››› 2015-2018

Passage numbers
[Individuals. Raw numbers, i.e. not rounded. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	840
Maximum	1260
Best single value	

Type of estimate
☑ Best estimate

Method used for passage numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetem
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database

Previous passage numbers estimate

Please indicate whether a previous estimate of passage numbers is available
☑ No previous passage numbers estimate is available

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Hungarian Waterfowl Monitoring database 2015-2018: 600-900. I considered
only months during migration. Considering that many wetland areas are not
covered by this program, I corrected the value upwards by 40%.

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	60
Maximum	100
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Short-term trend is fluctuating, between 2007 and 2018 there were very few
observations about potential breeding attempts.
Long-term trend is decreasing. According to Barabás (2013) and Ecsedi (2004)
the baseline was 1980 (30-50), to what the current values (0-20) were
compared to.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ Yes

Passage numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term passage numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetem
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database

Long-term passage numbers trend estimate

Trend period [since ca. 1980or a period as close as possible to that]
››› 1996-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	0
Maximum	27
Best single value	

Method used for long-term trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2006): A vonuló vízivad populációk fenntartásának alapjai
Magyarországon. Doktori Értekezés. Mellékletek, 305 p.
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetemi
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database
In the short-term trend, I checked the Hungarian Waterfowl Monitoring
database values between 2007 and 2018. I considered only months during
migration. The values are strongly fluctuating.
Long-term trend is decreasing. According to Faragó's study (2016) the
baseline was 1996 (818), to what the current Hungarian Waterfowl
Monitoring database values (600-900) were compared to. I considered only
spring and autumn months. Faragó's study (2017) also determined long-term
decline.

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2013-2018

Range size [Total surface area of the range size in km2]
››› 848

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates' databases
http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Ecsedi Z. (2004): A Hortobágy madárvilága. Hortobágy Természetvédelmi
Egyesület, Winter Fair, Balmazújváros-Szeged, 602 p.
Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases
http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	60
Maximum	100

Best single value	100

Method used for long-term range trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases
http://map.mme.hu/maps/map2

Common Teal / Anas crecca

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2013-2018

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	0
Maximum	15
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates' databases
"A közösségi jelentőségű természeti értékek hosszú távú megőrzését és
fejlesztését, valamint az EU Biológiai Sokféleség Stratégia 2020
célkitűzéseinek hazai szintű megvalósítását megalapozó stratégiai vizsgálatok"
programme

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]

››› 2000-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	0
Maximum	15
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. p. 278.
Annual reports of the Hungarian Checklist and Rarities Committee.
Barabás, L. (2013): Breeding distribution of Hungarian Duck species. Hungarian
Waterfowl Publications 23: 79-120.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ No

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› National Park Directorates' databases + data collected under the "A közösségi
jelentőségű természeti értékek hosszú távú megőrzését és fejlesztését,
valamint az EU Biológiai Sokféleség Stratégia 2020 célkitűzéseinek hazai szintű
megvalósítását megalapozó stratégiai vizsgálatok" programme.
In the frame of the "A közösségi jelentőségű természeti értékek hosszú távú
megőrzését és fejlesztését, valamint az EU Biológiai Sokféleség Stratégia 2020
célkitűzéseinek hazai szintűmegvalósítását megalapozó stratégiai vizsgálatok"
programme a new monitoring program was started in 2017. Several sample
areas were selected where the common teal could be breed. Experienced
observers surveyed these areas and tried to prove that this species breed in
these areas. This programme and the national park directorates databases are
the most important survey program of this species.

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ Passage numbers estimate is available [Passage numbers are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

Latest passage numbers estimate

Year or period
[Year or period when numbers were last determined]
››› 2015-2018

Passage numbers
[Individuals. Raw numbers, i.e. not rounded. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	15400
Maximum	25200
Best single value	

Type of estimate
☑ Best estimate

Method used for passage numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinion
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetem
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database
National Park Directorates' databases

Previous passage numbers estimate

Please indicate whether a previous estimate of passage numbers is available
☑ No previous passage numbers estimate is available

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Hungarian Waterfowl Monitoring database 2015-2018: 11000-18000. I considered only months during migration (typically october-november).
Considering that many wetland areas are not covered by this program, I corrected the value upwards by 40%.

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ Non-breeding/wintering numbers estimate is available

Latest non-breeding/wintering numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2013-2018

Numbers [Individuals. Raw numbers, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	1000

Maximum	8000
Best single value	

Type of estimate
☑ Best estimate

Method used for non-breeding/wintering numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Previous non-breeding/wintering numbers estimate

Please indicate whether a previous estimate of the non-breeding/wintering numbers is available
☑ No previous non-breeding/wintering numbers estimate is available

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]

››› 1980-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	0
Maximum	200
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Short-term trend is fluctuating, between 2007 and 2018 there were very few
observations about potential breeding attempts.
Long-term trend is increasing. According to Barabás (2013) and Ecsedi (2004)
the baseline was 1980 (0-5), to what the current values (0-15) were compared
to.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ Yes

Passage numbers trend estimate is available for:
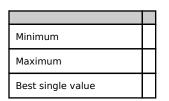☑ Short-term trend
☑ Long-term trend

Short-term passage numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetem
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database
National Park Directorates' databases

Long-term passage numbers trend estimate

Trend period [since ca. 1980or a period as close as possible to that]
››› 1996-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	27
Maximum	55
Best single value	

Method used for long-term trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2006): A vonuló vízivad populációk fenntartásának alapjai
Magyarországon. Doktori Értekezés. Mellékletek, 305 p
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetem
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database
National Park Directorates' databases
In the short-term trend, I checked the Hungarian Waterfowl Monitoring
database values between 2007 and 2018. I considered only months during
migration (typically october-november). It seems that there is no significant
change therefor the short-term trend is stable. This is supported by the fact
that although the national park directorates' databases show fluctuating
values, most of them have indicated stable or fluctuating short-term trend.
Long-term trend is decreasing. According to Faragó's study (2016) the

Report on the status of waterbird populations in the AEWA area for the period 2013-2018 [Contracting Party: Hungary]

baseline was 1996 (24681), to what the current Hungarian Waterfowl
Monitoring database values (11000-18000) were compared to. I considered
only spring and autumn months.

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas
where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ Yes

Is short-term and/or long-term non-breeding/wintering numbers trend estimate available?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

**Please indicate whether estimate of the breeding range size and short-term (last 12 years)
and/or long-term (since ca. 1980) range trend is available**
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2013-2018

Range size [Total surface area of the range size in km2]
››› 348

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details,
etc.]
››› http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either
interval (minimum - maximum) and/or best single value. In cases when only best single value is available,
ideally provide lower and upper confidence limits in the data fields for minimum and maximum and
indicate them as such.]

Minimum	
Maximum	

Best single value	

Method used for short-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Ecsedi Z. (2004): A Hortobágy madárvilága. Hortobágy Természetvédelmi
Egyesület, Winter Fair, Balmazújváros-Szeged, 602 p.
Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases
http://map.mme.hu/

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	50
Maximum	100
Best single value	100

Method used for long-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Barabás, L. (2013): Breeding distribution of Hungarian Duck species.
Hungarian Waterfowl Publications 23: 79-120.
Expert opinions
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278
National Park Directorates' databases
http://map.mme.hu/maps/map2

Little Grebe / Tachybaptus ruficollis

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2014-2018

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	3000
Maximum	4000
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› KEHOP-4.3.0-15-2016-00001 project results, unpublished.
National park directorates' databases
http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2000-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	3300
Maximum	5000
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates' databases.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change

[More than one option from the list below is possible]
☑ Due to the use of different method

Please indicate which reason for change is predominant
☑ Due to the use of different method

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› New method: Under the KEHOP-4.3.0-15-2016-00001 project in 2017-2018,
530 2.5x2.5 km2 grids were surveyed for a given set of breeding bird species,
covering 3.6% of the country. 118 breeding pairs of Tachybaptus ruficollis
were estimated for the 530 grids. As the habitat distribution in the 530 grids is
considered to be representative of the country, 3278 pairs can be calculated
for the national population. This figure was used as the minimum population.

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas
where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ Non-breeding/wintering numbers estimate is available

Latest non-breeding/wintering numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2015-2018

Numbers [Individuals. Raw numbers, i.e. not rounded). Provide either interval (minimum - maximum)
and/or best single value. In cases when only best single value is available, ideally provide lower and upper
confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	200
Maximum	250
Best single value	

Type of estimate
☑ Best estimate

Method used for non-breeding/wintering numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details,
etc.]
››› Expert opinions
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetem
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database

Previous non-breeding/wintering numbers estimate

Please indicate whether a previous estimate of the non-breeding/wintering numbers is available

☑ No previous non-breeding/wintering numbers estimate is available

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available

››› Hungarian Waterfowl Monitoring database 2015-2018: 20-60. I considered only the January data. Considering that many parts of Danube river where the species wintered are not covered by this program, I corrected the value upwards. I have also compared to great crested grebe which winters in lower quantities, therefore I raised the values independently from the previous results.

Population trend

Breeding numbers

Please indicate whether:

☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available

Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel entes_2013_anyagai/Tachybaptus_ruficollis.pdf
National park directorates' databases
http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	60
Maximum	67
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Magyar G., Hadarics T., Waliczky Z., Schmidt A., Nagy T. & Bankovics A. (1998):
Magyarország madarainak névjegyzéke. Madártani Intézet, Budapest, 26 p.
BirdLife International (2004) Birds in Europe: population estimates, trends and
conservation status. Cambridge, UK: BirdLife International. (BirdLife
Conservation Series No.12.), 30 p.
Ecsedi Z. (szerk.) (2004): A Hortobágy madárvilága. Hortobágy
Természetvédelmi Egyesület, Winter Fair, Balmazújváros - Szeged. 2004. 104-
105 p.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. 68 p.
KEHOP-4.3.0-15-2016-00001 project results, unpublished.
National park directorates' databases
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› The apparent short-term decline as compared to the 2013 report is
considered to be due to better knowledge, so the population is considered
stable. The earliest national population estimate is from 1990-93 (BirdLife
International (2004) Birds in Europe: population estimates, trends and
conservation status. Cambridge, UK: BirdLife International. (BirdLife
Conservation Series No.12.), 30 p.): 9 000 -10 000 pairs, this was the basis of
the long-term trend.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ Yes

Is short-term and/or long-term non-breeding/wintering numbers trend estimate available?
☑ Yes

Please indicate whether estimate of the non-breeding/wintering numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Non-breeding/wintering numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term non-breeding/wintering numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term non-breeding/wintering numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetem
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database

Long-term non-breeding/wintering numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Fluctuating

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term non-breeding/wintering numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2006): A vonuló vízivad populációk fenntartásának alapjai
Magyarországon. Doktori Értekezés. Mellékletek, 305 p.
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetemi
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› In the short-term and long-term trend, I checked the Hungarian Waterfowl
Monitoring database values between 2007 and 2018, and between 1996 and
2018. I considered only months during wintering. The values are strongly
fluctuating.

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 35557

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases
http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel
entes_2013_anyagai/Tachybaptus_ruficollis.pdf
National park directorates' databases
http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Stable

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Based on the distribution map of the 2013 Article 12 report, the distribution is
stable in the short-term. The long-term trend is based on expert judgment
that the decline in population is not yet manifested in the distribution.

Red-necked Grebe / Podiceps grisegena

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2015-2017

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	10
Maximum	20
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2008-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	40
Maximum	80
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates databases.
Breeding bird (MME RTM) database.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change

[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant

☑ Due to genuine change

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available

››› Figures are rounded up (accounting for pairs in unsurveyed localities) from the
national park directorates databases (2015: 8, 2016: 15, 2017: 10 pairs
counted).

Passage and staging numbers

Does the species migrate through the country?

☑ Yes

Please indicate whether estimate of passage numbers is available

☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available

☑ No staging numbers estimate is available

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas
where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available

☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:

☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available

Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction

☑ Decreasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	75

Method used for short-term breeding numbers trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	88

Method used for long-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura,
Budapest.
Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest. 441 p.
Magyar, G., Hadarics, T., Waliczky, Z., Schmidt, A., Nagy, T. & Bankovics, A.
(1998): Nomenclator avium Hungariae. Magyarország madarainak
névjegyzéke. KTM Természetvédelmi Hivatal Madártani Intézete – Magyar
Madártani és Természetvédelmi Egyesület – Winter Fair, Budapest – Szeged.
P. 202
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. 278 p.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› The minimum values in the two reporting periods were compared and the
maximum values were also similarly compared to calculate the short-term
population trend. According to the 2013 Birds Directive Article 12 report, the
population had declined by a minimum of 47% since 1980, and it is estimated
to have further declined by 75% since then, which, combined, produce a
decline of 88% between 1980-2018.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to

determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 2000

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Decreasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and

indice them as such.]

Minimum	
Maximum	
Best single value	57

Method used for short-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. 278 p.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	58
Maximum	64
Best single value	64

Method used for long-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura,
Budapest.
Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest. 441 p.
Magyar, G., Hadarics, T., Waliczky, Z., Schmidt, A., Nagy, T. & Bankovics, A.
(1998): Nomenclator avium Hungariae. Magyarország madarainak
névjegyzéke. KTM Természetvédelmi Hivatal Madártani Intézete – Magyar
Madártani és Természetvédelmi Egyesület – Winter Fair, Budapest – Szeged.
p. 202
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. 278 p.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available

››› The distribution map of the 2013 report was compared with that of the present report to et the short-term trend. The present report shows 20 grids (2014-2018), the latter with likely or certain breeding of the species. Most of the decline probably occurred during the short-term period (hence the estimate there). This single best value was multiplied with the long-term breeding range trend figures (min. 30%, max. 40%) of the 2013 Birds Directive Article 12 report to get the long-term range trend 1980-2018.

Great Crested Grebe / Podiceps cristatus

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2014-2018

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	2000
Maximum	3000
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› KEHOP-4.3.0-15-2016-00001 project results, unpublished.
National park directorates' databases
http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2000-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	3000
Maximum	4000
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Consultation with national experts

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› New method: Under the KEHOP-4.3.0-15-2016-00001 project in 2017-2018, 530 2.5x2.5 km2 grids were surveyed for a given set of breeding bird species, covering 3.6% of the country. 68 breeding pairs of Podiceps cristatus were estimated for the 530 grids. As the habitat distribution in the 530 grids is considered to be representative of the country, 1889 pairs can be calculated for the national population. This supports the population estimate based on the national bird atlas mapping and on the databases of the national park directorates, which resulted in 2000-3000 pairs, and these latter figures were used in the present report.

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ Non-breeding/wintering numbers estimate is available

Latest non-breeding/wintering numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2013-2018

Numbers [Individuals. Raw numbers, i.e. not rounded). Provide either interval (minimum - maximum)

and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	150
Maximum	200
Best single value	

Type of estimate
☑ Best estimate

Method used for non-breeding/wintering numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetem
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database

Previous non-breeding/wintering numbers estimate

Please indicate whether a previous estimate of the non-breeding/wintering numbers is available
☑ No previous non-breeding/wintering numbers estimate is available

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Hungarian Waterfowl Monitoring database 2015-2018: 40-90. I considered
only the January data. Considering that many parts of Danube river where the
species wintered are not covered by this program, I corrected the value
upwards.

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel
entes_2013_anyagai/Podiceps_cristatus.pdf
National park directorates' databases
http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	67
Maximum	71
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Magyar G., Hadarics T., Waliczky Z., Schmidt A., Nagy T. & Bankovics A. (1998):
Magyarország madarainak névjegyzéke. Madártani Intézet, Budapest, 26 p.
BirdLife International (2004) Birds in Europe: population estimates, trends and
conservation status. Cambridge, UK: BirdLife International. (BirdLife
Conservation Series No.12.), 30 p.
Ecsedi Z. (szerk.) (2004): A Hortobágy madárvilága. Hortobágy
Természetvédelmi Egyesület, Winter Fair, Balmazújváros - Szeged. 2004. 105-
107 p.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. 69 p.
KEHOP-4.3.0-15-2016-00001 project results, unpublished.
National park directorates' databases
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Az állomány rövidtávon stabil. A csökkenés a korábbi jelentéshez viszonyítva a
jobb minőségű adatgyűjtéssel és adatokkal magyarázható.
A hosszútávú csökkenés részben valós lehet.

Passage and staging numbers

Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ Yes

Is short-term and/or long-term non-breeding/wintering numbers trend estimate available?
☑ Yes

Please indicate whether estimate of the non-breeding/wintering numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Non-breeding/wintering numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term non-breeding/wintering numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term non-breeding/wintering numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetem
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database

Long-term non-breeding/wintering numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1996-2018

Long-term trend direction

☑ Fluctuating

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term non-breeding/wintering numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2006): A vonuló vízivad populációk fenntartásának alapjai
Magyarországon. Doktori Értekezés. Mellékletek, 305 p.
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetemi
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› In the short-term and long-term trend, I checked the Hungarian Waterfowl
Monitoring database values between 2007 and 2018, and between 1996 and
2018. I considered only months during wintering. The values are strongly
fluctuating.

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 29064

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases
http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel
entes_2013_anyagai/Podiceps_cristatus.pdf
National park directorates' databases
http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Unknown

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate
☑ Insufficient or no data available

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Az elterjedés növekedése rövidtávon az átfogóbb felméréseknek köszönhető.
1990-es évek előttről nem áll rendelkezésre országos térképes adat a fajra
vonatkozólag.

