

Plans (IMSAP), listed below, into National Action or Management Plans. (AEWA Action Plan, paragraph 2.2)

Please report on all listed ISSAP, ISSMP and IMSAP

Corncrake / *Crex crex*

National Plan for Corncrake / *Crex crex*

NP in place, but not being implemented properly or at all

Please explain the reasons

> A national action plan for Corncrake was published in 2000: Miljø- og Energiministeriet and Skov- og Naturstyrelsen (2000): Handlingsplan for bevarelse af den truede fugleart engsnarre *Crex crex*. (Danish only) <http://mst.dk/media/113894/engsnarre.pdf>

The implementation is integrated into the management plans developed for each SPA and into management plans for areas owned by the state. Deliberate disturbance is prohibited, and EIA's are performed for construction projects. Actions on change in agricultural management has not been implemented during 2015-2017.

Field for additional information (optional)

> A national action plan for Corncrake was published in 2000: Miljø- og Energiministeriet and Skov- og Naturstyrelsen (2000): Handlingsplan for bevarelse af den truede fugleart engsnarre *Crex crex*. The implementation is integrated into the management plans developed for each SPA and into management plans for areas owned by the state. Deliberate disturbance is prohibited, and EIA's are performed for construction projects. Actions on change in agricultural management has not been implemented during 2015-2017.

Great Snipe / *Gallinago media*

National Plan for Great Snipe / *Gallinago media*

No NP and no action implemented

Please explain the reasons

> Great Snipe is a rare passage migrant to Denmark. The relatively few annual observations are mostly from sites protected either as EU IBA's (SPA's)(mentioned under Section 8 above) or from salt marsh habitats protected under national legislation (the Nature Protection Act of 27 June 2017, § 3). Hence it has been considered unnecessary to implement a National Plan for Great Snipe.

Field for additional information (optional)

> No additional information.

White-headed Duck / *Oxyura leucocephala*

National Plan for White-headed Duck / *Oxyura leucocephala*

No NP, but actions implemented

Please explain the reasons for having no NP in place

> White-headed duck is an extremely rare guest in Denmark.

Please provide a description of the actions implemented

> As described in the Danish Action Plan Against invasive species a monitoring and eradication program on Ruddy duck exist. Ruddy Duck is currently an exceptionally rare visitor to Denmark. During the 2015-2017 AEWA reporting period, there are only two records (one female Nørrestrand 25 November to 4 December 2017; and one male Rugård Strand 29 December 2017) according to DOFbasen (Birdlife Denmark's citizen science portal). But see details on birds regulated further down.

When ruddy duck is found in Denmark actions to eradicate it is initiated.

Field for additional information (optional)

> No additional information

Eurasian Spoonbill / *Platalea leucorodia*

National Plan for Eurasian Spoonbill / *Platalea leucorodia*

No NP, but actions implemented

Please explain the reasons for having no NP in place

> Management plans for all SPA's are in place and include Eurasian Spoonbill where relevant.

Please provide a description of the actions implemented

> Improvement of habitats.

Prohibitions on deliberate disturbance

Monitoring is performed under the national nature monitoring programme NOVANA. Latest results are available at: <http://novana.au.dk/fugle/> (in Danish only).

Field for additional information (optional)

> The breeding population of Eurasian Spoonbill is rapidly expanding and increasing in Denmark. Since the first breeding pair was recorded in 1996, the number of breeding pairs has risen almost annually, and tallied min. 266 breeding pairs in Denmark in 2016 (Lange 2017). Only 2 of these were breeding outside Special Protection Areas designated under the EU Birds Directive, hence the vast majority is breeding inside protected areas.

Lange, P. (Ed.) (2017): Fugleåret 2016. - Dansk Ornitologisk Forening.

Pink-footed Goose / Anser brachyrhynchus **National Plan for Pink-footed Goose / Anser brachyrhynchus**

No NP, but actions implemented

Please explain the reasons for having no NP in place

> Denmark has no formal national management plan for the Svalbard Pink-footed Goose, but plays a major and full role in contributing to the ISMP for the population and fulfilling its requirements without the need for a formal management plan. The actions described in the international management plan are thus directly implemented

Please provide a description of the actions implemented

> Denmark has taken the lead on the development and implementation of the ISMP and provides key inputs in the form of coordination and provision of vital data to the annual cycle of collation, synthesis and actions under the plan.

Specifically, these include using resighting data to inform on survival rates and reproductive output, coordination and verification of monitoring count data and age ratios to assess annual changes in population size, as well as collating and reporting the harvest and estimation of crippling.

Denmark is also responsible for coordinating and implementing neck-collar marking of geese, predicting breeding output from snow cover imagery from Svalbard, modelling population growth in relation to population size, predicted reproductive success and survival to set coming national hunting regulations. Denmark also provides support to farmers on mechanisms to avoid agricultural damage as well as the provision of adequate site safeguard to support the population during the periods of the non-breeding season when the species resides in Denmark.

Field for additional information (optional)

> The wintering population of Pink-footed Goose is monitored annually, while autumn- and spring staging populations are monitored every second year under the current national nature monitoring programme NOVANA. Latest results are available at: <http://novana.au.dk/fugle/> (in Danish only).

Further monitoring are undertaken under the European Goose Management Platform and feed-back loop to the Single-Species Action plan for Pink-footed Goose.

Further details can be found in the European Goose Management Platform - National Report 2018 submitted by Denmark to AEWA in April 2018.

Bean Goose / Anser fabalis **National Plan for Bean Goose / Anser fabalis**

No NP, but actions implemented

Please explain the reasons for having no NP in place

> Denmark has no formal national management plan for the Taiga Bean Goose, but plays a major and full role in contributing to the ISSMP for the population and fulfilling its requirements without the need for a formal management plan.

Please provide a description of the actions implemented

> Denmark has taken the lead on the defining and scientifically justifying the various management units through the western Eurasian distribution of the subspecies (e.g. Fox et al. 2017) as well as providing key inputs in the form of coordination and provision on vital data to the annual cycle of collation, synthesis and actions under the plan.

Specifically, these include capture and marking of geese with collars and telemetry devices to link breeding, moulting, staging and wintering areas, using resighting data to inform on survival rates and reproductive output, coordination and verification of monitoring count data and age ratios to assess annual changes in population size.

Denmark has substantially enhanced its monitoring capacity to gather improved information on the precise non-breeding phenology, abundance and distribution of the subspecies (e.g. Brandt et al. 2017). Based on this, Denmark has implemented hunting regulations to remove hunting in Jutland and to reduce to a minimum the kill of Taiga Bean Geese relative to rossicus in SE Denmark, where both subspecies occur, compliant with the ISSMP.

Denmark has played a major role in developing a modelling approach to implement an adaptive harvest management approach for the population in the face of major uncertainty (Johnson et al. 2018).

The provision of site safeguard provision is in place to support the population adequately during the periods of the non-breeding season when the species resides in Denmark and a campaign has been staged to bring the awareness of hunters to the plight of this population in the last year.

Brandt, T., Lund, T., Sørensen, D., Sørensen, F., Skyllberg, U., Therkildsen, O.R. & Fox, A.D. (2017). Recent status and changes in abundance of Taiga Bean Geese wintering in NE Jutland. Dansk Ornitologisk Forenings Tidsskrift 111: 138-146.

Fox, A.D., Hobson, K.A., de Jong, A., Kardynal, K.J., Koehler, G. & Heinicke, T. (2017). Moulting-wintering site connectivity for Taiga Bean Geese *Anser fabalis fabalis* revealed by feather stable isotope analysis. Ibis 159: 66-75.

Johnson, F.A., Alhainen, M., Fox, A.D., Madsen, J. & Guillemain, M. (2018) Making do with less: must sparse data preclude informed harvest strategies for European waterbirds? Ecological Applications 28: 427-441.

Field for additional information (optional)

> The wintering population of Bean Geese is monitored annually under the current national nature monitoring programme NOVANA. Latest results are available at: <http://novana.au.dk/fugle/> (in Danish only).

