# AGREEMENT ON THE CONSERVATION OF AFRICAN-EURASIAN MIGRATORY WATERBIRDS

# **Proposed Amendments to the Action Plan**

Draft report prepared by Wetlands International

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### 1. INTRODUCTION

The Action Plan, appended as Annex 3 to the Agreement, specifies actions which the Parties shall undertake in relation to priority species and issues. In Article IV, paragraphs 2 and 3, of the Agreement, it is stated that the Action Plan shall be reviewed at each ordinary session of the Meeting of the Parties, taking into account the Conservation Guidelines, and may be amended by the Meeting of the Parties, taking into consideration the provisions of Article III of the Agreement.

At present, the Action Plan is confined to the four species of Ciconiidae (storks), five species of Threskiornithidae (ibises and spoonbills) and 50 species of Anatidae (ducks, geese and swans) covered by the Agreement. However, all of the actions specified in the Action Plan would benefit other waterbird species listed in Annex 2 to the Agreement, and it would therefore be appropriate to expand the Action Plan to include all 170 species listed in Annex 2.

The Negotiation Meeting to adopt the Agreement on the Conservation of African-Eurasian Migratory Waterbirds, held in The Hague, The Netherlands, in June 1995, invited the interim Agreement secretariat to prepare, to the extent possible, for submission to the Meeting of the Parties at its first session proposals concerning, *inter alia*, amendment of the Action Plan with regard to species or families of species listed in Annex 2 to the Agreement.

The present document specifies those changes which are required to expand the Action Plan to include all 170 species of waterbirds listed in Annex 2 to the Agreement, and also identifies recent changes in the conservation status of species and populations of waterbirds already included in the Action Plan.

# 2. AMENDMENTS TO THE TEXT OF THE ACTION PLAN

The Action Plan specifies actions which the Parties shall undertake in relation to priority species and issues, under the following headings:

- (a) species conservation;
- (b) habitat conservation;
- (c) management of human activities;
- (d) research and monitoring;
- (e) education and information; and
- (f) implementation.

Actions were described in general terms so as to be applicable to a wide diversity of species and populations, taking into account their varied habitat requirements, their different migration strategies, and the many and various types of threat to their survival. Thus, although the original Action Plan includes only 59 species of Ciconiidae (storks), Threskiornithidae (ibises and spoonbills) and Anatidae (ducks, geese and swans), most of the provisions which it contains are equally applicable to all other species of migratory waterbirds covered by the Agreement. Furthermore, the original Action Plan was sufficiently broad in its scope to cover virtually all of the major issues relating to the conservation of all species of migratory waterbirds in the Agreement Area.

Amendment of the Action Plan to include all 170 species listed in Annex 2 to the Agreement would, therefore, require almost no change to the existing text. Only in the context of potential conflict between human activities and fish-eating birds is any change required. Many of the additional 111 species proposed for inclusion in the Action Plan are fish-eating birds (*e.g.* species of Gaviidae, Podicipedidae, Pelecanidae, Phalacrocoracidae, Ardeidae and Laridae), and some of these, notably the pelicans (Pelecanidae) and cormorants (Phalacrocoracidae) occasionally come into conflict with fisheries interests. Special provisions are made in the Action Plan

for conflicts between populations of waterbirds and human interests (Section 4.3), but the emphasis is placed on damage to crops, especially by grazing birds such as geese (*Anser* and *Branta* spp.). It is recommended that this specific reference to types of conflict be broadened to include damage to fisheries. This could be achieved by adding the words <u>and to fisheries</u> after the words <u>in particular to crops</u> in sections 4.3.2, 4.3.3 and 4.3.4 in the Action Plan.

Many of the additional 111 proposed for inclusion in the Action Plan are coloniallynesting birds (e.g. species of Pelecanidae, Phalacrocoracidae, Ardeidae, Phoenicopteridae, Dromadidae and Laridae) and are especially susceptible to human disturbance at the breeding colonies. Some of these colonially-nesting birds habitually breed on small islands which are popular for outdoor recreation, while other species (e.g. several species of terns Sterna spp.) commonly breed on sand and shingle beaches where levels of human disturbance may be high. Several sections in the Action Plan already address the issue of human disturbance. Deliberate disturbance to species listed in Column A of Table 1 is covered in section 2.1.1 (b), while human disturbance in general is well covered for all species in section 4.3.6. The need for research on the problem of human disturbance is addressed in section 5.6. However, it might be appropriate to highlight the problem of human disturbance at breeding colonies of waterbirds by adding a sentence after the first sentence in section 4.3.6 as follows: Special attention should be given to the problem of human disturbance at breeding colonies of colonially-nesting waterbirds, especially when these are situated in areas which are popular for outdoor recreation.