Horned Grebe / Podiceps auritus

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Black-necked Grebe / Podiceps nigricollis

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2015-2017

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	100
Maximum	250
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species)

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2008-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	300
Maximum	1100
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate

☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates databases.
Breeding bird (MME RTM) database.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to improved knowledge/more accurate data

Please indicate which reason for change is predominant
☑ Due to genuine change

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Figures are rounded up (accounting for pairs in unsurveyed localities) from the
national park directorates databases (2015: 238, 2017: 62 pairs counted).

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2008-2018

Short-term trend direction
☑ Decreasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either

interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	66
Maximum	78
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	66
Maximum	78
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Magyar, G., Hadarics, T., Waliczky, Z., Schmidt, A., Nagy, T. & Bankovics, A.
(1998): Nomenclator avium Hungariae. Magyarország madarainak
névjegyzéke. KTM Természetvédelmi Hivatal Madártani Intézete – Magyar
Madártani és Természetvédelmi Egyesület – Winter Fair, Budapest – Szeged.
p. 202
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. 278 p.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› The minimum values in the two reporting periods were compared and the
maximum values were also similarly compared to calculate trend. As the
trend was fluctuating within a stable range (600-1000 or 1100) before 2007,
the short-term decline is assumed to be of the same rate as the long-term
decline.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 7117

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://map.mme.hu/maps/map2
National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species)

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction

☑ Decreasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	30
Maximum	35
Best single value	

Method used for short-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://map.mme.hu/maps/map2
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. 278 p.
http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel
entes_2013_anyagai/Podiceps_nigricollis.pdf

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest. 441 p.
Magyar, G., Hadarics, T., Waliczky, Z., Schmidt, A., Nagy, T. & Bankovics, A.
(1998): Nomenclator avium Hungariae. Magyarország madarainak
névjegyzéke. KTM Természetvédelmi Hivatal Madártani Intézete – Magyar
Madártani és Természetvédelmi Egyesület – Winter Fair, Budapest – Szeged.
p. 202
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. 278 p.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Haraszthy, L. (1998) shows 52 grids (based on surveys from 1976-1982), but it
is probably an underestimate due to the poorer coverage of the distribution
with surveys.

Western Water Rail / Rallus aquaticus

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2014-2018

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value.
In cases when only best single value is available, ideally provide lower and upper confidence limits in the
data fields for minimum and maximum and indicate them as such.]

Minimum	5000
Maximum	7000
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› KEHOP-4.3.0-15-2016-00001 project results, unpublished.
National park directorates' databases
http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2008-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value.
In cases when only best single value is available, ideally provide lower and upper confidence limits in the
data fields for minimum and maximum and indicate them as such.]

Report on the status of waterbird populations in the AEWA area for the period 2013-2018 [Contracting Party: Hungary]

Minimum	5000
Maximum	10000
Best single value	

Method used for breeding numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates' Databases

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change
☑ Due to the use of different method

Please indicate which reason for change is predominant
☑ Due to genuine change

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› New method: Under the KEHOP-4.3.0-15-2016-00001 project in 2017-2018,
530 2.5x2.5 km2 grids were surveyed for a given set of breeding bird species,
covering 3.6% of the country. 223 breeding pairs of Rallus aquaticus were
estimated for the 530 grids. As the habitat distribution in the 530 grids is
considered to be representative of the country, 6194 pairs can be calculated
for the national population. This figure was used here as the mean, with a
range.

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas
where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:

☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel
entes_2013_anyagai/Rallus_aquaticus.pdf
National park directorates' databases
http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1990-2018

Long-term trend direction
☑ Unknown

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Insufficient or no data available

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› KEHOP-4.3.0-15-2016-00001 project results, unpublished.
National park directorates' databases
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this

section, if available
››› A legkorábbi elérhető országos állománybecslés 10-20 000 pár. Ez az
állományadat valószínűleg kevésbé megalapozott mint a jelenlegi
állománybecslés. Ennek alapján nem lehet hosszútávú trendet megállapítani.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 33674

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases
http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel entes_2013_anyagai/Rallus_aquaticus.pdf
National park directorates' databases
http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Unknown

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate
☑ Insufficient or no data available

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases
http://map.mme.hu/maps/map2

Corncrake / Crex crex

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2014-2018

Population unit
☑ Calling males

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	525
Maximum	1532
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› KEHOP-4.3.0-15-2016-00001 project results, unpublished.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2008-2012

Population unit
☑ Calling males

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	500
Maximum	2000
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates databases
Breeding bird (MME RTM) database.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to improved knowledge/more accurate data

Please indicate which reason for change is predominant
☑ Due to improved knowledge/more accurate data

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› New method: Under the KEHOP-4.3.0-15-2016-00001 project in 2017-2018, 530 2.5x2.5 km2 grids were surveyed for a given set of breeding bird species, covering 3.6% of the country. 38 calling males of Crex crex were estimated for the 530 grids. As the habitat distribution in the 530 grids is considered to be representative of the country, 1056 pairs can be calculated for the national population.

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel
entes_2013_anyagai/Crex_crex.pdf
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 577-580.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Fluctuating

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Tucker, G. M. – Heath, M. F. (1994): Birds in Europe – Their Conservation
Status. Royal Society for the Protection of Birds, BirdLife International, 228-
229 p.
Magyar G., Hadarics T., Waliczky Z., Schmidt A., Nagy T. & Bankovics A. (1998):
Magyarország madarainak névjegyzéke. Madártani Intézet, Budapest, 56 p.
Haraszthy László (szerk.) (1998, 2000)- Magyarország madarai. 114-115 p.
BirdLife International (2004) Birds in Europe: population estimates, trends and
conservation status. Cambridge, UK: BirdLife International. (BirdLife
Conservation Series No.12.), 102 p.
Ecsedi Z. (szerk.) (2004): A Hortobágy madárvilága. Hortobágy
Természetvédelmi Egyesület, Winter Fair, Balmazújváros - Szeged. 2004. 249-
250 p.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. 97 p.
KEHOP-4.3.0-15-2016-00001 project results, unpublished.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› The long-term trend is based on Tucker, G. M. – Heath, M. F. (1994) and on
expert judgment for the preceding period.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 18029

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 577-580.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
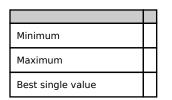http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term range trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel
entes_2013_anyagai/Crex_crex.pdf
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 577-580.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Fluctuating

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura,
Budapest. 72 p.
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 577-580.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Spotted Crake / Porzana porzana

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2014-2018

Population unit
☑ Calling males

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	650
Maximum	1300
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› KEHOP-4.3.0-15-2016-00001 project results, unpublished.
National park directorates' databases http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2000-2012

Population unit
☑ Calling males

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	600
Maximum	1500
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information

[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates databases.
Breeding bird (MME RTM) database

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ No

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› New method: Under the KEHOP-4.3.0-15-2016-00001 project in 2017-2018,
530 2.5x2.5 km2 grids were surveyed for a given set of breeding bird species,
covering 3.6% of the country. 22 calling males of Porzana porzana were
estimated for the 530 grids.
As the habitat distribution in the 530 grids is considered to be representative
of the country, 611 pairs can be calculated for the national population. This
figure was used here as the minimum population.

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel
entes_2013_anyagai/Porzana_porzana.pdf
National park directorates' databases http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Fluctuating

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Magyar G., Hadarics T., Waliczky Z., Schmidt A., Nagy T. & Bankovics A. (1998):
Magyarország madarainak névjegyzéke. Madártani Intézet, Budapest, 55-56 p.
Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest. 112-113 p.
Ecsedi Z. (szerk.) (2004): A Hortobágy madárvilága. Hortobágy
Természetvédelmi Egyesület, Winter Fair, Balmazújváros - Szeged. 2004. 244-
246 p.
BirdLife International (2004) Birds in Europe: population estimates, trends and
conservation status. Cambridge, UK: BirdLife International. (BirdLife
Conservation Series No.12.), 100 p.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. p. 96.
KEHOP-4.3.0-15-2016-00001 project results, unpublished.
National park directorates' databases http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› There is better coverage in surveying the species, and this has confirmed
former estimates for the population size. There are no population figures
from the 1980s. Estimates later reflect a fluctuation probably in strong
correlation with rainfall patterns, but the maximum and minimum figures
seem to stay within about the same range.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 7782

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel
entes_2013_anyagai/Porzana_porzana.pdf
National park directorates' databases http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Fluctuating

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest. 112-113 p.
National park directorates' databases
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› There is better coverage in surveying the species, and this has shown a
smaller distribution than previously thought – but this is probably due to
better knowledge only, not to genuine decline. The distribution probably
fluctuates similarly as the population, following rainfall patterns.

Little Crake / Zapornia parva

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]

Population unit
☑ Calling males

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	1000
Maximum	3000
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases
http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2001-2012

Population unit
☑ Calling males

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	1800
Maximum	3000
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates' Databases

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› New method: Under the KEHOP-4.3.0-15-2016-00001 project in 2017-2018,
530 2.5x2.5 km2 grids were surveyed for a given set of breeding bird species,
covering 3.6% of the country. 67 calling males of Zapornia parva were
estimated for the 530 grids. As the habitat distribution in the 530 grids is
considered to be representative of the country, 1861 pairs can be calculated
for the national population.

Passage and staging numbers

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel
entes_2013_anyagai/Porzana_parva.pdf
National park directorates' databases
http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1990-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	40
Maximum	66
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Magyar G., Hadarics T., Waliczky Z., Schmidt A., Nagy T. & Bankovics A. (1998):
Magyarország madarainak névjegyzéke. Madártani Intézet, Budapest, 56 p.
BirdLife International (2004) Birds in Europe: population estimates, trends and
conservation status. Cambridge, UK: BirdLife International. (BirdLife
Conservation Series No.12.), 101 p.
Ecsedi Z. (szerk.) (2004): A Hortobágy madárvilága. Hortobágy
Természetvédelmi Egyesület, Winter Fair, Balmazújváros - Szeged. 2004. 246-
247 p.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 96-97.
KEHOP-4.3.0-15-2016-00001 project results, unpublished.
National park directorates' databases
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› No national population estimate is available from before 1990. The long-term
trend is based on BirdLife (2004).

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 12592

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases
http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details,

etc.]
›››
http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jelentes_2013_anyagai/Porzana_parva.pdf
National park directorates' databases
http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Unknown

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate
☑ Insufficient or no data available

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› The short-term decrease of the distribution trend is considered to be due to
improved knowledge (better surveys).
There is no map available to use as basis for the long-term trend.

Baillon's Crake / Zapornia pusilla

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2013-2018

Population unit
☑ Calling males

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Report on the status of waterbird populations in the AEWA area for the period 2013-2018 [Contracting Party: Hungary]

Minimum	0
Maximum	15
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates' databases
http://www.birding.hu/

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2008-2012

Population unit
☑ Calling males

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	0
Maximum	15
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates databases.
Breeding bird (MME RTM) database.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ No

Passage and staging numbers

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available

☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates' databases
http://www.birding.hu/

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	70
Maximum	100
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates' databases
Ecsedi Z. (2004): A Hortobágy madárvilága. Hortobágy Természetvédelmi
Egyesület, Winter Fair, Balmazújváros-Szeged, 602 p.
Expert opinions
Maygar et al. (1998): Magyarország madarainak névjegyzéke. Nomenclator
avium Hungariae. Magyar Madártani és TermészetvédelmiEgyesület,
Budapest.
Http://www.birding.hu/

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Short-term trend is based due to the amount of precipitation (wet or dry
year).
Long-term trend is decreasing. According to Magyar et al (1998) the baseline
was 1980 (30-50), to what the current values (0-15) were compared to.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2012-2018

Range size [Total surface area of the range size in km2]
››› 548

Method used for range size estimate

☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
National Park Directorates' databases
http://www.birding.hu/
http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates' databases
http://www.birding.hu/
http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	50
Maximum	70
Best single value	70

Method used for long-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates' databases
Ecsedi Z. (2004): A Hortobágy madárvilága. Hortobágy Természetvédelmi

Egyesület, Winter Fair, Balmazújváros-Szeged, 602 p.
Expert opinions
Maygar et al. (1998): Magyarország madarainak névjegyzéke. Nomenclator
avium Hungariae. Magyar Madártani és TermészetvédelmiEgyesület,
Budapest.
http://www.birding.hu/
http://map.mme.hu/maps/map2

Common Moorhen / Gallinula chloropus

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2014-2018

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value.
In cases when only best single value is available, ideally provide lower and upper confidence limits in the
data fields for minimum and maximum and indicate them as such.]

Minimum	6000
Maximum	12000
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› KEHOP-4.3.0-15-2016-00001 project results, unpublished.
National park directorates' databases
http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2000-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value.
In cases when only best single value is available, ideally provide lower and upper confidence limits in the
data fields for minimum and maximum and indicate them as such.]

Minimum	6000
Maximum	12000
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. p. 27

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ No

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› New method: Under the KEHOP-4.3.0-15-2016-00001 project in 2017-2018,
530 2.5x2.5 km2 grids were surveyed for a given set of breeding bird species,
covering 3.6% of the country. 291 breeding pairs of Gallinula chloropus were
estimated for the 530 grids. As the habitat distribution in the 530 grids is
considered to be representative of the country, 8083 pairs can be calculated
for the national population. The figures presented here were based on this.

Passage and staging numbers

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas
where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel
entes_2013_anyagai/Gallinula_chloropus.pdf
National park directorates' databases http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Stable

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Magyar G., Hadarics T., Waliczky Z., Schmidt A., Nagy T. & Bankovics A. (1998):
Magyarország madarainak névjegyzéke. Madártani Intézet, Budapest, 56-57 p.
Ecsedi Z. (szerk.) (2004): A Hortobágy madárvilága. Hortobágy
Természetvédelmi Egyesület, Winter Fair, Balmazújváros - Szeged. 2004. 250-
251 p.
BirdLife International (2004) Birds in Europe: population estimates, trends and
conservation status. Cambridge, UK: BirdLife International. (BirdLife
Conservation Series No.12.), 87 p.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. 94 p.
KEHOP-4.3.0-15-2016-00001 project results, unpublished.
National park directorates' databases
http://map.mme.hu/maps/map2
National common bird monitoring scheme (MMM) database.

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this

section, if available
››› There is no national population estimate from before 1995. The species is
widespread and occupies most of the suitable habitats. The national park
directorates databases suggest a stable trend.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 50326

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases
http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel
entes_2013_anyagai/Gallinula_chloropus.pdf
National park directorates' databases
http://map.mme.hu/maps/map

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Stable

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases
http://map.mme.hu/maps/map2

Common Coot / Fulica atra

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2014-2018

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	10000
Maximum	20000
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› KEHOP-4.3.0-15-2016-00001 project results, unpublished.
National park directorates' databases http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2000-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	25000
Maximum	50000
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Consultation with national expes.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant

☑ Due to genuine change

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› New method: Under the KEHOP-4.3.0-15-2016-00001 project in 2017-2018,
530 2.5x2.5 km2 grids were surveyed for a given set of breeding bird species,
covering 3.6 % of the country. 398 breeding pairs of Fulica atra were
estimated for the 530 grids.
As the habitat distribution in the 530 grids is considered to be representative
of the country, 11176 pairs can be calculated for the national population. This
figure was used to estimate the minimum, while the national park directorates
estimated 15-20 000 pairs, of which the higher value was used here as the
maximum.

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ Non-breeding/wintering numbers estimate is available

Latest non-breeding/wintering numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2015-2018

Numbers [Individuals. Raw numbers, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	5000
Maximum	6000
Best single value	

Type of estimate
☑ Best estimate

Method used for non-breeding/wintering numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetem
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database

Previous non-breeding/wintering numbers estimate

Please indicate whether a previous estimate of the non-breeding/wintering numbers is

available

☑ No previous non-breeding/wintering numbers estimate is available

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available

››› Hungarian Waterfowl Monitoring database 2015-2018: 800-2700. I considered only the January data. Considering that many parts of Danube river where the species wintered are not covered by this program, I corrected the value upwards. I have also compared to common pochard and tufted duck which winter in much bigger quantities, therefore I raised the values independently from the previous results.

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Unknown

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
›››
http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jelentes_2013_anyagai/Fulica_atra.pdf
National park directorates' databases http://map.mme.hu/maps/map2
National common bird monitoring scheme (MMM) database.

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either

interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	83
Maximum	88
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura,
Budapest. 76-77 p.
Magyar G., Hadarics T., Waliczky Z., Schmidt A., Nagy T. & Bankovics A. (1998):
Magyarország madarainak névjegyzéke. Madártani Intézet, Budapest, 57 p.
Ecsedi Z. (szerk.) (2004): A Hortobágy madárvilága. Hortobágy
Természetvédelmi Egyesület, Winter Fair, Balmazújváros - Szeged. 2004. 252-
254 p.
BirdLife International (2004) Birds in Europe: population estimates, trends and
conservation status. Cambridge, UK: BirdLife International. (BirdLife
Conservation Series No.12.), 103 p.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. 98-99 p.
KEHOP-4.3.0-15-2016-00001 project results, unpublished.
National park directorates' databases http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› The long-term trend was based on BirdLife International (2004), where a
population estimate based on data from 1990-1993 was published.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ Yes

Is short-term and/or long-term non-breeding/wintering numbers trend estimate available?
☑ Yes

Please indicate whether estimate of the non-breeding/wintering numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Non-breeding/wintering numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term non-breeding/wintering numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2008-2018

Short-term trend direction
☑ Decreasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	0
Maximum	50
Best single value	

Method used for short-term non-breeding/wintering numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetem
Kiadó, 304 p.