Further details can be found in the European Goose Management Platform - National Report 2018 submitted by Denmark to AEWA in April 2018.

Tundra Swan / *Cygnus columbianus* **National Plan for Tundra Swan / *Cygnus columbianus***

No NP, but actions implemented

Please explain the reasons for having no NP in place

> Management plans for all SPA's are in place and include Tundra Swan where relevant.

Please provide a description of the actions implemented

> Improvements of habitats

Deliberate disturbance is prohibited

Monitoring is performed under the national nature monitoring programme NOVANA. Latest results are available at: <http://novana.au.dk/fugle/> (in Danish only).

Field for additional information (optional)

> The wintering population of Tundra Swans is monitored annually, while autumn- and spring staging populations are monitored every second year under the current national nature monitoring programme NOVANA. Latest results are available at: <http://novana.au.dk/fugle/> (in Danish only).

Black-tailed Godwit / *Limosa limosa* **National Plan for Black-tailed Godwit / *Limosa limosa***

NP in place and being implemented

When was the plan approved and published? Please provide a web link or attach a file, if available. Please provide contact details for any person or organisation coordinating its implementation. Please list any activities and/or achievements over the past triennium.

> A National Plan for Black-tailed Godwit and two other endangered meadow bird species was published in 2005: Miljøministeriet and Skov- og Naturstyrelsen (2005): Handlingsplan for truede engfugle. (Danish only) <http://naturstyrelsen.dk/media/219176/handlingsplan-for-truede-engfugle.pdf>

The implementation is integrated into the management plans developed for each SPA and into management plans for areas owned by the state. Deliberate disturbance is prohibited, and organized predator control is

performed in some areas

Field for additional information (optional)

> The breeding population of Black-tailed Godwits are monitored regularly by DCE/Department of Bioscience, Aarhus University the numerically three most important breeding sites: i.e. annually at Vejlerne and Tipperne, and every second year in Tøndermarsken (partly under the NOVANA programme, partly under specific contracts with the Ministry of Environment and Food of Denmark, and Aage V. Jensen Nature Fund). Other important sites in the Wadden Sea region is monitored at least every 6th year (under the TMAP section of NOVANA).

Eurasian Curlew / *Numenius arquata* **National Plan for Eurasian Curlew / *Numenius arquata***

No NP, but actions implemented

Please explain the reasons for having no NP in place

> Management plans for all SPA's are in place and include Eurasian Curlew where relevant.

Please provide a description of the actions implemented

> The implementation is integrated into the management plans developed for each SPA and into management plans for areas owned by the state. Actions include

Improvements of habitats

Deliberate disturbance is prohibited

organized predator control is performed in some areas

Monitoring is performed under the national nature monitoring programme NOVANA. Latest results are available at: <http://novana.au.dk/fugle/> (in Danish only).

Field for additional information (optional)

> The staging population of Eurasian Curlew is monitored monthly in four major staging areas within the by far most important staging area, the Danish Wadden Sea. Results are reported under the Trilateral monitoring programme for the Wadden Sea (TMAP) tri-annual reporting cycle.

Complete aerial censuses of the Wadden Sea is undertaken every mid-winter and every second August under the current national nature monitoring programme NOVANA. Latest results from these are available at: <http://novana.au.dk/fugle/> (in Danish only).

Long-tailed Duck / *Clangula hyemalis* **National Plan for Long-tailed Duck / *Clangula hyemalis***

No NP, but actions implemented

Please explain the reasons for having no NP in place

> Actions are implemented directly

Please provide a description of the actions implemented

> Sustainability of hunting is assessed with the regularly revision of hunting seasons. From July 2018 hunting will be restricted to only males.

Denmark is participating in internationally coordinated censuses of Long-tailed Duck, where the latest complete 2016 national census of the wintering population was convened as part of a joint venture with almost all range states surrounding the Baltic Sea, with the aim to improve population estimates for the species. First results (distribution of counted numbers) are available at: <http://novana.au.dk/fugle/> (in Danish only), but estimates of total numbers through distance sampled spatial modelling is pending.

Field for additional information (optional)

> No additional information

10. Does your country have in place or is your country developing a National Single Species Action Plan for any species/population for which an AEWA ISSAP has not been developed? (AEWA Action Plan, paragraph 2.2.2)

Yes

Please provide information on each species for which relevant action has been undertaken

Denmark

Corncrake / *Crex crex*

National Single Species Action Plan for Corncrake / *Crex crex*

NSSAP in place and being implemented

Please provide details

> The management plan is from 2000. main initiatives have been habitat restoration and protection.
<http://mst.dk/media/113894/engsnarre.pdf> (Danish only)

Ruff / *Calidris pugnax*

National Single Species Action Plan for Ruff / *Calidris pugnax*

NSSAP in place and being implemented

Please provide details

> A National Plan for Black-tailed Godwit, Ruff and Dunlin was published in 2005: Miljøministeriet and Skov- og Naturstyrelsen (2005): Handlingsplan for truede engfugle. (Danish only)

<http://naturstyrelsen.dk/media/219176/handlingsplan-for-truede-engfugle.pdf>

The implementation is integrated into the management plans developed for each SPA and into management plans for areas owned by the state. Deliberate disturbance is prohibited, and organized predator control is performed in some areas

Dunlin / *Calidris alpina*

National Single Species Action Plan for Dunlin / *Calidris alpina*

NSSAP in place and being implemented

Please provide details

> A National Plan for Black-tailed Godwit, Ruff and Dunlin was published in 2005: Miljøministeriet and Skov- og Naturstyrelsen (2005): Handlingsplan for truede engfugle. (Danish only)

<http://naturstyrelsen.dk/media/219176/handlingsplan-for-truede-engfugle.pdf>

The implementation is integrated into the management plans developed for each SPA and into management plans for areas owned by the state. Deliberate disturbance is prohibited, and organized predator control is performed in some areas

11. Has your country used the AEWA Guidelines for the preparation of National Single Species Action Plans for migratory waterbirds?

Notice: Before clicking on the above hyperlink, please keep pressing the **Ctrl button** on your keyboard to open the link in a new tab.

No

Please explain the reasons. What has been used instead as a basis for the preparation of NSSAPs?

> Action plans prepared before guidelines were available. However, these are largely fulfilled.

Optionally you can provide additional information on section 3.2. Single Species Action Plans

> No further information.

3.3 Emergency Measures

12. Please report on any emergency situation that has occurred in your country over the past triennium and has threatened waterbirds. (AEWA Action Plan, paragraph 2.3)

Please indicate whether an emergency situation threatening waterbirds, such as botulism, chemical pollution, earthquake, extreme weather, fire, harmful algal bloom, infectious disease, introduction of alien species, lead poisoning, nuclear accident, oil spill, predation, volcanic activity, war or other emergency (please specify), has occurred in the country over the past triennium.

Emergency situation has occurred

Please provide information on each emergency situation which occurred

Oil spill

Indicate when the emergency situation took place

> There was a major oil-spill in February 2017 when the portuguese containership went aground northwest of Fynshoved. The oilspill especially affected wintering sea duck populations in the southwestern part of the Kattegat (outermost Baltic Sea) - including SPA no. 26/Ramsar site no. 13 Horsens Fjord and Endelave and SPA no. 76/Ramsar site no. 16 North Funen (Æbelø and Nærå Strand).

Indicate where the emergency situation took place (including geographical coordinates)

> North of Funen (see answer above and attached map)

You have attached the following documents to this answer.

[Map_of_oil_spill_affected_area.docx](#) - Map of affected area

Indicate which species were affected by the emergency situation and the estimated magnitude of the impact

Long-tailed Duck / *Clangula hyemalis*

If mortality has been recorded, indicate number of individuals

> approx 5

What proportion of the national (breeding, passage, wintering/nonbreeding, whichever is applicable) population does this number represent?

< 10%

Common Eider / *Somateria mollissima*

If mortality has been recorded, indicate number of individuals

> approx 50

What proportion of the national (breeding, passage, wintering/nonbreeding, whichever is applicable) population does this number represent?