# 3. AMENDMENTS TO TABLE 1 OF THE ACTION PLAN

# 3.1. Amendments to the conservation status of the populations currently included in the Action Plan

Table 1 of the Action Plan currently includes 137 populations of 59 species of waterbirds. The conservation status of these populations, as shown in Table 1, was based on the latest available estimates of population size and trends as compiled by the International Waterfowl and Wetlands Research Bureau (later to become part of Wetlands International) in 1993 and presented in the Draft Management Plan, prepared in conjunction with the Agreement text, and first edition of *Waterfowl Population Estimates* (Rose & Scott, 1994). The few discrepancies between the estimates and trends given in the Draft Management Plan and those given in *Waterfowl Population Estimates* were the result of last minute changes to the latter report, which post-dated the final version of the Draft Management Plan by some months.

A number of important publications have appeared since early 1994 which have greatly improved knowledge of the sizes and trends of many waterbird populations in the Agreement Area. The *Atlas of Anatidae Populations in Africa and Western Eurasia*, published by Wetlands International in 1996 (Scott & Rose, 1996), is of particular relevance to the Action Plan, since this includes a major revision of population limits for all species of Anatidae occurring in the Agreement Area, revised estimates of population sizes, and a considerable amount of new information on population trends. The new information in the *Atlas* was based to a large extent on work being carried out by Wetlands International in preparation for the second edition of *Waterfowl Population Estimates*, which was published in 1997 (Rose & Scott, 1997). Thus, the population limits, sizes and trends in the *Atlas of Anatidae Populations in Africa and Western Eurasia* agree very closely with those given in the second edition of *Waterfowl Population Estimates*. There are, however, some discrepancies because of new information reaching Wetlands International after the *Atlas* had gone to press.

The conservation status of all populations currently listed in Table 1 of the Action Plan has been revised on the basis of the new population sizes and trends given in the second edition of *Waterfowl Population Estimates*. The revised version of Table 1 is included here as Table 1a. Where the status of a population now differs from that given in Table 1 in the original version of the Action Plan, the new status is given in bold face, and the original status in italics.

The second edition of *Waterfowl Population Estimates* is now somewhat out of date. Important publications such as *Birds in Europe: Their Conservation Status* (Tucker & Heath, 1994), *The EBCC Atlas of European Breeding Birds* (Hagemeijer & Blair, 1997) and *The Atlas of Southern African Birds* (Harrison *et al.*, 1997) have provided a considerable amount of new information on the size of breeding populations of many waterbird species and the recent trends in their populations. In a few cases, it has become apparent that the conservation status of a population listed in Table 1a, as deduced from the second edition of *Waterfowl Population Estimates*, may no longer be applicable. Whenever this is the case, the new conservation status based on the recent evidence is indicated in Table 1a in square brackets. (For a full discussion of these proposed changes, see the accompanying document entitled *Report on the Conservation Status of Migratory Waterbirds in the Agreement Area*).

The brief descriptions used to identify the populations listed in Table 1 have been extensively revised to conform as closely as possible with the descriptions used in the second edition of *Waterfowl Population Estimates*. However, to improve clarity, slash signs (/) have been used only to separate breeding areas from wintering areas. Thus 'Central Siberia/Caspian' indicates that the population concerned breeds in Central Siberia and winters in the Caspian region. Wintering populations in the Black Sea and Mediterranean region are now listed as 'Black Sea & Mediterranean (win)', rather than as 'Black Sea/ Mediterranean (win)' as was formerly the case. A complete listing of the original descriptions of the populations and the revised versions is given in Table 2. Unless otherwise stated, these changes do not imply any change in the limits of the populations concerned.

In 17 species of Anatidae included in the Action Plan, the actual populations listed in the second edition of *Waterfowl Population Estimates* differ from those listed in the original Table 1, because of recent modifications to population boundaries. In some cases, a single large population has been subdivided into two smaller populations, while in other cases, two former populations have been combined into a single large population. These changes have been based almost entirely on changes made, or recommended, in the *Atlas of Anatidae Populations in Africa and Western Eurasia* (Scott & Rose, 1996). Populations of Anatidae which have been affected by these changes are indicated in bold face in Table 1a, with a footnote describing the changes.

# 3.2. Conservation status of the populations to be added to the Action Plan

Amendment of the Action Plan to include all 170 species of waterbirds listed in Annex 2 to the Agreement will involve the addition of 111 species and 215 populations to Table 1. These additional species and populations are listed in Table 1b.

The conservation status of each population listed in Table 1b is based on the population estimates and trends given in the second edition of *Waterfowl Population Estimates*. Where recent evidence suggests that the actual conservation status of a population differs significantly from that deduced from the second edition of *Waterfowl Population Estimates*, the proposed new status is given in square brackets. (For a full discussion of these proposed changes, see the accompanying document entitled *Report on the Conservation Status of Migratory Waterbirds in the Agreement Area*).