Long-term non-breeding/wintering numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	18
Maximum	76
Best single value	

Method used for long-term non-breeding/wintering numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2006): A vonuló vízivad populációk fenntartásának alapjai

Magyarországon. Doktori Értekezés. Mellékletek, 305 p.
Faragó S. (2017): Magyar Vízivad Közlemények No. 29. Soproni Egyetemi
Kiadó, 304 p.
Hungarian Waterfowl Monitoring database

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Short-term trend is based on Hungarian Waterfowl Monitoring database 2007-
2018. I considered only the January data. The baseline was 2007 (1608), to
what the current values (800-2700) were compared to.
Long-term trend is decreasing. According to Faragó's study (2016) the
baseline was 1996 (3309), to what the current Hungarian Waterfowl
Monitoring database values (800-2700) were compared to. I considered only
January data. Faragó's study (2017) also determined long-term decline.

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 36328

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases
http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Unknown

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate
☑ Insufficient or no data available

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases
http://map.mme.hu/maps/map2

Common Crane / Grus grus

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ Passage numbers estimate is available [Passage numbers are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

Latest passage numbers estimate

Year or period
[Year or period when numbers were last determined]
››› 2013-2018

Passage numbers
[Individuals. Raw numbers, i.e. not rounded. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	120000
Maximum	200000
Best single value	

Type of estimate
☑ Best estimate

Method used for passage numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2017): Vízivad Közlemények No. 29. Soproni Egyetem Kiadó, 304 p.
Hortobágy National Park Directorate's databases
Hungarian Waterfowl Monitoring database
National Park Directorates' databases

Previous passage numbers estimate

Please indicate whether a previous estimate of passage numbers is available
☑ No previous passage numbers estimate is available

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Hungarian Waterfowl Monitoring database + National Park Directorates'
databases + Hortobágy National Park Directorate's database (news in internet
about crane's monitoring).

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas
where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ Non-breeding/wintering numbers estimate is available

Latest non-breeding/wintering numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2013-2019

Numbers [Individuals. Raw numbers, i.e. not rounded). Provide either interval (minimum - maximum)
and/or best single value. In cases when only best single value is available, ideally provide lower and upper
confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	1000
Maximum	10000
Best single value	

Type of estimate
☑ Best estimate

Method used for non-breeding/wintering numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Previous non-breeding/wintering numbers estimate

Please indicate whether a previous estimate of the non-breeding/wintering numbers is available
☑ No previous non-breeding/wintering numbers estimate is available

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ Yes

Passage numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term passage numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Increasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	37
Maximum	91
Best single value	

Method used for short-term trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
Faragó S. (2017): Vízivad Közlemények No. 29. Soproni Egyetem Kiadó, 304 p.
Hortobágy National Park Directorate' database
Hungarian Waterfowl Monitoring database
National Park Directorates' databases

Long-term passage numbers trend estimate

Trend period [since ca. 1980or a period as close as possible to that]
››› 1996-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	1566
Maximum	2233
Best single value	

Method used for long-term trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Ecsedi Z. (2004): A Hortobágy madárvilága. Hortobágy Természetvédelmi
Egyesület, Winter Fair, Balmazújváros-Szeged, 602 p.
Expert opinions
Faragó, S. (2006): A vonuló vízivad populációk fenntartásának alapjai
Magyarországon. Doktori Értekezés. Mellékletek. 305 p.
Faragó S. (2017): Vízivad Közlemények No. 29. Soproni Egyetem Kiadó, 304 p.
Hortobágy National Park Directorate's database
Hungarian Waterfowl Monitoring database
Short-term trend is based on Hungarian Waterfowl Monitoring database 2007-
2018. I considered only the migration months. Hungarian Waterfowl
Monitoring database 2015-2018: 50000-70000. The baseline was 2007
(36570), to what the current values (50000-70000) were compared to.
Long-term trend. Hungarian Waterfowl Monitoring database 2015-2018:
50000-70000. According to Ecsedi (2014) the baseline was 1981 (2000, but I
corrected the value
upwards 3000), to what the current Hungarian Waterfowl Monitoring
database values (50000-70000) were compared to.

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ Yes

Is short-term and/or long-term non-breeding/wintering numbers trend estimate available?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Red-throated Loon / Gavia stellata

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Arctic Loon / Gavia arctica

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Black Stork / Ciconia nigra

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2017

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	350
Maximum	400
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Demeter, I., Horváth, M., Prommer, M. (2019): Az MME Ragadozómadárvédelmi
Szakosztálya (RMvSz) által monitorozott fajok 2017-es költési
eredményeinek összefoglalása/Summary of population monitoring
programmes run by MME/Birdlife Hungary's Raptor Conservation
Department (RCD) in 2017 (In Hungarian with English summary) – Heliaca
15:75.
Kalocsa, B., Tamás, E. A. (2015-2018): A Feketególya-védelmi Munkacsoport
beszámolói/Reports of the work of the Black Stork protection programme –
Heliaca 11-14.
National park directorates' databases

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2000-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	380
Maximum	420
Best single value	

Type of estimate
☑ Best estimate

Report on the status of waterbird populations in the AEWA area for the period 2013-2018 [Contracting Party: Hungary]

Method used for breeding numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Kalocsa, B. és Tamás, E. A. (2012): A fekete gólya védelmi program 2010. évi
beszámolója / Report of the Black Stork Protection Programme for 2010 (In
Hungarian with English summary.) Heliaca 8: 32-35.
Breeding bird (MME RTM) database.
National Park Direcorates' databases

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Passage and staging numbers

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas
where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

**Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or
long-term (since ca. 1980) trend is available**
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either
interval (minimum - maximum) and/or best single value. In cases when only best single value is available,
ideally provide lower and upper confidence limits in the data fields for minimum and maximum and
indicate them as such.]

Minimum	
Maximum	

Best single value	

Method used for short-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Kalocsa, B., Tamás, E. A. (2009): Feketególya-védelmi Program – 2007/The
Black Stork Protection Programme – 2007 – Heliaca 5:51.Kalocsa, B., Tamás, E. A. (2018): A Feketególya-
védelmi Munkacsoport 2016.
évi beszámolója/Report of the Black Stork Protection Working Group (2016)
(In Hungarian with English summary) – Heliaca 14:8.
National park directorates' databases
http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	25
Maximum	50
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Mezőgazdasági
Könyvkiadó Vállalat, Budapest. p. 33.
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 527.
National park directorates' databases
Consultation with national experts.

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› From the 1980s we have only a roughly underestimated number of about 150
breeding pairs, so the trend could not be based on this. The apparent increase
is mostly due to imrpoved knowledge (increasing extension of monitored
areas). The experts estimate a slight increase of the population (taken over
from the 2013 report).

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans

and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 23251

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases
http://map.mme.hu/maps/map2
The distribution map was made by using breeding probability data in category
certain.

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	

Best single value	

Method used for short-term range trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases
Consultation with national experts.

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	5
Maximum	10
Best single value	10

Method used for long-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases
Consultation with national experts.

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› The short-term trend of the distribution is considered stable, as is the population, the apparent decline when the map is compared with the map in the 2013 report is because the latter was based on a much longer period (2000-2012).
In the 1980s the experts knew only very few breeding sites and from this period we have only a roughly underestimated number of about 150 breeding pairs. As the monitoring activity was extremely low, we have only a rough estimation of the probable increase in the breeding distribution.

White Stork / Ciconia ciconia

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2015-2018

Report on the status of waterbird populations in the AEWA area for the period 2013-2018 [Contracting Party: Hungary]

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	4400
Maximum	5050
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Lovászi, Péter, Lendvai, Csaba, Nagy, Károly (2016): Results of the 2014
national White Stork (Ciconia ciconia) census in Hungary. Aquila 122-123, p.
47-55.
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 530.
VM Környezetügyért Felelős Államtitkárság (2013): Fajmegőrzési tervek –
Fehér gólya (Ciconia ciconia), p. 12-13.
Consultation with national experts.
National park directorates' databases
http://map.mme.hu/maps/map2
http://golya.mme.hu/index.php?p=db

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2000-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	5000
Maximum	5500
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]

››› Lovászi, P., Nagy, K. & Lendvai, Cs. (2013): Results of the White Stork Census in
Hungary in 2004. In: NABU (2013): White Stork populations cross the word –
Results of the 6th International White Stork Census 2004/05. Berlin.
Lovászi, P. és Nagy, K. (2013): A fehér gólya és védelme. Nimfea
Természetvédelmi Egyesület, Túrkeve. p. 32.
MME White Stork Nest Database (golya.mme.hu)

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› The minimum (2018) and maximum (2015) data come from the MAP (Bird
Atlas Program) data base. Since 1997 we have population data from every
year due to the country-wide monitoring activity:
http://map.mme.hu/maps/map2

Passage and staging numbers

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Lovászi, Péter, Lendvai, Csaba, Nagy, Károly (2016): Results of the 2014
national White Stork (Ciconia ciconia) census in Hungary. Aquila 122-123, p.
47-55.
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 530.
VM Környezetügyért Felelős Államtitkárság (2013): Fajmegőrzési tervek –
Fehér gólya (Ciconia ciconia), p. 12-13.
Consultation with national experts.
National park directorates' databases
http://map.mme.hu/maps/map2
http://golya.mme.hu/index.php?p=db

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1979-2018

Long-term trend direction
☑ Fluctuating

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Lovászi, Péter, Lendvai, Csaba, Nagy, Károly (2016): Results of the 2014
national White Stork (Ciconia ciconia) census in Hungary. Aquila 122-123, p.
47-55.
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 530.
Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest. 441 p.
VM Környezetügyért Felelős Államtitkárság (2013): Fajmegőrzési tervek –
Fehér gólya (Ciconia ciconia), p. 12-13.
Consultation with national experts.
National park directorates' databases
http://map.mme.hu/maps/map2
http://golya.mme.hu/index.php?p=db

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this

section, if available
››› We have population data of breeding pairs (extrapolations) from the end of the 1950s. The census was repeated every 5 years until 1997. Since 1997 we have population data from every year due to the country-wide monitoring activity. In 1979 there were about 5300 breeding pairs in Hungary, and since then their number has fluctuated between 4500 and 5400 pairs. In 1997 we had a negative peak of 3900 pairs.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 76500

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://map.mme.hu/maps/map2
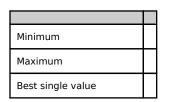Only certain breeding records were used for the map.

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction

☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term range trend estimate

☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]

››› Lovászi, Péter, Lendvai, Csaba, Nagy, Károly (2016): Results of the 2014 national White Stork (Ciconia ciconia) census in Hungary. Aquila 122-123, p. 47-55.
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon. Pro Vértes Közalapítvány, Csákvár. p. 530.
VM Környezetügyért Felelős Államtitkárság (2013): Fajmegőrzési tervek – Fehér gólya (Ciconia ciconia), p. 12-13.
Consultation with national experts.
National park directorates' databases
http://map.mme.hu/maps/map2
http://golya.mme.hu/index.php?p=db

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]

››› 1976-2018

Long-term trend direction

☑ Stable

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate

☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]

››› Lovászi, Péter, Lendvai, Csaba, Nagy, Károly (2016): Results of the 2014 national White Stork (Ciconia ciconia) census in Hungary. Aquila 122-123, p. 47-55.
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon. Pro Vértes Közalapítvány, Csákvár. p. 530.
Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó, Budapest. 441 p.
VM Környezetügyért Felelős Államtitkárság (2013): Fajmegőrzési tervek –

Fehér gólya (Ciconia ciconia), p. 12-13.
Consultation with national experts.
National park directorates' databases
http://map.mme.hu/maps/map2
http://golya.mme.hu/index.php?p=db

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› The breeding distribution actually seems stable, but there are already signs of
pairs leaving some breeding sites around mountain or hillside waterflows.

Eurasian Spoonbill / Platalea leucorodia

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2013-2018

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value.
In cases when only best single value is available, ideally provide lower and upper confidence limits in the
data fields for minimum and maximum and indicate them as such.]

Minimum	612
Maximum	1100
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Source of data: National Park Directorates
Expert: Csaba Pigniczki

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2008-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value.
In cases when only best single value is available, ideally provide lower and upper confidence limits in the

data fields for minimum and maximum and indicate them as such.]

Minimum	850
Maximum	1400
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates databases.
Breeding bird (MME RTM) database.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› The data quality is better, because a coordinator collected the breeding data
every year since 2015. This report-period (2013-2018) contains less estimation
than the previous one (2007-2012), and the results for this new report-period
contain more data based on aerial survey (drone, airplane). We estimated the
maximal number of breeding pairs (1100 pairs) in 2013, and we estimated the
minimal number of breeding pairs (612 pairs) one year later, in 2014 during
this report period.

Passage and staging numbers

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas
where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:

☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Decreasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	25

Method used for short-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Data sources: National Park Directorates
Statistical analysis: TRIM – time effect model, linear model (only one
data/year was used, which data is responsible for the estimated minimumnumber of breeding pairs in
Hungary). 25% decline, estimating with
comparing the average breeding pairs of 2013-2018 period and the average
breeding pairs of 2007-2012 period (824 bp / 1095 bp *100)Overall slope:
0.9572 ± 0.0026 (SE)
There are big, annual differences between estimated breeding numbers – this
is the result of the fact that Spoonbills may skip breeding, if circumstances are
not optimal for them (dryness in breeding area, probably also in case of bad
wintering conditions).
Expert: Csaba Pigniczki

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1982-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	43

Method used for long-term breeding numbers trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details,

etc.]
››› References: Rakonczay Z. (ed.) (1990): Vörös könyv. Akadémiai Kiadó,
Budapest. 360 p.
Haraszthy L. (ed.) (1984): Magyarország fészkelő madarai. Natura, Budapest.
247 p.
Data sources: National Park Directorates, references
Statistical analysis: TRIM – linear model (only one data/year was used, which
data is responsible for the estimated minimum number of breeding pairs in
Hungary)
Expert: Csaba Pigniczki

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Long term trend is increasing, because the breeding population of Spoonbills
increased from 575-600 pairs to 800+ pairs in most years. Adult Spoonbills
tend to skip breeding during dry years, due to unfavourable conditions.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to
determine the numbers of individuals passing through the country by applying targeted migration
census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans
and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas
where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2013-2018

Range size [Total surface area of the range size in km2]
››› 4830

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Data sources: National Park Directorates
Expert: Csaba Pigniczki

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Increasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	10

Method used for short-term range trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Data sources: national park directorates
Expert: Csaba Pigniczki

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1982-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (ed.) (1984): Magyarország fészkelő madarai. Natura, Budapest.
247 p.
Data sources: National Park Directorates, references
Expert: Csaba Pigniczki

Glossy Ibis / Plegadis falcinellus

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2015-2017

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	0
Maximum	12
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2000-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	2
Maximum	20
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates databases. Breeding bird (MME RTM) database.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Passage and staging numbers

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas
where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 532-534.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Fluctuating

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://map.mme.hu/maps/map2
Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura,
Budapest.
Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest.
Magyar G., Hadarics T., Waliczky Z., Schmidt A., Nagy T. & Bankovics A. (1998):
Magyarország madarainak névjegyzéke. Madártani Intézet, Budapest, 110 p.
BirdLife International (2004) Birds in Europe: population estimates, trends and
conservation status. Cambridge, UK: BirdLife International. (BirdLife
Conservation Series No.12.), 223 p.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. 189-190 p.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 600

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 532-534.
National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species)
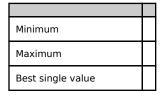http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 532-534.
National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Fluctuating

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://map.mme.hu/maps/map2
Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura,
Budapest.
Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest.
Magyar G., Hadarics T., Waliczky Z., Schmidt A., Nagy T. & Bankovics A. (1998):
Magyarország madarainak névjegyzéke. Madártani Intézet, Budapest, 110 p.
BirdLife International (2004) Birds in Europe: population estimates, trends and
conservation status. Cambridge, UK: BirdLife International. (BirdLife
Conservation Series No.12.), 223 p.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. 189-190 p.

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Breeding in the early 1980s was restricted to the Hortobágy (possibly two
grids). Based on the national park directorates' database, the number of grids
still varies from year to year (0-2).

Eurasian Bittern / Botaurus stellaris

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2017-2018

Population unit
☑ Calling males

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the

data fields for minimum and maximum and indicate them as such.]