< 10%

Velvet Scoter / *Melanitta fusca*

If mortality has been recorded, indicate number of individuals

> approx 20

What proportion of the national (breeding, passage, wintering/nonbreeding, whichever is applicable) population does this number represent?

< 10%

Common Scoter / *Melanitta nigra*

If mortality has been recorded, indicate number of individuals

> approx 40

What proportion of the national (breeding, passage, wintering/nonbreeding, whichever is applicable) population does this number represent?

< 10%

Goosander / *Mergus merganser*

If mortality has been recorded, indicate number of individuals

> 16

Eurasian Wigeon / *Mareca penelope*

If mortality has been recorded, indicate number of individuals

> 1

What proportion of the national (breeding, passage, wintering/nonbreeding, whichever is applicable) population does this number represent?

< 10%

European Herring Gull / *Larus argentatus*

If mortality has been recorded, indicate number of individuals

> 2

What proportion of the national (breeding, passage, wintering/nonbreeding, whichever is applicable) population does this number represent?

< 10%

If a waterbird site has been affected, indicate area of habitat impacted (in hectares)

> see map attached above

Have emergency response measures been implemented?

Yes

Please provide details

> all oiled birds are euthanized

13. Are there any other emergency response measures, different from the ones applied in response to the emergency situations reported above, that were developed and are in place in your country so that they can be used in future in emergency cases?

No

14. Has your country used the AEWA Guidelines on identifying and tackling emergency situations for migratory waterbirds?

Notice: Before clicking on the above hyperlink, please keep pressing the **Ctrl button** on your keyboard to open the link in a new tab.

No

Please explain the reasons. What was used instead as a basis for dealing with emergency situations?

> the oiled bird emergency plan has been revised following guidelines from Helcom

Optionally you can provide additional information on section 3.3. Emergency Measures

> None.

3.4 Re-establishments

15. Is your country maintaining a national register of re-establishment projects occurring or planned to occur wholly or partly within your country? (Resolution 4.4)

No

Please explain the reasons

> No re-establishment project for waterbirds has occurred

16. Is there a regulatory framework for re-establishments of species, including waterbirds, in your country (AEWA Action Plan, paragraph 2.4)?

Yes

Please provide details

> See above.

17. Has your country considered, developed or implemented re-establishment projects for any species listed on AEWA Table 1? (AEWA Action Plan, paragraph 2.4)

No

18. Has your country used the AEWA Guidelines on the translocation of waterbirds for conservation purposes?

Notice: Before clicking on the above hyperlink, please keep pressing the **Ctrl button** on your keyboard to open the link in a new tab.

Not applicable

Please explain

> As no species were subject to re-establishment or translocation project, this is not relevant.

Optionally you can provide additional information on section 3.4. Re-establishments

> None.

3.5 Introductions

19. Does your country have legislation in place, which prohibits the introduction into the environment of non-native species of animals and plants which may be detrimental to migratory waterbirds? (AEWA Action Plan, paragraph 2.5.1)

Yes, and being enforced

Please provide the following details: title of legislation, year of adoption, institution that adopted it,

institution that enforces it. Please clarify whether legislation applies to/is consistent throughout the entire country or only to particular states/provinces.

> According to Ministry of Environments Danish Nature Protection Act no. 934 of 27/06/2017 paragraph 31, it is prohibited to release non-native species in nature in Denmark without permission from the Minister of Environment. Enforced by Danish environmental protection Agency

Field for additional information (optional)

> None.

20. Does your country impose legislative requirements on zoos, private collections, etc. in order to avoid the accidental escape of captive animals belonging to non-native species which may be detrimental to migratory waterbirds? (AEWA Action Plan, paragraph 2.5.2)

Yes, and being enforced

Please provide the following details: title of the document, year of adoption, institution that adopted it, institution that enforces it. Please clarify whether legislation applies to/is consistent throughout the entire country or only to particular states/provinces.

> Statutory order prohibiting new holdings and outfasing old holds of racoon dogs. EU legislation on invasive species is implemented. General rules apply for zoo and keeping of animals in general under the ministry of environment and Food,

Field for additional information (optional)

> None.

21. Does your country have in place a National Action Plan for Invasive Species (NAPIS) (in the framework of other MEAs, such as CBD, Bern Convention, and GISP (Global Invasive Species Programme) (Strategic Plan 2009-2017, Objective 1, Target 5)?

Yes, and being implemented

Has consideration been given to waterbirds in the NAPIS?

Yes, fully

Field for additional information (optional)

> Ruddy Duck and the Egyptian Goose can be hunted all year through. Sittings of Ruddy Ducks may be subject to special enforcement of eradication. Canada goose is huntable as well.

22. Has your country considered, developed or implemented programmes to control or eradicate non-native species of waterbird so as to prevent negative impacts on indigenous species? (AEWA Action Plan, paragraph 2.5.3)

Yes

Please provide information on each species for which relevant action has been undertaken

Ruddy Duck / *Oxyura jamaicensis*

For Ruddy Duck / *Oxyura jamaicensis*

Control or eradication programme developed and being implemented

23. Has your country considered, developed or implemented programmes to control or eradicate other non-native species (in particular aquatic weeds) so as to prevent negative impacts on migratory waterbirds? (AEWA Action Plan, paragraph 2.5.3 and Resolution 5.15)

Yes

Please list the non-native species for which relevant action has been undertaken

> New common plan against invasive species published in 2017. Action Plan for american mink and Action plan for racoon dog is still in place and being implemented.

Please provide further information for each relevant programme

> N/A

24. Has your country used the AEWA Guidelines on avoidance of introductions of non-native waterbird species?

Notice: Before clicking on the above hyperlink, please keep pressing the **Ctrl button** on your keyboard to

open the link in a new tab.

No

Please explain the reasons. What was used instead as a basis for dealing with the issue?

> Denmark i 2017 published a new Action Plan against invasive species: Miljø- og Fødevareministeriet and Miljøstyrelsen (2017): Handlingsplan mod invasive arter. http://mst.dk/media/143350/handlingsplan_invasive-arter_juni17.pdf

According to this plan, and associated national legislation, three invasive waterbird species relevant to Denmark, i.e. Egyptian Goose, Ruddy Duck and Greater Canada Goose, may to regulated year-round, the first two without specific permission (with reference to EU legislation), the latter after permission outside the general hunting season for geese. Greater Canada Goose is also huntable during 1 September to 31 January. The statistics on regulated/hunted birds is available at: <http://fauna.au.dk/jagt-og-vildtforvaltning/vildtudbytte/> The number of regulated Ruddy Ducks is declining (as are the number of observed birds, mentioned above), and was only 3 birds in the season 2016/17.

The number of regulated Egyptian Geese is increasing (as are the number of observed birds), and was 273 birds in 2016/17.

The number of hunted and/or regulated Greater Canada Geese has been declining since 2010, and was 5213 in 2016/17. Likewise the staging population has been declining, since a peak count in 2002 (<http://novana.au.dk/fugle/traekfugle/traekfuglearter/canadagaas/>)

Optionally you can provide additional information on section 3.5. Introductions

> None.

Pressures and Responses

4. Habitat Conservation

4.1 Habitat Inventories

25. Has your country identified the network of all sites of international and national importance for the migratory waterbird species/populations listed on Table 1? (AEWA Action Plan, paragraph 3.1.2)

Yes

Please provide full reference, e.g. title, year, authors, etc. or a web link

> As mentioned under section 8 above, 113 areas, mainly internationally important wetlands, have been designated as Special protection Areas (SPA's) according to the EU Birds Directive, the majority of which are designated for breeding, moulting, staging or wintering waterbirds (see further details in section 8).

All habitats that are relevant to breeding and staging waterbirds, and prioritised habitats under the EU Habitats Directive is enrolled as part of the Natura 2000 network planning programme (see website), that was finished by the end of 2011 (first planning cycle 2009-2015, second 2016-2021).

A monitoring programme NOVANA provides more detailed data about threats and management status of the mapped areas.

Field for additional information (optional)

> No additional info

26. If your country has identified or is currently identifying the networks of sites of international and national importance, were the AEWA Guidelines on the preparation of site inventories for migratory waterbirds used?