The brief descriptions used to identify the populations listed in Table 1b closely follow the second edition of *Waterfowl Population Estimates*, except that a slash sign is

used only to distinguish between breeding areas and wintering areas. In a few cases, it has become apparent that the description of a population as given in the second edition of *Waterfowl Population Estimates* is misleading or erroneous. The preferred description is given in Table 1b, with a footnote indicating the nature of the change. All other instances of discrepancy between the treatment of a species or population in the second edition of *Waterfowl Population Estimates* and its treatment in Table 1b are similarly indicated with a footnote.

#### 4. **REFERENCES**

- Hagemeijer, W.J.M. & Blair, M.J. (eds). (1997). *The EBCC Atlas of European Breeding Birds: Their Distribution and Abundance*. T. & A.D. Poyser, London. 903 pp.
- Harrison, J.A., Allan, D.G., Underhill, L.G., Herremans, M., Tree, A.J., Parker, V. & Brown, C.J. (1997). *The Atlas of Southern African Birds*. Vol.1. BirdLife South Africa, Johannesburg.
- Rose, P.M. & Scott, D.A. (1994). *Waterfowl Population Estimates*. IWRB Special Publication No.29. IWRB, Slimbridge, U.K. 102 pp.
- Rose, P.M. & Scott, D.A. (1997). Waterfowl Population Estimates Second Edition.
   Wetlands International Publication No.44. Wetlands International, Wageningen, The Netherlands. 106 pp.
- Scott, D.A. & Rose, P.M. (1996). Atlas of Anatidae Populations in Africa and Western Eurasia. Wetlands International Publication No.41. Wetlands International, Wageningen, The Netherlands. 336 pp.
- Tucker, G.M. & Heath, M.F. (1994). *Birds in Europe: their conservation status*. BirdLife Conservation Series No.3. BirdLife International, Cambridge, U.K. 600 pp.

#### Table 1

# STATUS OF THE POPULATIONS OF MIGRATORY WATERBIRDS

# **KEY TO CLASSIFICATION**

The following key to Table 1 is a basis for implementation of the Action Plan:

#### Column A

Category 1:	<ul> <li>(a) Species which are included in Appendix I to the Convention;</li> <li>(b) Species which are listed as threatened in the 1996 IUCN Red List of Threatened Animals; or</li> <li>(c) Populations which number less than around 10,000 individuals.</li> </ul>
Category 2:	Populations numbering between around 10,000 and around 25,000 individuals.
Category 3:	Populations numbering between around 25,000 and around 100,000 individuals and considered to be at risk as a result of:

- (a) concentration onto a small number of sites at any stage of their annual cycle;
- (b) dependence on a habitat type which is under severe threat;
- (c) showing significant long-term decline; or
- (d) showing extreme fluctuations in population size or trend.

For species listed in Categories 2 and 3, above, see paragraph 2.1.1 of this Annex.

# Column B

- Category 1: Populations numbering between around 25,000 and around 100,000 individuals and which do not fulfil the conditions in respect of Column A, as described above.
- Category 2: Populations numbering more than around 100,000 individuals and considered to be in need of special attention as a result of:
  - (a) concentration onto a small number of sites at any stage of their annual cycle;
  - (b) dependence on a habitat type which is under severe threat;
  - (c) showing significant long-term decline; or
  - (d) showing extreme fluctuations in population size or trend.

# Column C

Category 1: Populations numbering more than around 100,000 individuals which could significantly benefit from international cooperation and which do not fulfil the conditions in respect of either Column A or B, above.

# **REVIEW OF TABLE 1**

This Table shall be:

- (a) reviewed regularly by the Technical Committee in accordance with Article VII, paragraph 3(b), of this Agreement; and
- (b) amended as necessary by the Meeting of the Parties, in accordance with Article VI, paragraph 9(d) of this Agreement, in light of the conclusions of such reviews.

# **KEY TO ABBREVIATIONS AND SYMBOLS**

bre:	breeding	win:	wintering
N:	Northern	E:	Eastern
S:	Southern	W:	Western
NE:	Northeastern	NW:	Northwestern
SE:	Southeastern	SW:	Southwestern

- (): Population status unknown. Conservation status estimated.
- \*: See paragraph 2.1.1

# NOTES

- 1. The population data used to compile Table 1 as far as possible correspond to the number of individuals in the potential breeding stock in the Agreement Area. The status is based on the best available published population estimates.
- 2. Suffixes (bre) or (win) in population listings are solely aids to population identification. They do not indicate seasonal restrictions to actions in respect of these populations under this Agreement and Action Plan.