Minimum	800
Maximum	1740
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 502-505.
KEHOP-4.3.0-15-2016-00001 project results, unpublished.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2000-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	700
Maximum	1000
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates' databases.
Breeding bird (MME RTM) database.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. p. 278.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Report on the status of waterbird populations in the AEWA area for the period 2013-2018 [Contracting Party: Hungary]

Please clarify the nature of change

[More than one option from the list below is possible]
☑ Due to genuine change
☑ Due to the use of different method

Please indicate which reason for change is predominant
☑ Due to the use of different method

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available

››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 502-505. puts the population between
800-1200 pairs.
New method: Under the KEHOP-4.3.0-15-2016-00001 project in 2017-2018,
530 2.5x2.5 km2 grids were surveyed for a given set of breeding bird species,
covering 3.6% of the country. 62 calling males of Botaurus stellaris were
estimated for the 530 grids. The habitat distribution in the 530 grids is
considered to be representative of the country, so the national population
may be estimated at 1740 calling males. This figure was used here as a
maximum figure, considering that other, published estimates were lower (700-
1000 or 800-1200 calling males).

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas
where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ No non-breeding/wintering numbers estimate is available

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either
interval (minimum - maximum) and/or best single value. In cases when only best single value is available,
ideally provide lower and upper confidence limits in the data fields for minimum and maximum and

Report on the status of waterbird populations in the AEWA area for the period 2013-2018 [Contracting Party: Hungary]

indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 502-505.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Unknown

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Insufficient or no data available

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Tucker, G. M. – Heath, M. F. (1994): Birds in Europe – Their Conservation
Status. Royal Society for the Protection of Birds, BirdLife International, 600 p.
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 502-505.
KEHOP-4.3.0-15-2016-00001 project results, unpublished.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› The population estimate from the late 1980s published in Tucker and Heath
(1994) was only 400-500 pairs, but it is more likely that the difference to the
present population is due to better knowledge rather than genuine increase.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ Yes

Is short-term and/or long-term non-breeding/wintering numbers trend estimate available?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 21403

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 502-505.
National park directorates' databases (Annual survey of colonially breeding
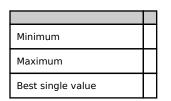and strictly protected bird species)
http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term range trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 502-505.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Unknown

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate
☑ Insufficient or no data available

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 502-505.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› The short-term trend of the distribution is considered stable, as is the
population, the apparent decline when the map is compared with the map in
the 2013 report is because the latter was based on a much longer period
(2000-2012).

Common Little Bittern / Ixobrychus minutus

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2017-2018

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	2500
Maximum	3500
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› KEHOP-4.3.0-15-2016-00001 project results, unpublished.

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 1995-2002

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	4000
Maximum	6000
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. p. 278.
National Park Directorates' databases.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 506-508. puts the population between
4000-6000 pairs.
New method: Under the KEHOP-4.3.0-15-2016-00001 project in 2017-2018,
530 2.5x2.5 km2 grids were surveyed for a given set of breeding bird species,
covering 3.6% of the country. 98 pairs of Ixobrychus minutus were estimated
for the 530 grids. Assuming the habitat distribution in the 530 grids is
representative of the country, the national population may be estimated at
2752 pairs. This figure was used here as a mean value, providing a range for
the estimate, considering also that other, published estimates were higher
(3500-6000 or 4000-6000 pairs).

Passage and staging numbers

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas
where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction

☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 506-508.

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Unknown

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Insufficient or no data available

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest. 441 p.
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 506-508.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 31516

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 506-508.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
›› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 506-508.253
National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
›› 1980-2018

Long-term trend direction
☑ Unknown

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate
☑ Insufficient or no data available

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
›› Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest. 441 p.
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 506-508.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Black-crowned Night-heron / Nycticorax nycticorax

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
›› 2015-2017

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	2243
Maximum	2576
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 509-511.

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2008-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	2200
Maximum	3600
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates databases.
Breeding bird (MME RTM) database.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› In the 2013 report, the upper value of the population figure (3600 pairs) was
probably just taken over from previous estimates. According to the Hungarian
Bird Migration Atlas published in 2009, the population had declined in the
previous years and so they estimated 1800-2500 pairs. A similar figure was
pubélished by Haraszthy (2014) and this seems to be correcto according to the
annual census results.

Passage and staging numbers

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas
where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either
interval (minimum - maximum) and/or best single value. In cases when only best single value is available,
ideally provide lower and upper confidence limits in the data fields for minimum and maximum and
indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details,
etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 509-511.Csörgő T. et al (2009): Magyar madárvonulási atlasz. Kossuth
Kiadó, Budapest,
672 p.
National park directorates' databases (Annual survey of colonially breeding

and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1976-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	34

Method used for long-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura, Budapest.
Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó, Budapest.
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon. Pro Vértes Közalapítvány, Csákvár. p. 509-511.
Csörgő T. et al (2009): Magyar madárvonulási atlasz. Kossuth Kiadó, Budapest, 672 p.
National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species)
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Surveys between 1976-1982 resulted in population figures between 2500-4800 pairs. The mean of these two figures (3650 pairs) was compared to the mean of the annual surveys in the years 2015-2017 (2403 pairs) to reach the best single value.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas

where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 9729

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 509-511.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
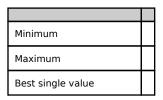http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2000-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term range trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 509-511.

National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1976-2018

Long-term trend direction
☑ Unknown

Long-term trend magnitude [Percentage change over the period indicated above. Provide either
interval (minimum - maximum) and/or best single value. In cases when only best single value is available,
ideally provide lower and upper confidence limits in the data fields for minimum and maximum and
indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate
☑ Insufficient or no data available

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details,
etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 509-511.
Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura,
Budapest.
Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest. 441 p.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Additional information (optional)

**Please provide any additional or complementary information to the data provided above in this
section, if available**
››› Haraszthy L. (1984) shows 32 grids, Haraszthy L. (2014) shows 96 grids for the
2000-2012 period, the http://map.mme.hu/maps/map2 database (with the
national park directorates' databases) shows 98 grids with certain breeding of
the species. However, the population did not increase (neither in the longterm
nor in the short-term), so it is not certain whether the 1979-1986 map is
based on insufficient surveys or the population has really spread out to more
sites since while it decreased in the long term.

Squacco Heron / Ardeola ralloides

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2015-2017

Population unit

☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	244
Maximum	286
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 512-514.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2008-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	250
Maximum	450
Best single value	

Method used for breeding numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates databases
Breeding bird (MME RTM) database.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]

☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Passage and staging numbers

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 512-514.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
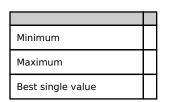http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1976-2018

Long-term trend direction
☑ Fluctuating

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://map.mme.hu/maps/map2
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura,
Budapest.
Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest.
Magyar G., Hadarics T., Waliczky Z., Schmidt A., Nagy T. & Bankovics A. (1998):
Magyarország madarainak névjegyzéke. Madártani Intézet, Budapest, 110 p.
BirdLife International (2004) Birds in Europe: population estimates, trends and
conservation status. Cambridge, UK: BirdLife International. (BirdLife
Conservation Series No.12.), 223 p.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. 189-190 p.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 4142

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 509-511.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2000-2018

Short-term trend direction
☑ Decreasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	11

Method used for short-term range trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 509-511.
National park directorates' databases (Annual survey of colonially breeding
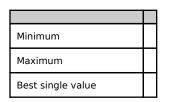and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1976-2018

Long-term trend direction
☑ Unknown

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate
☑ Insufficient or no data available

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura,
Budapest.
Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest. 441 p.
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 512-514.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Haraszthy L. (1998) shows 23 grids (1979-1986), while the present map shows
4142 km2. However, the population did not increase (neither in the long-term
nor in the short-term), so it is uncertain whether the 1979-1986 map is based
on insufficient surveys or the population has really spread out to more sites
since. The best single value for the short-term trend is the comparison of the
breeding range in the 2013 Article 12 report and in the present report.

Grey Heron / Ardea cinerea

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2015-2017

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	2970
Maximum	3343
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2008-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	3000
Maximum	4000
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates databases
Breeding bird (MME RTM) database

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ Non-breeding/wintering numbers estimate is available

Latest non-breeding/wintering numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2013-2018

Numbers [Individuals. Raw numbers, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	1000
Maximum	3000
Best single value	

Type of estimate
☑ Best estimate

Method used for non-breeding/wintering numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Previous non-breeding/wintering numbers estimate

Please indicate whether a previous estimate of the non-breeding/wintering numbers is available
☑ No previous non-breeding/wintering numbers estimate is available

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1976-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	82

Method used for long-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura, Budapest.
Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó, Budapest. 441 p.
National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species)
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Surveys between 1976-1982 estimated 1200-1600 pairs (the highest number in 1978, in 44 colonies). 1760 pairs bred in 1996. The mean of the 1200-1600 pairs estimate was compared to the mean of the 2015-2017 counts (3209) to get the best single value.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ Yes

Is short-term and/or long-term non-breeding/wintering numbers trend estimate available?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 13508

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2000-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term range trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2-_

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1978-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura,
Budapest.
Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest. 441 p.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› 44 colonies were reported in 1978. Assuming they were all in different 10x10
km grids, this number was compared with the present map to provide the
best single value for the long-term trend. The short-term trend of the
distribution is considered stable, as is the population.

Purple Heron / Ardea purpurea

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2015-2017

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	633
Maximum	802
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2008-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	800
Maximum	1400
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates databases
Breeding bird (MME RTM) database.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to the use of different method

Please indicate which reason for change is predominant
☑ Due to the use of different method

Passage and staging numbers

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Decreasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	11
Maximum	58
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 522-524.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)

http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Fluctuating

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest. 441 p.
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 518-521.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years)

and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 12627

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 518-521.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2000-2018

Short-term trend direction
☑ Decreasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	29

Method used for short-term range trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 518-521.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2-_

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Fluctuating

Long-term trend magnitude [Percentage change over the period indicated above. Provide either

interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura,
Budapest.
Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest. 441 p.
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 522-524.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Haraszthy, L. (1998) shows 66 grids (based on surveys from 1976-1982),
Haraszthy L. (2014) shows 147 grids for 2000-2012, the present report shows
12627 km2 distribution. The breeding population strongly fluctuates
depending on rainfall conditions (decreased from mid-80s, and increased
again in the years 2000, but seems to have decreased again), so it is best
called fluctuating in the long-term. The best single value for the short-term
trend is the comparison of the breeding range in the 2013 Article 12 report
and in the present report.

Great White Egret / Ardea alba

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2015-2017

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	4173
Maximum	4666
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 518-521.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2008-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	3600
Maximum	5500
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates databases
Breeding bird (MME RTM) database.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Passage and staging numbers

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ Non-breeding/wintering numbers estimate is available

Latest non-breeding/wintering numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2013-2018

Numbers [Individuals. Raw numbers, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	500
Maximum	3000
Best single value	

Type of estimate
☑ Best estimate

Method used for non-breeding/wintering numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Magyar Vízivad Közlemények (Hungarian Waterfowl Monitoring Database) (http://vadgazdalkodas.emk.uni-sopron.hu/content/index/id/3955)

Previous non-breeding/wintering numbers estimate

Please indicate whether a previous estimate of the non-breeding/wintering numbers is available
☑ No previous non-breeding/wintering numbers estimate is available

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› January counts of the Waterbird Monitoring between 2013-2018: the minimum count was 209, the maximum count was 736. Because coverage is not complete, an expert estimate had to be made. Probably, in harsh winters a large part of birds are at the best – monitored – wetlands, so the minimum estimate is close to the minimum count. In mild winters, the species is much more widespread and so the maximum national estimate can be multifold of the maximum count from monitored sites.

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 518-521.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1976-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	1424

Method used for long-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest. 441 p.
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 518-521.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this

section, if available
››› Mean (295 pairs) of minimum and maximum of surveys in 1976-1982
(minimum: 260 pairs, maximum: 330 pairs) compared to the mean of annual
surveys in 2015-2017 (4496 pairs) provided the best single value.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ Yes

Is short-term and/or long-term non-breeding/wintering numbers trend estimate available?
☑ Yes

Please indicate whether estimate of the non-breeding/wintering numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Non-breeding/wintering numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term non-breeding/wintering numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term non-breeding/wintering numbers trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Magyar Vízivad Közlemények (Hungarian Waterfowl Monitoring Database) (http://vadgazdalkodas.emk.uni-sopron.hu/content/index/id/3955)

Long-term non-breeding/wintering numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	900
Maximum	2900
Best single value	

Method used for long-term non-breeding/wintering numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest. 441 p.

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Very few individuals overwintered in Hungary in the years around 1980. This number is estimated at 50-100. The minimum and maximum values are based on the comparison of these numbers with the present estimate for wintering birds (500-3000), minimum of 1980 estimate compared with minimum of 2018 estimate provided the minimum rate and maximum of 1980 estimate compared with maximum of 2018 estimate provided the maximum rate.

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 13187

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]

››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 518-521.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2
Only grids with certain breeding were included, but without records of nest
building (nesting material may be carried from far away and this is observed
most often, rather than at the nestsite).

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2000-2018

Short-term trend direction
☑ Increasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	9

Method used for short-term range trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 518-521.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1976-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]

››› Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó, Budapest. 441 p.
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon. Pro Vértes Közalapítvány, Csákvár. p. 518-521.
National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species)
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Haraszthy, L. (1998) shows 26 grids (based on surveys from 1976-1982), Haraszthy L. (2014) shows 132 grids for the 2000-2012 period, the present report shows 13187 km2 distribution (with certain breeding of the species, except nestbuilding records). The best single value for the long-term trend is the comparison of 26 grids (2600 km2) to 13187 km2. The best single value for the short-term trend is the comparison of the breeding range in the 2013 Article 12 report and in the present report.

Little Egret / Egretta garzetta

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2015-2017

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	578
Maximum	768
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon. Pro Vértes Közalapítvány, Csákvár. p. 515-517.
National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species)
http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2008-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	750
Maximum	1400
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates databases. Breeding bird (MME RTM) database

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to the use of different method

Passage and staging numbers

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 515-517.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1978-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	116

Method used for long-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura,
Budapest.
Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest. 441 p.
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 515-517.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Mean (305 pairs) of surveys in 1978 (280 pairs) and 1982 (430 pairs)
compared to the mean of annual surveys in 2015-2017 (658 pairs) provided
the best single value for the long-term trend. Surveys at irregular periods
since 1838 normally ranged around 200-300 pairs, and only resulted in more
than 400 pairs in the early 1980s, but after a temporary decline in the late
1980s and early 1990s, the numbers went above 600 in the years 2000 and
seem to fluctuate since around a higher mean than in the last two centuries.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 7309

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 515-517.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)

http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term range trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 515-517.
National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species)
http://map.mme.hu/maps/map2
http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel
entes_2013_anyagai/Egretta_garzetta.pdf

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1979-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura,
Budapest.
Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest. 441 p.
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.

Pro Vértes Közalapítvány, Csákvár. p. 515-517.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Haraszthy, L. (1998) shows 36 grids (based on surveys from 1979-1986),
Haraszthy L. (2014) shows 72 grids, the present report shows a distribution of
7309 km2 (2014-2018) with certain breeding of the species. The best single
value for the long-term trend is the comparison of 36 grids (3600 km2) to
7309 km2. The best single value for the short-term trend is the comparison of
the breeding range in the 2013 Article 12 report and in the present report.

Great White Pelican / Pelecanus onocrotalus

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas
where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to
determine the numbers of individuals passing through the country by applying targeted migration
census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans
and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas
where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Pygmy Cormorant / Microcarbo pygmaeus

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2015-2017

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	1100
Maximum	1233
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2008-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	600
Maximum	1500
Best single value	

Type of estimate

☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates databases. Breeding bird (MME RTM) database.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Passage and staging numbers

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ Non-breeding/wintering numbers estimate is available

Latest non-breeding/wintering numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2013-2018

Numbers [Individuals. Raw numbers, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	500
Maximum	1300
Best single value	

Type of estimate
☑ Best estimate

Method used for non-breeding/wintering numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Magyar Vízivad Közlemények
Hungarian Waterfowl Monitoring Database (http://vadgazdalkodas.emk.unisopron.hu/content/index/id/3955)

Previous non-breeding/wintering numbers estimate

Please indicate whether a previous estimate of the non-breeding/wintering numbers is available
☑ No previous non-breeding/wintering numbers estimate is available

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
›››The wintering population of the species was not reported in 2013.
January counts of the Waterbird Monitoring between 2013-2018: the
minimum count was 467, the maximum count was 1140. Coverage is not
complete, but it is assumed that the majority occur at monitored wetlands. A
rounding-up estimate was made to account for the unmonitored part of the
wintering population.

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
›››2007-2018

Short-term trend direction
☑ Increasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	116
Maximum	185
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
›››National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
Szinai P. (szerk.) (2013): Kis kárókatona fajmegőrzési terv. Unpublished.

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
›››1995-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	11580

Method used for long-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Magyar, G., Hadarics, T., Waliczky, Z., Schmidt, A., Nagy, T. & Bankovics, A.
(1998): Nomenclator avium Hungariae. Magyarország madarainak
névjegyzéke. KTM Természetvédelmi Hivatal Madártani Intézete – Magyar
Madártani és Természetvédelmi Egyesület – Winter Fair, Budapest – Szeged.
p. 202
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278.
Szinai P. (szerk.) (2013): Kis kárókatona fajmegőrzési terv. Unpublished.