Notice: Before clicking on the above hyperlink, please keep pressing the **Ctrl button** on your keyboard to open the link in a new tab.

No

Please explain the reasons. What has been used instead as a basis for the inventory?

> These areas were identified before the AEWA guidelines under national implementation strategies using EU Birds Directive and Ramsar Convention guidelines.

Field for additional information (optional)

> No additional info.

Optionally, you can provide additional information on section 4.1. Habitat Inventories

> No additional info.

4.2. Conservation of Areas

27. Has your country assessed the future implications of climate change for protected areas and other sites important for waterbirds (i.e. resilience of sites to climate change)? (Resolution 5.13)

For one or more single sites

Yes

If yes, please give details as to where relevant information about these assessments have been published (either as publications or web-link).

> Two scientific papers have looked into this issue. The first has taken a national component of a single-species flyway population approach, assessing potential habitat loss for the East Atlantic flyway-population of light-bellied brent geese (listed in category A1c in Table 1 of the AEWA Action Plan): See Clausen, K.K., Stjernholm, M. and Clausen, P. (2013). Grazing management can counteract the impacts of climate change-induced sea level rise on salt marsh-dependent waterbirds. – Journal of Applied Ecology 50: 528-537.

The second has taken a wider perspective on a suite of species, covering all important areas for waterbirds in the Limfjord, the largest sound/estuary in Denmark, and one of the most important haunts for moulting, staging, and wintering inshore waterbirds in the country. See Clausen, K.K. and Clausen, P. (2014). Forecasting future drowning of coastal waterbird habitats reveals a major conservation concern. - Biological Conservation 171: 177-185.

For the national protected area network

No

28. Which sites that were identified as important, either internationally or nationally, for Table 1 migratory waterbird species/populations have been designated as protected areas under the national legislation and have management plans that are being implemented, including with the aim to increase resilience to the effects of climate change? (AEWA Action Plan, paragraph 3.2.1, AEWA Strategic Plan 2009-2017, Objective 1, Target 1.2)

Please report separately on internationally important sites, nationally important sites and buffer zones.

- Reporting on designation and management of internationally important sites
- Reporting on designation and management of nationally important sites
- Reporting on establishing buffer zones around waterbird sites (as an approach for maintaining or increasing resilience of ecological networks, including resilience to climate change)

All sites of international importance

(sites recognized as having international importance for migratory waterbirds following criteria of, for instance, the AEWA Critical Site Network, the Ramsar Convention, the EU Birds Directive (SPAs), the Bern Convention Emerald Network, the BirdLife International's Important Bird Areas)

Total number

> 113

Total area (ha)

> 1470000

Number of internationally important sites under national protection designation

> 113

Area of international importance under national protection designation (ha)

> 1470000

Internationally important protected sites with management planning in place which is being implemented

> 113

Area (in ha)

> 1470000

Internationally important sites with management planning in place which is being implemented and includes management objectives related to maintaining or increasing the resilience of existing ecological networks, including resilience to climate change

Number of sites

> 113

Area (in ha)

> 1470000

All sites of national importance

Total number

> 126000

Total area (ha)

> 178000

Number of nationally important sites under national protection designation

> 126000

Area of national importance under national protection area designation

> 178000

Area (in ha)

> 86000

Has your country identified around which nationally or internationally important sites the establishment of buffer zones is needed to maintain or increase resilience?

- No

29. Has your country developed a national action plans for filling gaps in designation and/or management of internationally and nationally important sites? (Resolution 5.2)

DESIGNATION GAP FILLING

No

Please explain the reasons

> In 2018 a proces of evaluating the designations is ongoing

MANAGEMENT GAP FILING

No

Please explain the reasons

> There is not an action plan for management gap filling, but the actions plans for each of the SPA's are revised every 6 year and the issue of management gaps are treated in this proces

30. Has your country developed a strategic plan (independently or as part of your country's overarching biodiversity or protected area policy document) to maintain or increase the resilience of the ecological network (for waterbirds), including resilience to climate change, and to conserve range and ecological variability of habitats and species? (Resolution 5.2, AEWA Strategic Plan 2009-2017, Objective 1, Target 1.2)

No

Please explain the reasons

> Nature management plans are updated for the protected sites with regular year-intervals. The matter of resilience may be part of these plans if relevant

31. Has your country used the AEWA Guidelines on the management of key sites for migratory waterbirds?

Notice: Before clicking on the above hyperlink, please keep pressing the **Ctrl button** on your keyboard to open the link in a new tab.

No

Please explain the reasons. What guidance has been used instead?

> These areas were identified before the AEWA guidelines, using Natura 2000 and Ramsar Convention guidelines.

32. Has the Critical Site Network (CSN) Tool for the AEWA area been accessed and used in your country?

Notice: Before clicking on the above hyperlink, please keep pressing the **Ctrl button** on your keyboard to open the link in a new tab.

No

Please explain the reasons

> These areas were identified before the development of the CSN Tool.

Optionally you can provide additional information on section 4.2. Conservation of Areas

> The sites are protected according to the provisions in the EU Birds Directive and the Ramsar Convention. Furthermore, the sites as a whole or partly are protected according to national legislation e.g. as nature conservation and/or wildlife reserves. A management planning process is being implemented for all Danish NATURA 2000-Sites including basic investigations, conservation goals, monitoring and management plan. In Denmark the national wetland policy is covered by an integrated and a comprehensive set of nature protection and environmental laws and strategies which also complies with article 6 of the Convention of Biological Diversity. The aim of the entire nature and environmental conservation effort in Denmark is the preservation of biodiversity. The most relevant legal instruments regarding conservation and wise use of wetland are the following:

- The Nature Protection Act (1997, revised in 2004)
- The Act on the Structure of Agriculture (1999)
- The Raw Materials Act (2004)
- The Action Plan of the Aquatic Environment (2004)
- The Act relating to protection of the Tøndermarsh (2004)
- The Hunting and Game Management Act (2007)
- The Marine Environment Act (2008)

Approximately 300000 hectares are generally protected habitats (bogs, lakes, saltmeadows) important for waterbirds and of national importance. Of these, 60 % are situated outside the areas of international

importance, equal to 180000 hectares. The total number of individual sites of national importance (situated outside the international areas) are identified to approximately 125000. Of the 180000 hectares approximately 86000 hectares are considered to have a proper management being implemented.

Pressures and Responses

5. Management of Human Activities

5.1. Hunting

33. Does your country have an established system for the collection of harvest data, which covers the species listed in Table 1? (AEWA Action Plan, paragraph 4.1.3)

Yes

Does it cover the following? (tick where applicable and provide details)

All AEWA species occurring in your country

> Details given below.

Does it cover the following? (tick where applicable and provide details)

The whole territory of your country

Does it cover the following? (tick where applicable and provide details)

All harvesting activities

Field for additional information (optional)

> The total bag of the Danish hunters is recorded annually. Each hunter is obliged to inform the authorities of their annual bag in conjunction with their online hunters license renewal.

The results are published annually in a Research note from

DCE - Danish Centre for Environment and Energy.

A major assessment of populations trends, bag statistics and harvest sustainability is made on a regular basis.

If the bag of a waterbird species has significantly declined it is considered to close or reduce the open season for the species. The latest major report was published in 2016 (In Danish).

Asferg, T., Clausen, P., Christensen, T.K., Bregnballe, T., Clausen, K.K., Fox, A.D., Haugaard, L., Holm, T.E., Laursen, K., Madsen, A.B., Madsen, J., Nielsen, R.D., Sunde, P. & Therkildsen, O.R. 2016. Vildtbestande og jagttider i Danmark: Det biologiske grundlag for jagttidsrevisionen 2018. Aarhus Universitet, DCE - Nationalt Center for Miljø og Energi, 140 s. - Videnskabelig rapport fra DCE - Nationalt Center for Miljø og Energi nr. 195. <http://dce2.au.dk/pub/SR195.pdf>

An English-linguaged presentation of this reporting system was given by Bregnballe et al. (2007).

Bregnballe, T., Noer, H., Christensen, T.K., Clausen, P., Asferg, T., Fox, A.D. & Delany, S. 2007. Sustainable hunting of migratory waterbirds: the Danish approach. In: Boere, G.C., Galbraith, C.A. & Stroud, D.A. (Eds): Waterbirds around the world. A global overview of the conservation, management and research of the world's waterbird flyways. Edinburgh Stationery Office. Pp. 854-860.

34. Has your country phased out the use of lead shot for hunting in wetlands? (AEWA Action Plan, paragraph 4.1.4)

Fully

When was lead shot use in wetlands banned?

> According to Ministerial Order no. 41, dated 21. January 1994, hunting with lead-ammunition has been forbidden since 1 April 1996, from which date it has also been forbidden to trade and carry lead ammunition while hunting. Use of lead ammunition for training purposes and target shooting was also forbidden after that date. Use of lead ammunition for hunting waterfowl and hunting on wetlands was however already forbidden since 1986.

What legislation is in place?

> Please see answer above

Who enforces this legislation?

> The Danish Ministry of Environment and Food

Has assessment of compliance with the legislation been undertaken?

Yes

Please explain how this was assessed.

> Researchers from Department of Bioscience at Aarhus University and the Danish Academy of Hunting, Denmark - is currently investigating the issue by use of data on a) plastic litters from shotgun cartridges, b) embedded and c) ingested shotgun shoots in waterbirds.

Results from part a) was published in 2018, but these results are not fully conclusive from a national perspective, because the plastic litter found beached may come from Danish hunting activities, but also via sea currents from hunting activities abroad.

In this context it is noteworthy, that steel shot shells and wads were more common in inner Danish waters (where Danish hunters are active), but steel shot shells and wads were over-represented on the North Sea coast, where hardly any sea duck hunting takes place in Denmark. Thus, the latter may in fact come from abroad, where lead shot is still being used.

The wads are considered more representative for current hunting activities, and 83 % of identified wads were judged to come from steel and 17 % from lead shot, suggesting a high degree of compliance to the lead-shot ban from Danish hunters, again because the lead-shot wads may come sea currents.

Reference: Kanstrup, N. & Balsby, T.S.J. 2018: Plastic litter from shotgun ammunition on Danish coastlines – amounts and provenance. – Environmental Pollution 237: 601-610.

Data on embedded and ingested shotgun shoots in waterbirds will be published during the next 2018-2020 AEWA reporting cycle.

Please explain what the compliance with legislation was found to be:

Good (almost full compliance)

Please indicate any known reasons for good compliance or any barriers to compliance. Please attach any published or unpublished references.

> Compliance generally thought to be good. See details below in answer 35 about compliance issues.

Has measurement of impact of the legislation been undertaken i.e. where there was a problem of lead poisoning in waterbirds, has this been reduced?

Yes

Please explain how this was done. Please attach any published or unpublished references.

> This issue is currently under investigation (under project c) mentioned above.

35. Are there measures in your country to reduce/eliminate illegal taking? (AEWA Action Plan, paragraph 4.1.6)

Yes

How would you rate the effectiveness of the measures?

High

Please provide details

> There is a high degree of self-justice within the membership of the Danish Hunters Association (embracing the majority of hunting licence holders in Denmark), and a developed system of game reserve control is working well. Moreover, police is taking this issue seriously, and deals with it efficiently.

Compliance with hunting laws is thus generally considered to be high in Denmark, and especially after some years with new regulations. A good example of this is illustrated from a study of Mute Swans, that in the past were subject to illegal hunting and persecution in Denmark (and neighboring countries).

Andersen-Harild et al. (2002) thus showed that the proportion of swans with embedded shots had declined from 12 % i 1979 to 5 % in 1996, and explained the difference as reflecting improved compliance with general hunting as well as reserve regulations, but also reduced near-coastal hunting activity.

Reference: Andersen-Harild, P., Clausen, B. & Nilson, B.R. (2002): Beskydning af Knopsvaner (Cygnus olor) i Danmark - en sammenligning af forholdene i 1979 og 1996. - Dansk Ornitologisk Forenings Tidsskrift 96: 9-14.

Field for additional information (optional)

> None

36. Are legally binding best practice codes and standards for hunting (e.g. bird identification) considered a priority or appropriate for your country? (AEWA Strategic Plan 2009-2017, Objective 2, Target 2.4)

Yes

Are there legally binding best practice codes or standards in place?

Yes

What do these cover?

Proficiency test for hunters (including bird identification)

Other (please specify)

> Shooting tests and ability to hit target is mandatory in the test necessary to achieve the right to get hunters license.

37. Has your country used the AEWA Guidelines on sustainable harvest of migratory birds?

Notice: Before clicking on the above hyperlink, please keep pressing the **Ctrl button** on your keyboard to open the link in a new tab.

No

Please explain the reasons. What other guidance has been used instead?

> A long-going programme is being used, from before the AEWA guidelines on sustainable harvest of migratory birds was published: Every third year a scientific report is edited on the quarry species population and the hunting season is evaluated and possibly revised based on the results, to ensure sustainable harvest of migratory birds. Latest report was published in 2016 (also mentioned above in section 33, with link to the report).

Optionally, you can provide additional information on section 5.1. Hunting

> None.

5.2. Other human activities

38. Have restrictions on use of lead fishing weights been introduced in your country? (AEWA Action Plan, paragraph 4.3.12). When answering this question please also consider question 56 in chapter 6 - Research and monitoring.

Yes

Please describe what restrictions are in place, when they were introduced and whether they are considered to have worked (i.e. reduced the impact of lead poisoning). Please attach any published or unpublished references.

> Since 1. December 2012 it has been illegal to import or sell fishing "gear" containing metallic lead to commercial as well as recreational fisheries (Ministerial Order No. 856 dated 5 September 2009).

39. Does your country have legislation in place, which provides for Strategic Environmental Assessment/Environmental Impact Assessment (SEA/EIA) of activities potentially negatively affecting natural habitats or wildlife? (AEWA Action Plan, paragraph 4.3.1)

Yes and being implemented

Does this legislation apply to the entire country or only to particular states/provinces thereof?

Entire country

Do the SEA/EIA processes consider waterbirds and habitats on which they depend?

Yes

Please provide details

> The main features of the Danish EIA are that companies or others making specific constructions, such as large husbandry farms, infrastructures, airports, and wind farms etc., have to make an assessment of the potential impact on the surrounding environment, including wetlands and waterbirds. If the impact is assessed to be significantly negative alleviating measures has to be carried out or the construction may even be translocated to another geographic position or may even be given up. The demands for carrying out EIAs are dependant upon the character and size of the development proposals or change in land/water use. Typically small projects do not require EIAs due to e.g. specified criteria for lower limits of agricultural development projects.

Do the SEA/EIA processes include public participation?

Yes

Please provide details

> The EIA process includes a public hearing.

Field for additional information (optional)

> None.

40. In the last three years, has your country used SEA/EIA for all relevant projects, including energy sector projects such as renewable energy developments and power lines installation, to assess the impact of proposed projects on migratory waterbird species listed on Table 1 and/or habitats/sites on which they depend? (AEWA Action Plan, paragraph 4.3.1, Resolution 5.11 and Resolution 5.16)

Yes, all proposed projects

Please provide information on the outstanding cases

> Yes, if assessment concerning waterbirds is considered relevant. There is a massive volume of scientific papers and reports dealing with pre-construction EIA's and wind turbine installations both on land and from Danish waters.

Where an SEA/EIA has identified a likelihood of significant negative impacts on migratory waterbirds, have steps been taken to avoid these impacts, including avoidance of protected areas and other sites of importance for migratory waterbirds?

Yes

41. Has your country used the AEWA Guidelines on how to avoid, minimize or mitigate impact of infrastructural developments and related disturbance affecting waterbirds?

Notice: Before clicking on the above hyperlink, please keep pressing the **Ctrl** button on your keyboard to open the link in a new tab.

No

Please explain the reasons. What other guidance has been used instead?