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› First breeding (after an absence of nearly a century) in the late 1980s, but
only established in early 1990s with a permanent population that allows
calculations of trend.
The maximum figure of 2007 (540) was compared to the single best value of
2017 (1168) to get the minimum of the short-term trend, and the minimum of
2007 (410) was also compared with the 2017 figure to get the maximum of
the short-term trend. The single best value of 2017 was compared with the
estimated 10 pairs of 1995 to get the long-term best single value trend.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to
determine the numbers of individuals passing through the country by applying targeted migration
census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans
and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas
where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ Yes

Is short-term and/or long-term non-breeding/wintering numbers trend estimate available?
☑ Yes

Please indicate whether estimate of the non-breeding/wintering numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Non-breeding/wintering numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term non-breeding/wintering numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term non-breeding/wintering numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Magyar Vízivad Közlemények
Hungarian Waterfowl Monitoring Database (http://vadgazdalkodas.emk.unisopron.
hu/content/index/id/3955)

Long-term non-breeding/wintering numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 2001-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	9350

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Magyar Vízivad Közlemények
Hungarian Waterfowl Monitoring Database (http://vadgazdalkodas.emk.unisopron.
hu/content/index/id/3955)

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› First breeding (after an absence of nearly a century) in the late 1980s, but only established in early 1990s with a permanent population. Wintering was not typical in the 1990s. The Hungarian Waterfowl Monitoring began to collect data for the species in 2000/2001, and the 2001 January figure (8 individuals) was used to calculate trend by comparing it to the mean (756) of the figures in the Hungarian Waterfowl Monitoring Database for the January

counts of 2013-2018 (873, 1140, 621, 824, 612, 467) to provide the best single value.

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 3577

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Increasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	10
Maximum	30
Best single value	

Method used for short-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Szinai P. (szerk.) (2013): Kis kárókatona fajmegőrzési terv. Unpublished. http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1995-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	1000
Maximum	2000
Best single value	2000

Method used for long-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Magyar, G., Hadarics, T., Waliczky, Z., Schmidt, A., Nagy, T. & Bankovics, A.
(1998): Nomenclator avium Hungariae. Magyarország madarainak
névjegyzéke. KTM Természetvédelmi Hivatal Madártani Intézete – Magyar
Madártani és Természetvédelmi Egyesület – Winter Fair, Budapest – Szeged.
p. 202
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278.
Szinai P. (szerk.) (2013): Kis kárókatona fajmegőrzési terv. Unpublished.
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› First breeding (after an absence of nearly a century) in the late 1980s, but
only established in early 1990s with a permanent population that allows
calculations of trend. The species became widespread within two decades,
which results in a large long-term trend value. On the other hand, the shortterm
increase was relatively small. Both trends are only estimated from
published or reported breeding sites.

Great Cormorant / Phalacrocorax carbo

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2013-2017

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	2390

Report on the status of waterbird populations in the AEWA area for the period 2013-2018 [Contracting Party: Hungary]

Maximum	2721
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates' database on complete, national surveys covering
all known colonies, carried out annually in the years 2012-2017 (Annual
survey of colonially breeding and strictly protected bird species).

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	2500
Maximum	2600
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Szinai, P. (2013): Status of the breeding population of Great Cormorants in
Hungary in 2013. – In: Bregnballe, T., Lynch, J., Parz-Gollner, R., Marion, L.,
Volponi, S., Paquet, J-Y. & van Eerden, M.R. (eds.) 2013. Report title to be
confirmed. IUCN-Wetlands International Cormorant Research Group Report.
Scientific report from DCE – Danish Centre for Environment and Energy,
AarhusUniversity. No. XX: XX-XX. National Park Directorates databases.
Breeding bird (MME RTM) databa

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant

☑ Due to genuine change

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ Non-breeding/wintering numbers estimate is available

Latest non-breeding/wintering numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2013-2018

Numbers [Individuals. Raw numbers, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	2000
Maximum	10000
Best single value	

Type of estimate
☑ Best estimate

Method used for non-breeding/wintering numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Magyar Vízivad Közlemények
Hungarian Waterfowl Monitoring Database (http://vadgazdalkodas.emk.unisopron.hu/content/index/id/3955)

Previous non-breeding/wintering numbers estimate

Please indicate whether a previous estimate of the non-breeding/wintering numbers is available
☑ No previous non-breeding/wintering numbers estimate is available

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› The wintering population was not reported in 2013.
The minimum value is an estimate based on the following: The January counts of the 48 most important wetlands (fishponds, major lakes, some parts of the River Danube etc.) resulted between 2013-2018 in numbers ranging from 570-2700 (Hungarian Waterfowl Monitoring Database). The lowest figure, 570, occurred in January 2017, when almost all wetlands were frozen over due to the long-lasting, extreme cold weather. The only major exception was the River Danube, which runs in a length of 417 km within Hungary. Out of the

three sample sites of the Hungarian Waterfowl Monitoring Database on the
river Danube, the Gönyű and Szob stretch (83 river km) could not be sailed in
the extreme conditions of January 2017. So the estimate is based only on the
two remaining sites: the Danube Bend (50 river km, 70 individuals counted)
and the stretch between Baja and the southern border (45 river km, 251
individuals counted). Most individuals otherwise wintering in Hungary
probably migrated off at the onset of the cold spell, but some may have
moved only to the River Danube. Averaging out these two figures (321
individuals/95 river km) and assuming this average was representative of the
entire Hungarian length of the river, there may have been 1400 individuals on
the river Danube, and probably some more on the River Tisza and Dráva in
that year (totalling 2000). In other years, the figures range from 1351-2700 in
the sample sites of the Hungarian Waterfowl Monitoring Database. The peakyear was 2016 (2700 individuals
counted on the 3 sample sites). Following the
same logic, the 1654 individuals counted along the 178 river km of the sample
sites yields 3663 individuals along the whole river. In addition, 1136 individuals
were counted at other wetlands. But this is probably only a portion of the
wintering population in Hungary in winters when most wetlands are not
frozen over, so a rough estimate of 10000 individuals was given as the
maximum figure (by doubling the total of 3663+1136).

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either
interval (minimum - maximum) and/or best single value. In cases when only best single value is available,
ideally provide lower and upper confidence limits in the data fields for minimum and maximum and
indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details,
etc.]
››› National Park Directorates' database on complete, national surveys covering
all known colonies, carried out annually in the years 2012-2017. However, the
trend is only estimated for previous years back to 2007. It is assumed that the
trend was in those years about the same as since 2012, i.e. stable (with slight
fluctuations from year to year).

Long-term breeding numbers trend estimate

Report on the status of waterbird populations in the AEWA area for the period 2013-2018 [Contracting Party: Hungary]

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Fluctuating

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Oláh J., Oláh J., Ecsedi Z. (2003): A kárókatona (Phalacrocorax carbo) halastavi kártétele és kárértékbecslése. Fishpond damages done by the Cormorant and the estimation of the value of the damage. Magyar Vízivad Közlemények 10., p.337-379.
National Park Directorates' database
Faragó, S. (2002): Vadászati állattan. Mezőgazda Kiadó, p. 496.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ Yes

Is short-term and/or long-term non-breeding/wintering numbers trend estimate available?
☑ Yes

Please indicate whether estimate of the non-breeding/wintering numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Non-breeding/wintering numbers trend estimate is available for:
☑ Short-term trend

☑ Long-term trend

Short-term non-breeding/wintering numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term non-breeding/wintering numbers trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Hungarian Waterfowl Monitoring Database (http://vadgazdalkodas.emk.unisopron. hu/content/index/id/3955)

Long-term non-breeding/wintering numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Fluctuating

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term non-breeding/wintering numbers trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Oláh J., Oláh J., Ecsedi Z. (2003): A kárókatona (Phalacrocorax carbo) halastavi kártétele és kárértékbecslése. Fishpond damages done by the Cormorant and the estimation of the value of the damage. Magyar Vízivad Közlemények 10., p.337-379.
Csörgő T. et al (2009): Magyar madárvonulási atlasz. Kossuth Kiadó, Budapest, 672 p.
Hungarian Waterfowl Monitoring Database (http://vadgazdalkodas.emk.unisopron. hu/content/index/id/3955)

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 3235

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates' database.
http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term range trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://map.mme.hu/maps/map2
National Park Directorates' database.

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	70
Maximum	90
Best single value	90

Method used for long-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://map.mme.hu/maps/map2
Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura,
Budapest.Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest.
Magyar G., Hadarics T., Waliczky Z., Schmidt A., Nagy T. & Bankovics A. (1998):
Magyarország madarainak névjegyzéke. Madártani Intézet, Budapest, 110 p.
BirdLife International (2004) Birds in Europe: population estimates, trends and
conservation status. Cambridge, UK: BirdLife International. (BirdLife
Conservation Series No.12.), 223 p.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. 189-190 p.
Oláh J., Oláh J., Ecsedi Z. (2003): A kárókatona (Phalacrocorax carbo) halastavi
kártétele és kárértékbecslése. Fishpond damages done by the Cormorant and
the estimation of the value of the damage. Magyar Vízivad Közlemények 10.,
p.337-379.
National Park Directorates' database
Csörgő T. et al (2009): Magyar madárvonulási atlasz. Kossuth Kiadó, Budapest,
672 p.

Eurasian Oystercatcher / Haematopus ostralegus

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers

Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Pied Avocet / Recurvirostra avosetta

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2015-2017

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	348
Maximum	360
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 590-592.
National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species)
http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2008-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	100
Maximum	850
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates databases
Breeding bird (MME RTM) database.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› National park directorates' databases: 348 pairs in 2016, 360 pairs in 2015
(356 pairs in 2017).

Passage and staging numbers

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 590-592.
National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Fluctuating

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]

››› Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest. 441 p.
Magyar, G., Hadarics, T., Waliczky, Z., Schmidt, A., Nagy, T. & Bankovics, A.
(1998): Nomenclator avium Hungariae. Magyarország madarainak
névjegyzéke. KTM Természetvédelmi Hivatal Madártani Intézete – Magyar
Madártani és Természetvédelmi Egyesület – Winter Fair, Budapest – Szeged.
p. 202
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. 278 p.
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 590-592.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 9355

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term range trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.Pro Vértes Közalapítvány,
Csákvár. p. 590-592.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest. 441 p.
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.

Pro Vértes Közalapítvány, Csákvár. p. 590-592.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Haraszthy, L. (1984) shows 27 grids (2700 km2). Haraszthy, L. (2014) shows
114 grids. The present map has a surface area of 9355 km2 with likely or
certain breeding of the species. The best single value for the long-term trend
is the comparison of 2700 km2 to 9355km2. The short-term trend is
estimated to be fluctuating.

Black-winged Stilt / Himantopus himantopus

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2015-2017

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value.
In cases when only best single value is available, ideally provide lower and upper confidence limits in the
data fields for minimum and maximum and indicate them as such.]

Minimum	590
Maximum	675
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 587-589.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2008-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	200
Maximum	1000
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates databases
Breeding bird (MME RTM) database

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Databases of the national park directorates: 2015: 644 pairs, 2016: 590 pairs,
2017: 675 pairs

Passage and staging numbers

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:

☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 587-589.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2017

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	2150
Maximum	2260
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura,
Budapest. 247 p.
ifj. Oláh J., Pigniczki Cs., Nagy T. (2003): A gólyatöcs (Himantopus himantopus)
állományának alakulása Magyarországon és a 2000. évi fészkelési invázió.
Populqation changes of Black-winged Stilts (Himantopus himantopus) in
Hungary and their breeding influx in 2000. Aquila 109-110, p. 61-79.

MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. 278 p.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› The population range in Haraszthy (1984) (25-30 pairs) and the present
reporting period were compared (minimum vs. minimum and maximum vs
maximum) to calculate the long-term trend.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 18206

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding

and strictly protected bird species)
http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term range trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura, Budapest. 247 p.
Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó, Budapest. 441 p.
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon. Pro Vértes Közalapítvány, Csákvár. p. 587-589.
National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species)

http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› From the textual description of Haraszthy, L. (1998), a maximum of 15
breeding localities can be assumed for the 1980s and 1990s. The distribution
in the present report is 18206 km2 grids (2014-2018), based on data with
likely or certain breeding of the species. The best single value for the longterm
trend is the comparison of 15 grids to 18206 km2.

Grey Plover / Pluvialis squatarola

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas
where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to
determine the numbers of individuals passing through the country by applying targeted migration
census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans
and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Eurasian Golden Plover / Pluvialis apricaria

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ Passage numbers estimate is available [Passage numbers are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

Latest passage numbers estimate

Year or period
[Year or period when numbers were last determined]
››› 2013-2018

Passage numbers
[Individuals. Raw numbers, i.e. not rounded. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	5000
Maximum	10000
Best single value	

Type of estimate
☑ Best estimate

Method used for passage numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
National Park Directorates' databases

Previous passage numbers estimate

Please indicate whether a previous estimate of passage numbers is available
☑ No previous passage numbers estimate is available

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› National Park Directorates' databases

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ Yes

Passage numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term passage numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term trend estimate

☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
National Park Directorates' databases

Long-term passage numbers trend estimate

Trend period [since ca. 1980or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Fluctuating

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Ecsedi Z. (2004): A Hortobágy madárvilága. Hortobágy Természetvédelmi
Egyesület, Winter Fair, Balmazújváros-Szeged, 602 p.
Expert opinions
National Park Directorates' databases
National Park Directorates' databases + birding.hu on-line database.

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Eurasian Dotterel / Eudromias morinellus

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ Passage numbers estimate is available [Passage numbers are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

Latest passage numbers estimate

Year or period
[Year or period when numbers were last determined]
››› 2013-2018

Passage numbers
[Individuals. Raw numbers, i.e. not rounded. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	233
Maximum	443
Best single value	

Type of estimate
☑ Best estimate

Method used for passage numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
National Park Directorates' databases

Previous passage numbers estimate

Please indicate whether a previous estimate of passage numbers is available
☑ No previous passage numbers estimate is available

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› National Park Directorates' databases

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca.

1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ Yes

Passage numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term passage numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
National Park Directorates' databases

Long-term passage numbers trend estimate

Trend period [since ca. 1980or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Fluctuating

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	

Best single value	

Method used for long-term trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Ecsedi Z. (2004): A Hortobágy madárvilága. Hortobágy Természetvédelmi
Egyesület, Winter Fair, Balmazújváros-Szeged, 602 p.
Expert opinions
National Park Directorates' databases

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Common Ringed Plover / Charadrius hiaticula

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Little Ringed Plover / Charadrius dubius

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2014-2018

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	470
Maximum	760
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› KEHOP-4.3.0-15-2016-00001 project results, unpublished.
National park directorates' databases

http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2005-2007

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	800
Maximum	1500
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› New method: Under the KEHOP-4.3.0-15-2016-00001 project in 2017-2018,
530 2.5x2.5 km2 grids were surveyed for a given set of breeding bird species,
covering 3.6% of the country. 16 breeding pairs of Charadrius dubius were
estimated for the 530 grids.
As the habitat distribution in the 530 grids is considered to be representative
of the country, 444 pairs can be calculated for the national population. This
figure was used here as the minimum population.

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Decreasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	41
Maximum	49
Best single value	

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
›››
http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jelentes_2013_anyagai/Charadrius_dubius.pdf
National park directorates' databases
http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1995-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and

indicate them as such.]

Minimum	67
Maximum	71
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Magyar G., Hadarics T., Waliczky Z., Schmidt A., Nagy T. & Bankovics A. (1998):
Magyarország madarainak névjegyzéke. Madártani Intézet, Budapest, 61 p.
Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest. 130-131 p.
Ecsedi Z. (szerk.) (2004): A Hortobágy madárvilága. Hortobágy
Természetvédelmi Egyesület, Winter Fair, Balmazújváros - Szeged. 2004. 276-
278 p.
BirdLife International (2004) Birds in Europe: population estimates, trends and
conservation status. Cambridge, UK: BirdLife International. (BirdLife
Conservation Series No.12.), 110 p.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. 105-106 p.
KEHOP-4.3.0-15-2016-00001 project results, unpublished.
National park directorates' databases
http://map.mme.hu/maps/map2

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range

☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 19871

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases
http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Unknown

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term range trend estimate
☑ Insufficient or no data available

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel
entes_2013_anyagai/Charadrius_dubius.pdf
National park directorates' databases
http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Unknown

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	

Best single value	

Method used for long-term range trend estimate
☑ Insufficient or no data available

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura,
Budapest. 81-82 p.
National park directorates' databases
http://map.mme.hu/maps/map2

Kentish Plover / Charadrius alexandrinus

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2015-2017

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	0
Maximum	4
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2008-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value.

In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	0
Maximum	22
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
›› National Park Directorates databases
Breeding bird (MME RTM) database.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Passage and staging numbers

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
›› 2007-2018

Short-term trend direction
☑ Decreasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	82
Maximum	100
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 601-604.
National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	95
Maximum	100
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura,
Budapest. 247 p.
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 601-604.
National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species)
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› The maximum population size (22) of the 2013 BD Article 12 report was compared to the maximum population size (4) in the present report to get the short-term trend (the minimum value is 0 in both reports). The population was 60-80 pairs around 1980 (Haraszthy, 1984). This was compared to the maximum population size (4) and to the minimum population size (0) in the

present report to get the long-term trend.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 400

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species)
http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2014-2018

Short-term trend direction
☑ Decreasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available,

ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	73
Maximum	100
Best single value	

Method used for short-term range trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 601-604.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	80
Maximum	100
Best single value	100

Method used for long-term range trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura,
Budapest. 247 p.
Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest. 441 p.
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 601-604.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Haraszthy (2014) shows 15 10x10 km grids for the breeding distribution in
2008-2012, while the http://map.mme.hu/maps/map2 database (with the
national park directorates' databases) shows 4 grids with likely or certain
breeding of the species (2013-2018). These two figures were compared to get
the minimum value of the short-term trend. The long-term trend minimum
value was calculated from the number of grids shown in Haraszthy (1998)

(19+1 for the Lake Fertő area which is not shown on the map, but Transdanubia is mentioned in the text) and the 4 grids in the http://map.mme.hu/maps/map2 database (with the national park directorates' databases). Unfortunately, the maximum value is 100%, as the species did not breed at all in Hungary in 2018.