> As for many other AEWA guidelines, Danish Authorities and Consultancies initiated such EIA studies well before the AEWA guidelines were produced, but current practices generally follow these.

42. Please report on the implementation of Resolution 5.11 on Power Lines and Migratory Waterbirds.

42.1. Are relevant stakeholders, including government agencies, scientific bodies, nongovernmental organisations and the energy sector, being regularly consulted in order to monitor jointly the impacts of power lines on waterbirds and to agree on a common policy of action?

Partially

42.2. Has a baseline of waterbird distribution, population sizes, migrations and movements (including those between breeding, resting and feeding areas) been established as early as possible in the planning of any power line project, over a period of at least five years, and with particular emphasis on those species known to be vulnerable to electrocution or collision?

Partially

Please explain the reasons. What are the constraints preventing implementation of this activity?

> Proposals for new power lines are subject to EIA which includes the assessment of impact on waterbirdspecies in the area.

42.3 If such studies, as described in the question above, have identified any risks, has every effort been made to ensure these are avoided?

Not applicable

Please explain the reasons.

> Only minor effects have been recognized

42.4. Have the location, route and direction of new power lines been designated on the basis of national zoning maps?

Partially

Please explain the reasons. What are the constraints preventing implementation of this activity?

> As above. In some areas existing power liners are now being laid under ground including in some wetland areas.

42.5. Has, wherever possible, the construction of power lines along major migration flyways and in habitats of conservation importance* been avoided, where such construction is likely to have significant effects on waterbirds?

* such as Special Protection Areas under the EU Birds Directive, Important Bird Areas, protected areas, Ramsar sites, the West/Central Asian Site Network for Siberian Crane and other waterbirds and other critical sites as identified by the Critical Site Network (CSN) Tool for the African-Eurasian region.

Yes

Please provide details.

> As mentioned above EIA's has to be performed for such Projects. If any significant adverse effects are recognized alleviating measures have to put in place or relocation will be necessary.

42.6. Are bird-safe designs in the construction of new power infrastructure, including measures designed to reduce electrocution and collisions being used in your country?

Yes

42.7. Have those sections of existing power lines that are causing relatively high levels of waterbird injury and/or mortality due to electrocution and/or collision been identified?

Partially

42.8. Where sections of existing power lines have been identified to cause relatively high levels of waterbird injury and/or mortality due to electrocution and/or collision, have they been modified as a matter of priority?

Not applicable

42.9. Is there in your country regular monitoring and evaluation of the impact of power lines on waterbird populations at the national scale?

Partial

42.11. Have the measures contained in Resolution 5.11. been included in your country's National Biodiversity Strategies and Action Plans and relevant legislation?

No

43. Has your country used the AEWA Guidelines on how to avoid or mitigate impact of electricity power grids on migratory birds in the African-Eurasian region?

No

Please explain the reasons. What other guidance has been used instead?

> Guidelines on conducting EIA's existed before the AEWA guideline

44. Please report on the implementation of Resolution 5.16 on Renewable Energy and Migratory Waterbirds.

44.1. Has a national sensitivity and zoning mapping to avoid overlap of renewable energy developments with areas of importance for migratory waterbirds been developed in your country?

Being developed

44.3. Is post-construction monitoring being undertaken of the renewable energy installations and associated infrastructure in your country?

Yes

Please share information and lessons learnt from the post-construction monitoring.

> A study on collision risk of taiga bean goose to wind turbines have been conducted. The geese avoided the turbines and no risk of collision was found

44.4. Where damage cannot be avoided or mitigated, has compensation for damages to biodiversity been provided?

No

Please explain the reasons. What are the constraints preventing implementation of this activity?

> New constructions for renewable energy are subject to EIA including assessment of impact on waterbirdspecies in the area. Where wind turbines have been raised mostly only minor adverse effects have been recorded

44.5. Please indicate whether any of the following measures have been put in place to reduce the potential negative impact of terrestrial and marine windfarms on migratory waterbirds:

Operate wind farms in ways that minimise bird mortality, for example by introducing shortterm shutdowns during peak migration and minimising lighting in wind farms.

Not applicable

Please explain the reasons

> No significant risk was found

44.6. Have any specific measures been put in place to assess, identify and reduce potential negative

impacts of biofuel production on migratory waterbirds and their habitats?

Not applicable

44.7. Have the measures contained in Resolution 5.11. been included in your country's National Biodiversity Strategies and Action Plans and relevant legislation?

No

46. Is by-catch of waterbirds in fishing gear taking place in your country? (Resolution 3.8)

Yes

Please provide details

> The Danish Agency of fishery is financing an ongoing project on by-catch in Commercial fishery

Field for additional information (optional)

> None.

47. Has your country undertaken steps towards the adoption/application of measures to reduce the incidental catch of seabirds and combat Illegal Unregulated and Unreported (IUU) fishing practices in the Agreement Area? (Resolution 3.8)

Not applicable

Please explain

> There are regulations on fishing practice concerning net gear, but no regulation concerning by-catch of waterbirds.

Field for additional information (optional)

> None.

Optionally you can provide additional information on section 5.2. Other Human Activities

> None.

Pressures and Responses

6. Research and Monitoring

49. Does your country have waterbird monitoring schemes for the AEWA species in place? (Strategic Plan 2009-2017, Objective 3, Target 3.2)

Yes

Covering the breeding period

Guidance: Including pre- and post-breeding sites of concentration, such as moulting sites close to breeding areas

Partially

Covering the passage period

Partially

Covering the non-breeding/wintering period

Partially

Field for additional information (optional)

> The results are published annually (in Danish), see <http://novana.au.dk/fugle/>

50. Has your country supported, technically or financially, other Parties or Range States in designing appropriate monitoring schemes and developing their capacity to collect reliable waterbird population data? (Resolution 5.2)

No

Please explain the reasons

> Not during the present reporting period.

Denmark in the past worked jointly with Guinea-Bissau to develop monitoring of waterbirds in the Bijagos Archipelago.

Denmark regularly contribute with fundings to monitoring of waterbirds in Greenland (not AEWA member)

51. Has your country used the AEWA Guidelines for a waterbird monitoring protocol?

Notice: Before clicking on the above hyperlink, please keep pressing the **Ctrl button** on your keyboard to open the link in a new tab.

No

Please explain the reasons. What guidance has been used instead?

> In general agreement with the AEWA guidelines, but the Danish waterbird monitoring programme has been developed and improved since the beginning of the 1960'ies.

52. Have any research programmes been established in your country in the last 5 years to address waterbird conservation priorities in accordance with the AEWA strategies and plans? (AEWA Strategic Plan 2009-2017, Objective 3, Target 3.3)

No

Please explain the reasons.

> The Avian Research Group of DCE - Danish Centre for Environment and Energy at Department of Bioscience, Aarhus University, is the largest waterbird research group in Denmark.

Staff members of the Group in coordination with The Environmental Protection Agency regularly update research priorities related to waterbird management issues, initiate and maintain research on several waterbird species of major international or national conservation or management concern (e.g. alien species or species causing damage), including species covered by existing AEWA SSAPs (e.g. Black-tailed Godwit, Greenland White-fronted Goose), ISMP's (Pink-footed Goose), expected SSAP's/ISMP's (Taiga Bean Goose, Long-tailed Duck). Other research priorities are threatened species (e.g. Light-bellied Brent Goose, terns, meadow birds, Common Eiders)

53. List (or provide links to lists) of research related to waterbirds and their conservation that has been undertaken or results published in the past triennium (Strategic Plan 2009-2017, Objective 3, Target 3.5)

> The majority of breeding and staging waterbird monitoring data collected under the NOVANA programme have been made publicly available through the Danish Environment Data Portal during 2013-2017, and more will be published during 2018.

Members of the Avian Research Group (mentioned above) publishes > 100 papers, reports, technical notes, and popular articles dealing with waterbird monitoring, ecology and management annually.

Field for additional information (optional)

> None.

54. Has your government provided over the past triennium funds and/or logistical support for the International Waterbird Census at international or national level? (Strategic Plan 2009-2017, Objective 3, Target 3.1)

Yes

Nationally

Yes

Please provide details

> See above under section 49 - dealing with the non-breeding/wintering period.

Internationally

Yes

Please provide details

> Denmark annually contributes approximately 29,500 EURO to Wetlands International

Field for additional information (optional)

> None.

55. Has your country donated funds to the African-Eurasian Waterbird Monitoring Partnership Fund in the past triennium (Resolution 6.3)?

No

Please explain reason

> Lack of resources

56. Has the impact of lead fishing weights on waterbirds been investigated in your country? (AEWA Action Plan, paragraph 4.3.12). When answering this question please also consider question 38 in chapter 5 - Management of human activities.

No

Are there plans to investigate the impact of lead fishing weights on waterbirds in your country?

No

Please provide reason(s)

> It is illegal to import or sell fishing "gear" containing metallic lead to commercial as well as recreational fisheries (Current Ministerial Order: BEK nr 856 af 05/09/2009 -

<https://www.retsinformation.dk/Forms/R0710.aspx?id=126138&exp=1>).

Optionally you can provide additional information on section 6. Research and Monitoring

> Three units within DCE - Danish Centre for Environment and Energy at Department of Bioscience, Aarhus University, are engaged in research related to migratory waterbirds within the AEWA region, i.e. the "Arctic Environment group" and "Arctic Ecosystem Ecology group" based in Roskilde and the "Avian Research Group" based in Kalø. Staff from all groups, however, carry out research on various issues both in Denmark and the Arctic - and occasionally elsewhere in Western Europe and North Africa, and generally together with a broad network of collaborators in other countries.

Projects have thus within the past 18 years been carried out in Arctic Canada, Greenland, Svalbard, Arctic Russia, Iceland, Ireland, United Kingdom, Norway, Denmark, Germany, Netherlands, Egypt, and China.

Pressures and Responses

7. Education and Information

7.1. Communication, Education and Public Awareness

57. Has your country developed and implemented programmes for raising awareness and understanding on waterbird conservation and about AEWA specifically? (Strategic Plan 2009-2017, Objective 4, Target 4.3 and AEWA Action Plan, paragraphs 6.1-6.4, Resolution 3.10, Resolution 5.5)

No

Please explain the reasons

> No specific programme developed and implemented. However, at many important bird areas the public has access to bird observation points and hides as well as information boards regarding the birds at the sites. At many areas also leaflets and/or descriptions are available at the Nature Agency's web page (<http://naturstyrelsen.dk/naturoplevelser/>) describing the areas and among others the birds and other animals that can be found.

Further there is an ongoing cooperation with the Danish Hunters Organization that are informing about waterbird conservation, better hunting organization, goose identification etc.

Field for additional information (optional)

> None

58. Has a National AEWA Focal Point for Communication, Education and Public Awareness (CEPA) been nominated by your country? (Resolution 5.5)

No

Please explain the reasons

> None appointed

Field for additional information (optional)

> None

59. Have measures been taken by your country to implement the provisions related to "Education and Information" in the AEWA Action Plan over the last triennium? (AEWA Action Plan, Paragraphs 6.1-6.4)

No

Please explain the reasons

> see answer to point 57. In addition the Danish Hunters Association produces a members magazine with information on subjects relating to both hunting and general conservation and protection issues.

60. Have World Migratory Bird Day (WMBD) activities been carried out in your country during this reporting cycle? (Resolution 5.5)

No

Please explain the reasons

> No specific WMBD activities has been carried out, however, Birdlife Denmark has for many years held an annual "Fuglenes Dag" ("Bird Day") - in mid May, where the public is invited on tours or out in bird observation towers, staffed by volunteer dedicated field ornitologists.

61. Has your country provided funding and/or other support, as appropriate (e.g. expertise, network, skills and resources) towards the implementation of the AEWA Communication Strategy? Please consider both national and international funding and different types of support provided. (Strategic Plan 2009- 2017, Objective 4, Target 4.1 and Resolution 3.10, Resolution 5.5)

No

Please explain the reasons

> This has not been prioritised - resource constraints

Field for additional information (optional)

> None

62. In Resolution 3.10 the Meeting of the Parties encouraged Contracting Parties to host AEWA Exchange Centres for their respective regions. Has your country considered/shown interest in hosting a Regional AEWA Exchange Centre? (Strategic Plan 2009-2017, Objective 3, Target 2 and Resolution 3.10)

Not considered yet

Please provide details on the answer given above

> None

Field for additional information (optional)

> None

63. Training for CEPA (Communication, Education and Public Awareness) at national level is supposed to be conducted by staff who have been trained in the framework of an AEWA Training of Trainers programme. Have staff who were trained as part of a Training of Trainers workshop conducted national CEPA training in your country in the past triennium? (Strategic Plan 2009-2017, Objective 4, Target 4.2)

No

Please explain the reasons

> N/A

Field for additional information (optional)

> N/A

Optionally you can provide additional information on section 7.1. AEWA Communication Strategy

> Department of Bioscience staff have since 2009 been responsible for teaching a 10 ECTS Master of Science course in Biology at Aarhus University.

The course is named "Wildlife Ecology and Management". Approximately 1/3 of the curriculum, lectures, and exercises (theoretical and practical) deals with waterbird ecology and management issues. A red line through the course includes discussions about management planning, where some student groups are engaged with presenting and evaluating some of the AEWA single-species action plans for other students.

The Department since 2017 also introduced a course in "Adaptive Nature Management" The course is a "continuing education" aimed at all those who work with administration, education or consultancy in the field of nature and wildlife management in public administration, consultancy firms, special interest organisations as well as academics. The course has the adaptive management approaches used under the AEWA European Goose Management Platform as a highlighted example.

Pressures and Responses

8. Implementation

64. Has your country approached non-contracting party range states to encourage them to accede to the Agreement? (Resolution 3.10)

Report only on activities over the past triennium

No

Please explain the reasons

> Ressource constraints

65. Has your country supported/developed international co-operation projects for the implementation of the Agreement, according to the priorities outlined in the AEWA International Implementation Tasks (IIT) for the current triennium? (Resolution 6.13).

Notice: Before clicking on the above hyperlink, please keep pressing the **Ctrl button** on your keyboard to open the link in a new tab.

Yes

Please list the IIT projects (**see the full roster here**) to which grants have been provided or for which initiatives have been undertaken and briefly provide any relevant information

> Denmark is implementing the ISSAP for taiga bean goose and the ISSMP for pinkfooted goose under the AEWA EGMP.

Denmark has financed the ISSMP management planning proces for barnacle goose

Field for additional information (optional)

> none

66. Does your country have in place a national coordination mechanism for implementation of AEWA, possibly linking to national coordination mechanisms for other biodiversity Multilateral Environmental Agreements (MEAs)? (Strategic Plan 2009-2017, Objective 5, Target 5.7)

No

Please explain the reasons

> Coordination is done case by case. The biodiversity MEAs are the responsibility of the Danish Nature Agency and staff dealing with these are either working close together or distributed in only a few different units.

A national goose management group has been established implementing the management and actions plans under the AEWA European goose management platform

Field for additional information (optional)

> A national goose management group has been established

67. Has your country concluded, or considered concluding, twinning schemes between sites with other countries, the sites of which share common migratory waterbirds or conservation issues? (Resolution 5.20)

No

Please explain the reasons

> Through the Danish foreign aid wetland related support to management and conservation has been given directly or indirectly to initiatives in partner countries by which Danida has an agreement such as Vietnam, Tanzania, Indonesia and Kenya.

68. Are those officers in your country's government responsible for AEWA implementation co-ordinated and engaged with national processes to implement and to assess delivery of the CBD Strategic Plan 2011 - 2020 including the Aichi targets?

No

Please explain the reasons

> The tasks are distributed but a close collaboration exists

69. Are the AEWA priorities incorporated into your county's National Biodiversity Strategies and Action Plan (NBSAP) and other strategic planning processes (Resolution 6.3)?