Northern Lapwing / Vanellus vanellus

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2014-2018

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	10000
Maximum	15000
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› KEHOP-4.3.0-15-2016-00001 project results, unpublished.
National park directorates' databases
http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2001-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	29000
Maximum	38000

Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change
☑ Due to the use of different method

Please indicate which reason for change is predominant
☑ Due to genuine change

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› New method: Under the KEHOP-4.3.0-15-2016-00001 project in 2017-2018, 530 2.5x2.5 km2 grids were surveyed for a given set of breeding bird species, covering 3.6% of the country. 356 breeding pairs of Vanellus vanellus were estimated for the 530 grids. As the habitat distribution in the 530 grids is considered to be representative of the country, 10250 pairs can be calculated for the national population. This figure was used here as the minimum population. From the national common bird monitoring, the population has been calculated to be 27500-30200 individuals, i.e. 13750-15100 pairs. The higher figure has been used here as the maximum population.

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ No non-breeding/wintering numbers estimate is available

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Decreasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	54
Maximum	76
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel entes_2013_anyagai/Vanellus_vanellus.pdf
National park directorates' databases http://map.mme.hu/maps/map2
National common bird monitoring scheme (MMM) database.

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	80
Maximum	85
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Magyar G., Hadarics T., Waliczky Z., Schmidt A., Nagy T. & Bankovics A. (1998): Magyarország madarainak névjegyzéke. Madártani Intézet, Budapest, 64 p.
BirdLife International (2004) Birds in Europe: population estimates, trends and conservation status. Cambridge, UK: BirdLife International. (BirdLife Conservation Series No.12.), 116 p.
Ecsedi Z. (szerk.) (2004): A Hortobágy madárvilága. Hortobágy Természetvédelmi Egyesület, Winter Fair, Balmazújváros - Szeged. 2004. 288-289 p.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke. Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi

Egyesület, Budapest. 111-112 p.
KEHOP-4.3.0-15-2016-00001 project results, unpublished.
National park directorates' databases
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Rövid –és hosszútávú trend esetében is elég egyértelmű a fészkelőállomány
csökkenése (NPI-jelentések alapján).
Országos állományadatok az 1980-90-es évekből nem nagyon ismertek. Az
utolsó az 1998-as Nomenclator könyvből származó adatokat vettem alapul a
hosszútávú trend megállapításához.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ Yes

Is short-term and/or long-term non-breeding/wintering numbers trend estimate available?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]

››› 39650

Method used for range size estimate

☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]

››› National park directorates' databases

http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]

››› 2007-2018

Short-term trend direction

☑ Decreasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	24

Method used for short-term range trend estimate

☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]

››› http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel
entes_2013_anyagai/Vanellus_vanellus.pdf
National park directorates' databases
http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]

››› 1980-2018

Long-term trend direction

☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate

☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details,

etc.]
››› National park directorates' databases
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Az elterjedés hosszútávú változására legalább a rövidtávú csökkenés
érvényes. Folyamatosan csökkenő állomány és elterjedés.

Whimbrel / Numenius phaeopus

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ Passage numbers estimate is available [Passage numbers are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

Latest passage numbers estimate

Year or period
[Year or period when numbers were last determined]
››› 2013-2018

Passage numbers
[Individuals. Raw numbers, i.e. not rounded. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	500
Maximum	1000
Best single value	

Type of estimate
☑ Best estimate

Method used for passage numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
National Park Directorates' databases

Previous passage numbers estimate

Please indicate whether a previous estimate of passage numbers is available
☑ No previous passage numbers estimate is available

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› According to the National Park Directorates' databases.

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ Yes

Passage numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term passage numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Decreasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	66
Maximum	83
Best single value	

Method used for short-term trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
National Park Directorates' databases

Long-term passage numbers trend estimate

Trend period [since ca. 1980or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	90
Maximum	93
Best single value	

Method used for long-term trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Ecsedi Z. (2004): A Hortobágy madárvilága. Hortobágy Természetvédelmi
Egyesület, Winter Fair, Balmazújváros-Szeged, 602 p.
Expert opinions
National Park Directorates' databases

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Slender-billed Curlew / Numenius tenuirostris

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ Passage numbers estimate is available [Passage numbers are expected to be reported for a small number of species

where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

Latest passage numbers estimate

Year or period
[Year or period when numbers were last determined]
››› 2013-2018

Passage numbers
[Individuals. Raw numbers, i.e. not rounded. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	0
Maximum	0
Best single value	

Type of estimate
☑ Best estimate

Method used for passage numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://www.birding.hu/

Previous passage numbers estimate

Please indicate whether a previous estimate of passage numbers is available
☑ No previous passage numbers estimate is available

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Extinct.

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to

determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ Yes

Passage numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term passage numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Decreasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	100
Maximum	100
Best single value	

Method used for short-term trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://www.birding.hu/

Long-term passage numbers trend estimate

Trend period [since ca. 1980or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	100
Maximum	100
Best single value	

Method used for long-term trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Oláh J., Pigniczki Cs. (2010): New Hungarian record of Slender-billed Curlew(Numenius tenuirostris) in the Kiskunság, Hungary. Aquila (2010), Vol. 116-117, p. 49-53.
http://www.birding.hu/
The last observation in the world was on 15 April 2001 in Kiskunság.

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Eurasian Curlew / Numenius arquata

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2014-2018

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	21
Maximum	61
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› KEHOP-4.3.0-15-2016-00001 project results, unpublished.
National park directorates' databases http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2008-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	20
Maximum	60
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates databases.
Breeding bird (MME RTM) database.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ No

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› New method: Under the KEHOP-4.3.0-15-2016-00001 project in 2017-2018,
530 2.5x2.5 km2 grids were surveyed for a given set of breeding bird species,
covering 3.6% of the country. 0 breeding pairs of Numenius arquata were
estimated for the 530 grids, so this only confirmed that the species is very
local and breeds in small numbers.

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ Passage numbers estimate is available [Passage numbers are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

Latest passage numbers estimate

Year or period
[Year or period when numbers were last determined]
››› 2013-2018

Passage numbers
[Individuals. Raw numbers, i.e. not rounded. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	3000
Maximum	5000
Best single value	

Type of estimate
☑ Best estimate

Method used for passage numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
National Park Directorates' databases

Previous passage numbers estimate

Please indicate whether a previous estimate of passage numbers is available
☑ No previous passage numbers estimate is available

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› National Park Directorates' databases.

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel
entes_2013_anyagai/Numenius_arquata.pdf
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Fluctuating

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura,
Budapest. 83-84 p.
Tucker, G. M. – Heath, M. F. (1994): Birds in Europe – Their Conservation
Status. Royal Society for the Protection of Birds, BirdLife International, 278-
279 p.
Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest. 160 p.
Magyar G., Hadarics T., Waliczky Z., Schmidt A., Nagy T. & Bankovics A. (1998):
Magyarország madarainak névjegyzéke. Madártani Intézet, Budapest, 70-71 p.
Ecsedi Z. (szerk.) (2004): A Hortobágy madárvilága. Hortobágy
Természetvédelmi Egyesület, Winter Fair, Balmazújváros - Szeged. 2004. 313-
314 p.
BirdLife International (2004) Birds in Europe: population estimates, trends and
conservation status. Cambridge, UK: BirdLife International. (BirdLife
Conservation Series No.12.), 126 p.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. 120-121 p.
KEHOP-4.3.0-15-2016-00001 project results, unpublished.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Haraszthy (1984) puts the national breeding population at around 50 pairs,
while Tucker, G. M. – Heath, M. F. (1994) mentions 177 pairs. Subsequently,
the population was around 20-60 and 40-90 pairs.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ Yes

Passage numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term passage numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Decreasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	17
Maximum	50
Best single value	

Method used for short-term trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
National Park Directorates' databases

Long-term passage numbers trend estimate

Trend period [since ca. 1980or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available,

ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	37
Maximum	50
Best single value	

Method used for long-term trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Ecsedi Z. (2004): A Hortobágy madárvilága. Hortobágy Természetvédelmi Egyesület, Winter Fair, Balmazújváros-Szeged, 602 p.
Expert opinions
National Park Directorates' databases
Short-term trend is based on the previous national country report 2007-2013.
The baseline value was 6000, to what the current values (3000-5000) were compared to.
Long-term trend is based on Ecsedi's book (2004), value 6000-8000, to what the current values (3000-5000) were compared to.

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 1793

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species)
http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Decreasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	31

Method used for short-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel
entes_2013_anyagai/Numenius_arquata.pdf
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Stable

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura,
Budapest. 83-84 p.
Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest. 160 p.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› The distribution underwent a significant decline during the short-term, based
on the 2013 report. The long-term trend is based on Haraszthy (1984).

Bar-tailed Godwit / Limosa lapponica

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas
where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to
determine the numbers of individuals passing through the country by applying targeted migration
census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans
and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas
where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Black-tailed Godwit / Limosa limosa

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available

☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2014-2018

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	80
Maximum	320
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› KEHOP-4.3.0-15-2016-00001 project results, unpublished.
National park directorates' databases http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2008-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	120
Maximum	600
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates' databases

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› New method: Under the KEHOP-4.3.0-15-2016-00001 project in 2017-2018,
530 2.5x2.5 km2 grids were surveyed for a given set of breeding bird species,
covering 3.6% of the country. 6 breeding pairs of Limosa limosa were
estimated for the 530 grids. As the habitat distribution in the 530 grids is
considered to be representative of the country, 167 pairs can be calculated for
the national population.

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ Passage numbers estimate is available [Passage numbers are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

Latest passage numbers estimate

Year or period
[Year or period when numbers were last determined]
››› 2013-2018

Passage numbers
[Individuals. Raw numbers, i.e. not rounded. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	2000
Maximum	2500
Best single value	

Type of estimate
☑ Best estimate

Method used for passage numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
National Park Directorates' databases

Previous passage numbers estimate

Please indicate whether a previous estimate of passage numbers is available

☑ No previous passage numbers estimate is available

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› National Park Directorates' databases

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Decreasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	33
Maximum	47
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel entes_2013_anyagai/Limosa_limosa.pdf

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	73
Maximum	92
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura,
Budapest. 84-85 p.
Tucker, G. M. – Heath, M. F. (1994): Birds in Europe – Their Conservation
Status. Royal Society for the Protection of Birds, BirdLife International, 272-
273 p.
Magyar G., Hadarics T., Waliczky Z., Schmidt A., Nagy T. & Bankovics A. (1998):
Magyarország madarainak névjegyzéke. Madártani Intézet, Budapest, 69 p.
Haraszthy László- Magyarország madarai; (1998,2000) 156-157 p.
Ecsedi Z. (szerk.) (2004): A Hortobágy madárvilága. Hortobágy
Természetvédelmi Egyesület, Winter Fair, Balmazújváros - Szeged. 2004. 308-
309 p.
BirdLife International (2004) Birds in Europe: population estimates, trends and
conservation status. Cambridge, UK: BirdLife International. (BirdLife
Conservation Series No.12.), 124 p.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 118-119.
KEHOP-4.3.0-15-2016-00001 project results, unpublished.
National park directorates' databases
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› The long-term trend is based on Tucker, G. M. – Heath, M. F. (1994).

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ Yes

Passage numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term passage numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Decreasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	88
Maximum	90
Best single value	

Method used for short-term trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
National Park Directorates' databases

Long-term passage numbers trend estimate

Trend period [since ca. 1980or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	96
Maximum	99
Best single value	

Method used for long-term trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Ecsedi Z. (2004): A Hortobágy madárvilága. Hortobágy Természetvédelmi
Egyesület, Winter Fair, Balmazújváros-Szeged, 602 p.
Expert opinions
National Park Directorates' databases
Short-term trend is based on the previous national country report 2007-2013.
The baseline value was 20000, to what the current values (2000-2500) were
compared to.
Long-term trend is based on Ecsedi's book (2004), value 50000, to what the
current values (2000-2500) were compared to.

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 9201

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species)
http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Decreasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	20

Method used for short-term range trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel

entes_2013_anyagai/Limosa_limosa.pdf
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura,
Budapest. 84-85 p.
Haraszthy László- Magyarország madarai; (1998,2000) 156-157 p.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› The short-term trend is based on the 2013 report and the long-term trend on
Haraszthy (1984).

Ruddy Turnstone / Arenaria interpres

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas

where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Red Knot / Calidris canutus

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas

Report on the status of waterbird populations in the AEWA area for the period 2013-2018 [Contracting Party: Hungary]

where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Ruff / Calidris pugnax

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ Passage numbers estimate is available [Passage numbers are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

Latest passage numbers estimate

Year or period
[Year or period when numbers were last determined]
››› 2013-2018

Passage numbers
[Individuals. Raw numbers, i.e. not rounded. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	80000
Maximum	100000
Best single value	

Type of estimate
☑ Best estimate

Method used for passage numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Ecsedi Z. (2004): A Hortobágy madárvilága. Hortobágy Természetvédelmi
Egyesület, Winter Fair, Balmazújváros-Szeged, 602 p.
Expert opinions
National Park Directorates' databases

Previous passage numbers estimate

Please indicate whether a previous estimate of passage numbers is available
☑ No previous passage numbers estimate is available

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› According to Ecsedi (2004) and national park directorates' databases.

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ Yes

Passage numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term passage numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
National Park Directorates' databases

Long-term passage numbers trend estimate

Trend period [since ca. 1980or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Fluctuating

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details,

etc.]
››› Expert opinions
National Park Directorates' databases

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Broad-billed Sandpiper / Calidris falcinellus

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Curlew Sandpiper / Calidris ferruginea

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Temminck's Stint / Calidris temminckii

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Sanderling / Calidris alba

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Dunlin / Calidris alpina

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ Passage numbers estimate is available [Passage numbers are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

Latest passage numbers estimate

Year or period
[Year or period when numbers were last determined]
››› 2013-2018

Passage numbers
[Individuals. Raw numbers, i.e. not rounded. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	0
Maximum	10
Best single value	

Type of estimate
☑ Best estimate

Method used for passage numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions

Previous passage numbers estimate

Please indicate whether a previous estimate of passage numbers is available
☑ No previous passage numbers estimate is available

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› According to the ringing studies in Hungary it seems that the migrating
number of subspecies "schinzii" is almost zero. Probably this subspecies
doesn't migrate through Central-Europe (for example Hungary), however it
migrates along the coast in Northern and Western Europe.

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas
where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to
determine the numbers of individuals passing through the country by applying targeted migration
census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans
and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ Yes

Passage numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term passage numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Unknown

Short-term trend magnitude [Percentage change over the period indicated above. Provide either
interval (minimum - maximum) and/or best single value. In cases when only best single value is available,
ideally provide lower and upper confidence limits in the data fields for minimum and maximum and
indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term trend estimate
☑ Insufficient or no data available

Long-term passage numbers trend estimate

Trend period [since ca. 1980or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Unknown

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term trend estimate
☑ Insufficient or no data available

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Little Stint / Calidris minuta

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available

☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Eurasian Woodcock / Scolopax rusticola

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2014-2018

Population unit
☑ Calling males

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value.

In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	50
Maximum	100
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy László (2019): Az erdei szalonka magyarországi fészkelése és tavaszi
vadászata, Madártávlat XXVI/1., 18-19 p.
KEHOP-4.3.0-15-2016-00001 project results, unpublished.
National park directorates' databases
http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2000-2002

Population unit
☑ Calling males

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	10
Maximum	
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 278

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change

[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› New method: Under the KEHOP-4.3.0-15-2016-00001 project in 2017-2018, 530 2.5x2.5 km2 grids were surveyed for a given set of breeding bird species, covering 3.6% of the country. 2 breeding pairs of Scolopax rusticola were estimated for the 530 grids. As the habitat distribution in the 530 grids is considered to be representative of the country, 56 pairs can be calculated for the national population.

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Unknown

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	

Best single value	

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
›››
http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jelentes_2013_anyagai/Scolopax_rust
icola.pdf
National park directorates' databases
http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Unknown

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Insufficient or no data available

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Magyar G., Hadarics T., Waliczky Z., Schmidt A., Nagy T. & Bankovics A. (1998):
Magyarország madarainak névjegyzéke. Madártani Intézet, Budapest, 68-69 p.
Ecsedi Z. (szerk.) (2004): A Hortobágy madárvilága. Hortobágy
Természetvédelmi Egyesület, Winter Fair, Balmazújváros - Szeged. 2004. 306-
307 p.
BirdLife International (2004) Birds in Europe: population estimates, trends and
conservation status. Cambridge, UK: BirdLife International. (BirdLife
Conservation Series No.12.), 124 p.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. 118 p.
Haraszthy László (2019): Az erdei szalonka magyarországi fészkelése és tavaszi
vadászata, Madártávlat XXVI/1., 18-19 p.
National park directorates' databases
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› 1995 előttről csak alkalmi fészkelési adatok állnak rendelkezésre. Az adatok
érdemi mennyisége nem változott az utóbbi években, figyelembe véve a faj
rejtett életmódját illetve azt, hogy a faj vadászatából nem lehet a
költőállomány nagyságára következtetni.
Haraszthy (2019) mindösszesen 69 fészkelési adatot gyűjtött össze ezidáig,
amelyek az erdei szalonka biztos fészkelését is jelentik mivel ezek csak az
előkerült fészkek, fiókák adatai.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca.