69.2 Other strategic planning processes

Yes

Please name the other strategic planning processes

> Aftale om naturpakke (agreement on nature). Political agreement on the priorities in Danish nature policy. Includes initiatives on i.a. better connectivity between habitats

70. Please report any activity undertaken to promote with the development agency of your country or other appropriate governmental body the relevance of AEWA implementation in the context of SDG-delivery and to stress the need to better integrate actions for waterbird and wetland conservation within relevant development projects (Resolution 6.15).

AEWA relevance for SDG implementation WAS promoted

Please provide details

> Close collaboration exists

72. Has your country donated funds to the AEWA Small Grants Fund over the past triennium? (Strategic Plan 2009-2017, Objective 5, Target 5.4)

No

Please explain the reasons

> Lack of resources.

73. Has your country donated other funding or provided in-kind support to activities coordinated by the Secretariat?

Yes

Pressures and Responses

9. Climate Change

75. Please outline relevant climate change research, assessments and/or adaptation measures that are relevant to migratory waterbirds and which have been undertaken or planned in your country. (Resolution 5.13)

a. Research and studies of climate change impacts on waterbirds

Undertaken

Please provide references or weblinks to any such work so as to facilitate their use as potential case-studies to assist other Contracting Parties

> Department of Bioscience at Aarhus University has participated in the NOWAC (Nordic Waterbirds And Climate) network <http://www.ducksg.org/activities/nowac/>, a research collaboration aimed at exploring already observed and/or expected impacts of climate change of waterbirds in the northern parts of Europe. The network has published several papers on the issue, including species-specific studies of tufted duck, common merganser, goldeneye, smew, and dabbling ducks:

Lehikoinen, A., Jaatinen, K., Vähätalo, A., Clausen, P., Crowe, C., Deceuninck, B., Hearn, R., Holt, C.A., Hornman, M., Keller, V., Nilsson, L., Langendoen, T., Tománková, I., Wahl, J. and Fox, A.D. (2013) Rapid climate driven shifts in winter distributions of three common waterbird species. - *Global Change Biology* 19: 2071-2081.

Dalby, L., Söderquist, P., Christensen, T.K., Clausen, P., Einarsson, Á., Elmberg, J., Fox, A.D., Holmqvist, N., Langendoen, T., Lehikoinen, A., Lindström, Å., Lorentsen, S.-H., Nilsson, L., Pöysä, H., Rintala, J., Sigfússon, A. and Svenning, J.-C. (2013) The status of the Nordic populations of the Mallard in a changing world. - *Ornis Fennica* 90: 2-15.

Dalby, L., Fox, A.D., Petersen, I.K., Svenning, J.-C. and Delany, S. (2013) Temperature does not dictate the wintering distributions of European dabbling duck species. - *Ibis* 155: 80-88.

Pavon-Jordan, D., Fox, A.D., Clausen, P., Dagys, M., Deceuninck, B., Devos, K., Hearn, R.D., Holt, C.A., Hornman, M., Keller, V., Langendoen, T., Ławicki, L., Lorentsen, S.H., Luingujo, L., Meissner, W., Musil, P., Nilsson, L., Paquet, J.Y., Stipnicic, A., Stroud, D.A., Wahl, J., Zanatello, M. and Lehikoinen, A. (2015) Climate-driven changes in winter waterbird abundance in relation to EU protected areas. - *Diversity and Distributions* 21: 571-582.

b. Assessment of the potential vulnerability to climate change of key habitats used by waterbird species (including those outside protected area networks) (Please note that the question asks about habitats, rather than sites. Question 27 in Section 4, sub-section 4.2 investigates vulnerability of sites to climate change)

Undertaken

Please provide references or weblinks to any such work so as to facilitate their use as potential case-studies to assist other Contracting Parties

> Department of Bioscience at Aarhus University has undertaken a study that explores to which extent light-bellied brent geese from the endangered East Atlantic Flyway-population (currently 6,900 birds, listed in Category A1c in Table 1 of the AEWA Action Plan) and other waterbirds may be affected under future several level rise scenarios. The studies document major habitat losses that may have negative impacts on the waterbirds, and pin-points some mitigation measures.

Clausen, K.K., Stjernholm, M. and Clausen, P. (2013). Grazing management can counteract the impacts of climate change-induced sea level rise on salt marsh-dependent waterbirds. - *Journal of Applied Ecology* 50: 528-537.

Clausen, K.K. and Clausen, P. (2014). Forecasting future drowning of coastal waterbird habitats reveals a major conservation concern. - *Biological Conservation* 171: 177-185.

c. Assessment of the potential vulnerability of waterbird species to climate change.

Undertaken

Please provide references or weblinks to any such work so as to facilitate their use as potential case-studies to assist other Contracting Parties

> The NOWAC network - mentioned above, has compiled two reviews on this issue:

Guillemain, M., Pöysä, H., Fox, A.D., Arzel, C., Dessborn, L., Ekroos, J., Gunnarsson, G., Holm, T.E., Christensen, T.K., Lehikoinen, A., Mitchell, C., Rintala, J. and Møller, A.P. (2013): Effects of climate change on European ducks: what do we know and what do we need to know? - *Wildlife Biology* 19: 404-419.

Fox, A.D., Jónsson, J.E., Aarvak, T., Bregnballe, T., Christensen, T.K., Clausen, K., Clausen, P., Dalby, L., Holm, T.E., Jordan, D.P., Laursen, K., Lehikoinen, A., Lorentsen, S.-H., Møller, A.P., Nordström, M., Öst, M., Söderquist, P. and Therkildsen, O.R. (in review): Current and potential threats to Nordic duck populations - a horizon

scanning exercise.

d. Review of relevant national conservation policies relevant to waterbirds and climate change.

No relevant activities

e. National Action Plan for helping waterbirds adapt to climate change (as a separate implementation process or as part of a larger national framework for biodiversity adaptation to climate change. Please note that Question 28 in Section 4, sub-section 4.2 investigates national measures for increasing resilience of the ecological network for waterbirds to climate change).

No relevant activities

f. Other undertaken or planned relevant activities.

No

76. Has your country used the AEWA Guidelines on measures needed to help waterbirds to adapt to climate change?

No

Optionally you can provide additional information on section 9. Climate Change

> None.

Pressures and Responses

10. Avian Influenza

77. What issues have proved challenging in responding nationally to the spread of the Highly Pathogenic Avian Influenza (HPAI) in the last triennium and what further guidance or information would be useful in this respect?

77.1 List challenges

> No actions are taken to respond to the spread of HPAI among wild birds in Denmark, and it is not a very common issue.

In 2015, 27 dead or sick wild birds (passive surveillance) and 973 apparently healthy wild birds (active surveillance) were tested for avian influenza (AI). None of these were positive for highly pathogenic AI (HPAI). In 2016, 204 dead or sick wild birds and 921 apparently healthy wild birds were tested for AI. HPAI H5N8 was detected in Common Eider (1), Mute Swan (8), Tufted Duck (28), Whooper Swan (1), Black-headed Gull (1), Great Black-backed Gull (9), Herring Gull (4), Mew Gull (3), White-tailed Sea-eagle (3) and other species (7). These were all isolates from dead birds, whereas none of the apparently healthy birds were positive for HPAI. In 2017, 154 dead or sick wild birds were tested for AI. HPAI H5N8 was isolated from Common Eider (1), Mute Swan (1), Herring Gull (1), Great Black-backed Gull (3), Eurasian Wigeon (1), White-tailed Sea-eagle (3) and other species (8). The results of the active surveillance are not yet available.

77.2 List required further guidance or information

> None.

77.3 Field for additional information (optional)

> Reports on Avian Influenza and other diseases are reported annually by the Danish Veterinary and Food Administration, and can be found here:

<https://www.foedevarestyrelsen.dk/english/Animal/AnimalHealth/Pages/default.aspx>

Optionally you can provide additional information on section 10. Avian Influenza

> None.

11. 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 implementation of AEWA for the period 2015-2017 has been verified and the report has been approved for submission by the appropriate state institution in the country.

Date of submission

> 29-06-2018