1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 1564

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases
http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Unknown

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term range trend estimate

☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]

››› National park directorates' databases
http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction

☑ Unknown

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate

☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]

››› Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura,
Budapest. 88-89 p.
Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest. 155-156 p.
National park directorates' databases
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available

››› A Haraszthy könyvekben (1984, 1998) közölt ponttérképek alapján az látszik,
hogy a folyók mentén valamint a hegyvidékeken fordul elő leginkább faj.

Great Snipe / Gallinago media

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Common Snipe / Gallinago gallinago

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2014-2018

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	300
Maximum	500
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› KEHOP-4.3.0-15-2016-00001 project results, unpublished.
National park directorates' databases http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2005-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	300
Maximum	600
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. p. 278.
National Park Directorates databases
Breeding bird (MME RTM) database

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?

☑ No

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› New method: Under the KEHOP-4.3.0-15-2016-00001 project in 2017-2018,
530 2.5x2.5 km2 grids were surveyed for a given set of breeding bird species,
covering 3.6% of the country. 11 breeding pairs of Gallinago gallinago were
estimated for the 530 grids. As the habitat distribution in the 530 grids is
considered to be representative of the country, 306 pairs can be calculated for
the national population.

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel
entes_2013_anyagai/Gallinago_gallinago.pdf
National park directorates' databases
http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Fluctuating

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura, Budapest. 87-88 p.
Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó, Budapest. 152-153 p.
Magyar G., Hadarics T., Waliczky Z., Schmidt A., Nagy T. & Bankovics A. (1998): Magyarország madarainak névjegyzéke. Madártani Intézet, Budapest, 68 p.
Ecsedi Z. (szerk.) (2004): A Hortobágy madárvilága. Hortobágy Természetvédelmi Egyesület, Winter Fair, Balmazújváros - Szeged. 2004. 302-304 p.
BirdLife International (2004) Birds in Europe: population estimates, trends and conservation status. Cambridge, UK: BirdLife International. (BirdLife Conservation Series No.12.), 122 p.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke. Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi Egyesület, Budapest. 117 p.
KEHOP-4.3.0-15-2016-00001 project results, unpublished.
National park directorates' databases http://map.mme.hu/maps/map2

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?

☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 8208

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases
http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel
entes_2013_anyagai/Gallinago_gallinago.pdf
National park directorates' databases http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Fluctuating

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases
http://map.mme.hu/maps/map2

Jack Snipe / Lymnocryptes minimus

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ Passage numbers estimate is available [Passage numbers are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

Latest passage numbers estimate

Year or period
[Year or period when numbers were last determined]
››› 2013-2018

Passage numbers
[Individuals. Raw numbers, i.e. not rounded. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	300
Maximum	500
Best single value	

Type of estimate
☑ Best estimate

Method used for passage numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://www.birding.hu/

Previous passage numbers estimate

Please indicate whether a previous estimate of passage numbers is available
☑ No previous passage numbers estimate is available

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› birding.hu on-line database.

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ Yes

Passage numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term passage numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› birding.hu on-line database.

Long-term passage numbers trend estimate

Trend period [since ca. 1980or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Unknown

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term trend estimate
☑ Based mainly on expert opinion with very limited data

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Common Sandpiper / Actitis hypoleucos

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2013-2018

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	80
Maximum	120
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases
Consultation with national experts.
http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2000-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	100
Maximum	
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates databases
Breeding bird (MME RTM) database

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ The nature of change is not known

Please indicate which reason for change is predominant
☑ Due to the use of different method

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› New method: Under the KEHOP-4.3.0-15-2016-00001 project in 2017-2018, 530 2.5x2.5 km2 grids were surveyed for a given set of breeding bird species, covering 3.6% of the country. Although not originally included among the target species, 3 breeding pairs of the Common sandpiper were estimated for the 530 grids (due to the scarcity of the species, it is quite certain that all observations of breeding were recorded). As the habitat distribution in the 530 grids is considered to be representative of the country, 88 pairs can be calculated for the national population. This figure, corrected with the data in the reports of the National park directorates, was used here as the minimum population, with regard to our previous report.

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura,
Budapest. 52-53 p.
Magyar G., Hadarics T., Waliczky Z., Schmidt A., Nagy T. & Bankovics A. (1998):
Magyarország madarainak névjegyzéke. Madártani Intézet, Budapest, 47 p.
Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest. 276-278 p.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. 87 p.
KEHOP-4.3.0-15-2016-00001 project results, unpublished.
National park directorates' databases http://map.mme.hu/maps/map2MME
Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. 189-190 p.
National park directorates' databases
Consultation with national experts.

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Stable

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details,

etc.]

››› Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura,
Budapest. 52-53 p.
Magyar G., Hadarics T., Waliczky Z., Schmidt A., Nagy T. & Bankovics A. (1998):
Magyarország madarainak névjegyzéke. Madártani Intézet, Budapest, 47 p.
Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest. 276-278 p.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. 87 p.
KEHOP-4.3.0-15-2016-00001 project results, unpublished.
National park directorates' databases http://map.mme.hu/maps/map2MME
Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. 189-190 p.
National park directorates' databases
Consultation with national experts.National park directorates' databases
Consultation with national experts.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2013-2018

Range size [Total surface area of the range size in km2]
››› 1967

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases
http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Unknown

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term range trend estimate
☑ Insufficient or no data available

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases http://map.mme.hu/maps/map2
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. 189-190 p.

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Unknown

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate
☑ Insufficient or no data available

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details,

etc.]
››› Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura,
Budapest. 52-53 p.
Magyar G., Hadarics T., Waliczky Z., Schmidt A., Nagy T. & Bankovics A. (1998):
Magyarország madarainak névjegyzéke. Madártani Intézet, Budapest, 47 p.
Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest. 276-278 p.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. 87 p.
KEHOP-4.3.0-15-2016-00001 project results, unpublished.
National park directorates' databases http://map.mme.hu/maps/map2
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. 189-190 p.

Green Sandpiper / Tringa ochropus

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas
where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to
determine the numbers of individuals passing through the country by applying targeted migration
census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans
and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Spotted Redshank / Tringa erythropus

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Common Greenshank / Tringa nebularia

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Common Redshank / Tringa totanus

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2014-2018

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	480
Maximum	850
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› KEHOP-4.3.0-15-2016-00001 project results, unpublished.
National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species)
http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ No previous breeding numbers estimate is available

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› New method: Under the KEHOP-4.3.0-15-2016-00001 project in 2017-2018,

530 2.5x2.5 km2 grids were surveyed for a given set of breeding bird species, covering 3.6% of the country. 29 breeding pairs of Tringa totanus were estimated for the 530 grids. As the habitat distribution in the 530 grids is considered to be representative of the country, 806 pairs can be calculated for the national population. This figure was used as the maximum, as the population total from the national park directorates databases was also taken into consideration (464-843 pairs).

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel entes_2013_anyagai/Tringa_totanus.pdf

National park directorates' databases (Annual survey of colonially breeding
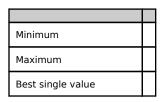and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Unknown

Long-term trend magnitude [Percentage change over the period indicated above. Provide either
interval (minimum - maximum) and/or best single value. In cases when only best single value is available,
ideally provide lower and upper confidence limits in the data fields for minimum and maximum and
indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Insufficient or no data available

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details,
etc.]
››› Haraszthy László (szerk.) (1984)- Magyarország madarai; 85-86 p.
Tucker, G. M. – Heath, M. F. (1994): Birds in Europe – Their Conservation
Status. Royal Society for the Protection of Birds, BirdLife International, 280-
281 p.
Magyar G., Hadarics T., Waliczky Z., Schmidt A., Nagy T. & Bankovics A. (1998):
Magyarország madarainak névjegyzéke. Madártani Intézet, Budapest, 71 p.
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317 p.
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Conservation Series No.12.), 127 p.
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Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. P. 121-122.
KEHOP-4.3.0-15-2016-00001 project results, unpublished.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Additional information (optional)

**Please provide any additional or complementary information to the data provided above in this
section, if available**
››› The long-term trend is based on Tucker, G. M. – Heath, M. F. (1994). Based on
the results of national surveys, the population minimum never fell below 400
pairs in the last few decades.

Passage and staging numbers
**Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca.
1980) trend of passage and/or staging numbers is available**

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to
determine the numbers of individuals passing through the country by applying targeted migration
census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans

and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 184883

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species),
http://map.mme.hu/maps/map2
Grids only with breeding probability A1 (possible breeding, no breeding
behaviour shown) were excluded from the map, as they may often refer to
early spring passage migrants.

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	

Maximum	
Best single value	

Method used for short-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel
entes_2013_anyagai/Tringa_totanus.pdf
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Unknown

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› There is no national distribution map from the last century, so the long-term
trend is unknown.

Wood Sandpiper / Tringa glareola

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available

☑ Passage numbers estimate is available [Passage numbers are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

Latest passage numbers estimate

Year or period
[Year or period when numbers were last determined]
››› 2013-2018

Passage numbers
[Individuals. Raw numbers, i.e. not rounded. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	10000
Maximum	20000
Best single value	

Type of estimate
☑ Best estimate

Method used for passage numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Expert opinions
National Park Directorates' databases

Previous passage numbers estimate

Please indicate whether a previous estimate of passage numbers is available
☑ No previous passage numbers estimate is available

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› National Park Directorates' databases

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Marsh Sandpiper / Tringa stagnatilis

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2013-2019

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	0
Maximum	0
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› www.birding.hu

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ No previous breeding numbers estimate is available

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› The species is extinct as breeding species, the last breeding record from 1958.

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Collared Pratincole / Glareola pratincola

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2013-2018

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	30
Maximum	52
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Kiss, Á., Molnár, A., Monoki, Á. et al. (2019): Nature conservation status of Collared Pratincoles (Glareola pratincola) breeding in agricultural habitats in Hungary and recommendations for their conservation especially in the Nagykunság area. Aquila (2018), Vol. 125, p. 49-72.
National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species)

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2008-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	20
Maximum	40
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates databases. Breeding bird (MME RTM) databa

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Passage and staging numbers

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Kiss, Á., Molnár, A., Monoki, Á. et al. (2019): Nature conservation status of
Collared Pratincoles (Glareola pratincola) breeding in agricultural habitats in
Hungary and recommendations for their conservation especially in the
Nagykunság area. Aquila (2018), Vol. 125, p. 49-72.
National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1981-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	12
Maximum	15
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura,
Budapest. 247 p.
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 597-600.
Kiss, Á., Molnár, A., Monoki, Á. et al. (2019): Nature conservation status of
Collared Pratincoles (Glareola pratincola) breeding in agricultural habitats in
Hungary and recommendations for their conservation especially in the
Nagykunság area. Aquila (2018), Vol. 125, p. 49-72.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› The population was 70-85 pairs in 1980-1982 according to Haraszthy (1984).
Kiss, Á., Molnár, A., Monoki, Á. et al. (2019) published the population figures
for each year between 1981-2018. The average of the first three years (1981:
75-83, 1982: 71-86, 1983: 42-44) was compared with the average of the last
three years (2016: 42-43, 2017: 46-52, 2018: 44-47) to get the long-term
trend. The overall trend between 1981-2018 is decreasing, but since the drop
down to 42-44 pairs in 1983, the population trend can rather be called
fluctuating, with extreme years such as 1994 with 79-82 pairs and 1998 with
15-17 pairs.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to

determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 700

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 597-600.
Kiss, Á., Molnár, A., Monoki, Á. et al. (2019): Nature conservation status of
Collared Pratincoles (Glareola pratincola) breeding in agricultural habitats in
Hungary and recommendations for their conservation especially in the
Nagykunság area. Aquila (2018), Vol. 125, p. 49-72.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and

indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term range trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	20
Maximum	40
Best single value	40

Method used for long-term range trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura,
Budapest. 247 p.
Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest. 441 p.
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 597-600.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› The distribution did not change signficantly (apart from some fluctuations) in
the short-term trend, so the same estimate based on expert opinion was used
for the long-term trend as in the 2013 report.

Little Gull / Hydrocoloeus minutus

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Black-headed Gull / Larus ridibundus

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2015-2017

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	4000
Maximum	6400
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2000-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	6000
Maximum	
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on expert opinion with very limited data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates databases

Breeding bird (MME RTM) database.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› The national park directorates surveyed 3949 pairs in 2017 and 6394 pairs in
2015.

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ No non-breeding/wintering numbers estimate is available

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	57
Maximum	74
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy, L. (szerk.) (1984): Magyarország fészkelő madarai. p. 246.
Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest. 441 p.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› The long-term trend is based on Haraszthy (1984), where the population was
estimated at 15 000 pairs.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ Yes

Is short-term and/or long-term non-breeding/wintering numbers trend estimate available?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 6703

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2000-2018

Short-term trend direction
☑ Decreasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	

Best single value	27

Method used for short-term range trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2
http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel
entes_2013_anyagai/Larus_ridibundus.pdf

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1979-2018

Long-term trend direction
☑ Fluctuating

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest. 441 p.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Haraszthy (1998) shows 54 grids for 1979-1986, the 2013 BD Article 12 report
shows 92 grids for 2000-2012, while the http://map.mme.hu/maps/map2
database (with the national park directorates' databases) in the present
report shows 67 grids.

Mediterranean Gull / Larus melanocephalus

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]

Report on the status of waterbird populations in the AEWA area for the period 2013-2018 [Contracting Party: Hungary]

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	765
Maximum	887
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2008-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	230
Maximum	590
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates databases
Breeding bird (MME RTM) database.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?

☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Passage and staging numbers

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2008-2018

Short-term trend direction
☑ Increasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	50
Maximum	233
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 605-607.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	19025
Maximum	22075
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Szél, A. & Bakacsi, G. (1996): A szerecsensirály (Larus melanocephalus) fészkelési viszonyai Magyarországon. [The Breeding of Mediterranean Gull in Hungary]. Túzok 1: 105-115.
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon. Pro Vértes Közalapítvány, Csákvár. p. 605-607.
National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species)
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› The minimum population size (230) of the 2013 BD Article 12 report was compared to the minimum population size (765) in the present report, and the maximum values were also similarly compared to get the short-term trend. The 1980-1981 population size (4 pairs) published by Szél, A & Bakacsi, G. (1996) was compared to the minimum and maximum population size in the present report to get the long-term trend.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Report on the status of waterbird populations in the AEWA area for the period 2013-2018 [Contracting Party: Hungary]

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 1430

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 605-607.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2008-2018

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term range trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 605-607. National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Szél, A. & Bakacsi, G. (1996): A szerecsensirály (Larus melanocephalus)
fészkelési viszonyai Magyarországon. [The Breeding of Mediterranean Gull in
Hungary]. Túzok 1: 105-115.
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 605-607.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Haraszthy (2014) shows 25 10x10 km grids for the breeding distribution in
2008-2012, while the present report shows 1430 km2 distribution (2013-
2018). The difference is probably due to overstimation in the 2013 report,
considering the increasing population size. The long-term trend was
calculated from the number of locations (2) published in Szél, A & Bakacsi, G.
(1996) for 1980 and the 1630 km2 in the present report.

Mew Gull / Larus canus

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas
where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ No non-breeding/wintering numbers estimate is available

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ Yes

Is short-term and/or long-term non-breeding/wintering numbers trend estimate available?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Lesser Black-backed Gull / Larus fuscus

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

European Herring Gull / Larus argentatus

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas
where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ No non-breeding/wintering numbers estimate is available

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to
determine the numbers of individuals passing through the country by applying targeted migration
census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans
and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas
where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Yellow-legged Gull / Larus michahellis

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2015-2017

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value.
In cases when only best single value is available, ideally provide lower and upper confidence limits in the
data fields for minimum and maximum and indicate them as such.]

Minimum	0
Maximum	8
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2000-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	0
Maximum	1
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. p. 278.
Annual reports of the Hungarian Checklist and Rarities Committee.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant

☑ Due to genuine change

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ No non-breeding/wintering numbers estimate is available

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. p. 278.
Faragó S. (ed.) (2012): Nyugat-Magyarország fészkelő madarainak elterjedési
atlasza. Nyugat-magyarországi Egyetem Kiadó, Sopron (2012), 278 p.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Fluctuating

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Magyar, G., Hadarics, T., Waliczky, Z., Schmidt, A., Nagy, T. & Bankovics, A. (1998): Nomenclator avium Hungariae. Magyarország madarainak névjegyzéke. KTM Természetvédelmi Hivatal Madártani Intézete – Magyar Madártani és Természetvédelmi Egyesület – Winter Fair, Budapest – Szeged. p. 202.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke. Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi Egyesület, Budapest. p. 278.
Faragó S. (ed.) (2012): Nyugat-Magyarország fészkelő madarainak elterjedési atlasza. Nyugat-magyarországi Egyetem Kiadó, Sopron (2012), 278 p.
National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species)
http://map.mme.hu/maps/map2

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ Yes

Is short-term and/or long-term non-breeding/wintering numbers trend estimate available?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 300

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term range trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. p. 278.
Faragó S. (ed.) (2012): Nyugat-Magyarország fészkelő madarainak elterjedési
atlasza. Nyugat-magyarországi Egyetem Kiadó, Sopron (2012), 278 p.

National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Fluctuating

Long-term trend magnitude [Percentage change over the period indicated above. Provide either
interval (minimum - maximum) and/or best single value. In cases when only best single value is available,
ideally provide lower and upper confidence limits in the data fields for minimum and maximum and
indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details,
etc.]
››› Magyar, G., Hadarics, T., Waliczky, Z., Schmidt, A., Nagy, T. & Bankovics, A.
(1998): Nomenclator avium Hungariae. Magyarország madarainak
névjegyzéke. KTM Természetvédelmi Hivatal Madártani Intézete – Magyar
Madártani és Természetvédelmi Egyesület – Winter Fair, Budapest – Szeged.
p. 202.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. p. 278.
Faragó S. (ed.) (2012): Nyugat-Magyarország fészkelő madarainak elterjedési
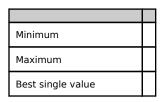atlasza. Nyugat-magyarországi Egyetem Kiadó, Sopron (2012), 278 p.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Additional information (optional)

**Please provide any additional or complementary information to the data provided above in this
section, if available**
››› First known breeding in 1988.

Little Tern / Sternula albifrons

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2013-2018

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	0

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2008-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	2
Maximum	19
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates databases.
Breeding bird (MME RTM) database.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› The species did not breed in the reporting period in Hungary. The occurrence
of this species has always been characterised by strong fluctuations, and it has
been also absent as a breeder (in the 1980s, for example), but then returned
again, and now it is absent again.

Passage and staging numbers

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas
where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Decreasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either
interval (minimum - maximum) and/or best single value. In cases when only best single value is available,
ideally provide lower and upper confidence limits in the data fields for minimum and maximum and
indicate them as such.]

Minimum	
Maximum	
Best single value	100

Method used for short-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 612-615.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Fluctuating

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest. 441 p.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. p. 278.
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 612-615.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› The species did not breed in the reporting period in Hungary. The occurrence
of this species has always been characterised by strong fluctuations, and it has
been also absent as a breeder (in the 1980s, for example), but then returned
again, and now it is absent again.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2013-2018

Range size [Total surface area of the range size in km2]
››› 0

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Decreasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	100

Method used for short-term range trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 612-615.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Fluctuating

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura,
Budapest.
Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest. 441 p.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. p. 278.
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 612-615.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› In the 1980s, the species was not known to breed in Hungary (formerly 1-5
pairs had bred occasionally at various sites). A small colony was known in the
River Dráva since the 1990s, but no breeding occurred in the 2013-2018
period.

Caspian Tern / Hydroprogne caspia

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ The species does not breed in the country

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas
where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ The species does not breed in the country

Passage and staging numbers
**Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca.
1980) trend of passage and/or staging numbers is available**

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to
determine the numbers of individuals passing through the country by applying targeted migration
census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans
and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas
where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ No

Whiskered Tern / Chlidonias hybridus

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2015-2017

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value.
In cases when only best single value is available, ideally provide lower and upper confidence limits in the
data fields for minimum and maximum and indicate them as such.]

Minimum	1106
Maximum	1568
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2008-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	1000
Maximum	6000
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Breeding bird (MME RTM) database.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. p. 278.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to improved knowledge/more accurate data

Please indicate which reason for change is predominant

☑ Due to improved knowledge/more accurate data

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2008-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 616-619.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Fluctuating

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura, Budapest. 247 p.
Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó, Budapest. 441 p.
Dr. Kovács G. – Ecsedi Z. (2004): Fattyúszerkő In: Ecsedi Z. (szerk.) (2004): A Hortobágy madárvilága. Hortobágy Természetvédelmi Egyesület, Winter Fair, Balmazújváros – Szeged. 2004.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke. Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi Egyesület, Budapest. p. 278.
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon. Pro Vértes Közalapítvány, Csákvár. p. 616-619.
National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species)
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Haraszthy (1984) estimated the population below 1000 pairs, Haraszthy (1998) wrote that the national population was 1850 pairs in 1996, Dr. Kovács G. – Ecsedi Z. (2004) put the population at 1700-2200 pairs "after an increase in the last 20-25 years", Haraszthy (2014) wrote 1600-8500 pairs but the national census results were only 1568 pairs (2015) 1405 pairs (2016) and 1106 pairs (2017). An overall increase was assumed previously, but the last censuses showed a decline that brought the population almost back to the level of the 1980s, so the trend is best called fluctuating.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 7506

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species)
http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term range trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 616-619.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Increasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura,
Budapest. 247 p.
Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest. 441 p.
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 616-619.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Haraszthy (1984) shows 12 grids for the 1979-1986 period, and this was the
basis of the long-term trend.

White-winged Tern / Chlidonias leucopterus

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2015-2017

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	124
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

You have attached the following Web links/URLs to this answer.

http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2008-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	30
Maximum	4500
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates databases
Breeding bird (MME RTM) database.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. p. 278.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke. Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi Egyesület, Budapest. p. 278.
National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species)
http://map.mme.hu/maps/map2

You have attached the following Web links/URLs to this answer.

http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Fluctuating

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke. Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi Egyesület, Budapest. p. 278.
Magyar, G., Hadarics, T., Waliczky, Z., Schmidt, A., Nagy, T. & Bankovics, A. (1998): Nomenclator avium Hungariae. Magyarország madarinak névjegyzéke. KTM Természetvédelmi Hivatal Madártani Intézete – Magyar Madártani és Természetvédelmi Egyesület – Winter Fair, Budapest – Szeged. p. 202.
National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species)
http://map.mme.hu/maps/map2

You have attached the following Web links/URLs to this answer.

http://map.mme.hu/maps/map2

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2015-2017

Range size [Total surface area of the range size in km2]
››› 700

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term range trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. p. 278.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Fluctuating

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://map.mme.hu/maps/map2
Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura,
Budapest.
Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest.
Magyar G., Hadarics T., Waliczky Z., Schmidt A., Nagy T. & Bankovics A. (1998):
Magyarország madarainak névjegyzéke. Madártani Intézet, Budapest, 110 p.
BirdLife International (2004) Birds in Europe: population estimates, trends and
conservation status. Cambridge, UK: BirdLife International. (BirdLife
Conservation Series No.12.), 223 p.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. 189-190 p.

Black Tern / Chlidonias niger

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2015-2017

Population unit

☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	25
Maximum	38
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

You have attached the following Web links/URLs to this answer.

http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2008-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	100
Maximum	1400
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates databases
Breeding bird (MME RTM) database.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Decreasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	75
Maximum	97
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel
entes_2013_anyagai/Chlidonias_niger.pdf
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.

Pro Vértes Közalapítvány, Csákvár. p. 620-623.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

You have attached the following Web links/URLs to this answer.

http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	97

Method used for long-term breeding numbers trend estimate
☑ Based mainly on extrapolation from a limited amount of data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Kovács G. (2004): Kormos szerkő. In: Ecsedi, Z. [szerk.] A Hortobágy
madárvilága. Hortobágy Természetvédelmi Egyesület, Balmazújváros-Szeged.
p. 356-358.
http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jel
entes_2013_anyagai/Chlidonias_niger.pdf
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 620-623.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› The 2013 Article 12 report gives 100-1400 pairs for the population in 2008-
2012, Haraszthy (2014) estimates 400-1300 pairs, and these figures were
compared with the results of the national censuses (25 pairs in 2015, 38 pairs
in 2016 and 27 pairs in 2017) to get the short-term trend. The long-term trend
was calculated using the population range of 800-1200 pairs in the late 1980s
according to Kovács G. (2004) (both the comparisons of the two minimum
values and the two maximum values resulted in about 97% decline).

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ Yes

Is short-term or long-term trend estimate of passage numbers available?
☑ No

Is short-term or long-term trend estimate of staging numbers available?
☑ No

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2015-2017

Range size [Total surface area of the range size in km2]
››› 1642

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

You have attached the following Web links/URLs to this answer.

http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Decreasing

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	69

Method used for short-term range trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 620-622.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

You have attached the following Web links/URLs to this answer.

http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Decreasing

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura,
Budapest.
Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest. 441 p.
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 620-622.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

You have attached the following Web links/URLs to this answer.

http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› Haraszthy (1998) shows 31 grids for the 1979-1986 period, and this was the
basis of the long-term trend. The short-term trend was based on the 2013
report.

Common Tern / Sterna hirundo

Population Size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2015-2017

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	565
Maximum	862
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

You have attached the following Web links/URLs to this answer.

http://map.mme.hu/maps/map2

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers is available
☑ Previous breeding numbers estimate is available

Year or period
[Year or period when numbers were previously determined]
››› 2008-2012

Population unit
☑ Pairs

Numbers [(Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	400
Maximum	1500
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information
[Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National Park Directorates databases.
Breeding bird (MME RTM) database.

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change
[More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Passage and staging numbers

Does the species migrate through the country?
☑ Yes

Please indicate whether estimate of passage numbers is available
☑ No passage numbers estimate is available

Please indicate whether estimate of staging numbers is available
☑ No staging numbers estimate is available

Non-breeding/wintering numbers

[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/winter season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend
☑ Long-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2007-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term breeding numbers trend estimate

☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]

››› National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

You have attached the following Web links/URLs to this answer.

http://map.mme.hu/maps/map2

Long-term breeding numbers trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction

☑ Fluctuating

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term breeding numbers trend estimate

☑ Based mainly on expert opinion with very limited data

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]

››› Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura,
Budapest.
Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó,
Budapest. 441 p.
MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke.
Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi
Egyesület, Budapest. p. 278.
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon.
Pro Vértes Közalapítvány, Csákvár. p. 608-611.
National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

You have attached the following Web links/URLs to this answer.

http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available

››› The population fluctuates rather heavily, but it may have had an overall
decreasing trend since 1980. Haraszthy (1998) mentions 840 pairs for 1996,

but also the decline of some local populations previously. 2015-2017 (the
years of the national censuses) showed a decreasing trend, but this may be
part of a fluctuating trend, and is within the range provided by the 2013
Article 12 report. All in all, the data do not allow to come to a definite
conclusion as for the rate of decrease, if any.

Passage and staging numbers
Please indicate whether estimate of the short-term (last 12 years) and/or long-term (since ca. 1980) trend of passage and/or staging numbers is available

[Passage numbers trends are expected to be reported for a small number of species where it is feasible to determine the numbers of individuals passing through the country by applying targeted migration census in areas of relatively narrow migration corridors. This would include species such as storks, pelicans and cranes]

[Staging numbers trends refer to the number of individuals that stopover in the country during migration]

Does the species migrate through the country?
☑ No

Non-breeding/wintering numbers
[Non-breeding/wintering distribution is the terminal destination of migration as opposed to other areas where birds pass through or stop-over at during non-breeding season movements]

Does the species occur in the country during the non-breeding/wintering season?
☑ No

Breeding range size and trend

Does the species occur in the country during the breeding season?
☑ Yes

Is range size and/or short-term and/or long-term range trend estimate available?
☑ Yes

Please indicate whether estimate of the breeding range size and short-term (last 12 years) and/or long-term (since ca. 1980) range trend is available
The following estimates are available:
☑ Range size
☑ Short-term trend of the range
☑ Long-term trend of the range

Breeding range size

Year or period [Year or period when breeding range size was last determined]
››› 2014-2018

Range size [Total surface area of the range size in km2]
››› 5026

Method used for range size estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding
and strictly protected bird species)
http://map.mme.hu/maps/map2

You have attached the following Web links/URLs to this answer.

http://map.mme.hu/maps/map2

Short-term breeding range trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]

Short-term trend direction
☑ Stable

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for short-term range trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species)
http://map.mme.hu/maps/map2

You have attached the following Web links/URLs to this answer.

http://map.mme.hu/maps/map2

Long-term breeding range trend estimate

Trend period [since ca. 1980 or a period as close as possible to that]
››› 1980-2018

Long-term trend direction
☑ Unknown

Long-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	
Maximum	
Best single value	

Method used for long-term range trend estimate
☑ Insufficient or no data available

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura, Budapest.
Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó, Budapest. 441 p.
Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon. Pro Vértes Közalapítvány, Csákvár. p. 608-611.
National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species)
http://map.mme.hu/maps/map2

You have attached the following Web links/URLs to this answer.

http://map.mme.hu/maps/map2

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available

››› Haraszthy (1998) shows 28 grids, but the coverage of that survey was probably not as comprehensive as that of more recent surveys. Haraszthy (2014) shows 73 grids and the http://map.mme.hu/maps/map2 database (with the national park directorates' databases) shows 54 grids (2014-2018) with certain breeding of the species and 23 additional grids with likely breeding of the species. The old mapping data are not considered sufficiently comprehensive to give the basis of the long-term trend.

4. NON-NATIVE WATERBIRD SPECIES

Please select from the drop-down list below only the non-native species that occur in your country. This list contains the non-native waterbird species that have been identified to occur in the Agreement area. Should any additional species occur in your country, please contact the UNEP/AEWA Secretariat. Please note that some species are listed under AEWA and are native in some parts of the Agreement area, but are non-native in others.

Egyptian Goose / Alopochen aegyptiacus

Confirmation of species occurrence
Please confirm the occurrence of the species in the country
☑ The species occurs in the country

Population size

Breeding numbers

Please indicate whether estimate of the breeding numbers is available
☑ Breeding numbers estimate is available

Latest breeding numbers estimate

Year or period [Year or period when numbers were last determined]
››› 2017-2018

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	0
Maximum	1
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› http//:birding.hu

Previous breeding numbers estimate

Please indicate whether a previous estimate of the breeding numbers size is available
☑ Previous breeding numbers estimate is available

Year or period [Year or period when breeding numbers were previously determined]
››› 2010-2016

Population unit
☑ Pairs

Numbers [Raw, i.e. not rounded). Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	0
Maximum	0
Best single value	

Type of estimate
☑ Best estimate

Method used for breeding numbers estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› www.birding.hu

Changes in the breeding numbers estimates

Has there been a change between the previous and the latest breeding numbers estimate?
☑ Yes

Please clarify the nature of change [More than one option from the list below is possible]
☑ Due to genuine change

Please indicate which reason for change is predominant
☑ Due to genuine change

Additional information (optional)

Please provide any additional or complementary information to the data provided above in this section, if available
››› http//:www.birding.hu

Non-breeding/wintering numbers
[Non-breeding/wintering distribution in the case of non-native waterbird species is defined as any areas where the species occurs outside of the breeding season]

Please indicate whether estimate of the non-breeding/wintering numbers is available
☑ The species does not occur in the country during the non-breeding/wintering season

Population trend

Breeding numbers

Please indicate whether:
☑ Short-term and/or long-term breeding numbers trend estimate is available

Please indicate whether estimate of the breeding numbers short-term (last 12 years) and/or long-term (since ca. 1980) trend is available
Breeding numbers trend estimate is available for:
☑ Short-term trend

Short-term breeding numbers trend estimate

Trend period [2007-2018 (12-year rolling time window) or a period as close as possible to that]
››› 2017-2018

Short-term trend direction
☑ Fluctuating

Short-term trend magnitude [Percentage change over the period indicated above. Provide either interval (minimum - maximum) and/or best single value. In cases when only best single value is available, ideally provide lower and upper confidence limits in the data fields for minimum and maximum and indicate them as such.]

Minimum	0
Maximum	1
Best single value	

Method used for short-term breeding numbers trend estimate
☑ Complete survey or a statistically robust estimate

Sources of information [Provide bibliographic references, link to Internet sites, expert contact details, etc.]
››› www.birding.hu

Long-term breeding numbers trend estimate

Non-breeding/wintering numbers
[Non-breeding/wintering distribution in the case of non-native waterbird species is defined as any areas where the species occurs outside of the breeding season]

Please indicate whether:
☑ The species does not occur in the country during the non-breeding/wintering season

Range size and trend

Breeding range

Please indicate whether:
☑ The species does not occur in the country during the breeding season

Non-breeding/wintering range
[Non-breeding/wintering distribution in the case of non-native waterbird species is defined as any areas where the species occurs outside of the breeding season]

Please indicate whether:
☑ The species does not occur in the country during the non-breeding/wintering season

National legal and Red List status

National Legal Status

Does the species have any national protection or other legal status?
☑ Yes

Please provide details
››› The species can be hunted between 1 Oct and 31 Jan.

National Red List Status

Does the species have any National Red List status?
☑ No

5. CONFIRMATION

Confirmation of information verification and approval for submission.

*Please confirm:
In addition a scanned copy of an official letter from the relevant state institution, approving the report for submission, can be attached.
☑ I declare that the information provided in the Report on the population size and trend of AEWA-listed (native) and non-native waterbird species in the Agreement area for the period 2013-2018 has been verified and the report has been approved for submission by the appropriate state institution in the country.

*Date of submission
››› 25.06.2020.