#### Table 1a

#### STATUS OF THE POPULATIONS CURRENTLY LISTED IN THE ACTION PLAN

# NOTES

The brief descriptions used to identify the populations have been revised to conform with the descriptions used in the second edition of *Waterfowl Population Estimates*, except that slash signs (/) are used exclusively to separate breeding areas from wintering areas. In most cases, these changes do not imply any change in the limits of the populations concerned. However, in 17 species of Anatidae, the actual populations listed in the second edition of *Waterfowl Population Estimates* differ from those listed in the original Table 1, because of recent modifications to population boundaries. Populations which have been affected by these changes are indicated in bold face, with a footnote describing the changes. (See Table 2 for a complete listing of the original descriptions of the populations and the revised versions).

The conservation status of each population is based on the population estimates and trends given in the second edition of *Waterfowl Population Estimates* (Rose & Scott, 1997). Where this status differs from the status given in Table 1 in the original version of the Action Plan, the new status is given in bold face, and the original status in italics. Where recent evidence suggests that the actual conservation status of a population differs significantly from that implied in the second edition of *Waterfowl Population Estimates*, the proposed new status is given in square brackets.

Conventional brackets are used to indicate that the conservation status is uncertain.

	Α	В	C
Mycteria ibis			
- Subsaharan Africa		1	
Ciconia nigra			
- SW Europe/Western Africa	1c		
- Central & Eastern Europe (bre)	2		
Ciconia episcopus microscelis			
- Tropical Africa		1	
Ciconia ciconia ciconia			
- Southern Africa	1c		
- Iberia & NW Africa (bre)	3b		
- Central & Eastern Europe (bre)		2c	
- Southwestern Asia (win)	3b		
Plegadis falcinellus falcinellus			
- Subsaharan Africa (bre)			(1)
- Black Sea & Med/W Africa	[3c]	1	
- Southwestern Asia/E Africa	2*	[1]	
Geronticus eremita			
- Morocco	1a <b>1b 1c</b>		
- Southwestern Asia	1a <b>1b 1c</b>		
Threskiornis aethiopicus aethiopicus			
- Subsaharan Africa			1
- Iraq & Iran	1c		
Platalea leucorodia leucorodia			
- Eastern Atlantic	1c		

- Central & SE Europe (bre) 2	 	
	2	

	Α	В	С
Platalea leucorodia archeri		-	•
- Red Sea	1c		
Platalea leucorodia major			
- SW & S Asia (win)	2		
Platalea alba	2		
- Subsaharan Africa	2*		
	2		
Dendrocygna bicolor - Western Africa <sup>1</sup>			(1)
- Eastern & Southern Africa <sup>1</sup>			<u>(1)</u> (1)
			(1)
Dendrocygna viduata - Western Africa <sup>2</sup>			4
			1
- Eastern & Southern Africa <sup>2</sup>			1
Thalassornis leuconotus leuconotus			
- Western Africa	<u>1c</u>		
- Eastern & Southern Africa	2*		
Oxyura leucocephala			
- Western Mediterranean <sup>3</sup>	1a 1b 1c		
- Algeria & Tunisia <sup>3</sup>	1a 1b 1c		
- E Med, Turkey & SW Asia	1a <b>1b 2</b>		
Cygnus olor			
- NW Mainland & Central Europe		2d	
- Black Sea	2	1	
- W & Central Asia/Caspian		2a 2d	
Cygnus cygnus			
- Iceland/UK & Ireland	2		
- NW Mainland Europe		1	
- N Europe & W Sib/B Sea & E Med	2		
- W & Cent Siberia/Caspian	(2) <b>2</b>		
Cygnus columbianus bewickii			
- W Siberia & NE Europe/NW Europe	2	[1]	
- Northern Siberia/Caspian	1c		
Anser brachyrhynchus			
- E Greenland & Iceland/UK		2a	
- Svalbard/NW Europe		1	
Anser fabalis fabalis			
- W Sib & NE Europe/NW Europe		1	
Anser fabalis rossicus			
- W & C Siberia/NE & SW Europe			1 <b>(1)</b>
Anser albifrons albifrons			. /
- NW Sib & NE Europe/NW Europe			1
- W Siberia/Central Europe	3c	2c	
- W Siberia/Black Sea & Turkey		-	1
- N Siberia/Caspian & Iraq	2		
Anser albifrons flavirostris			
- Greenland/Ireland & UK	3a*		
Anser erythropus			
- N Europe & W Sib/B Sea & Caspian	1a 1b 3c [2]		
Anser anser anser			
- Iceland/UK & Ireland		1	
- NW Europe/SW Europe			1
- Central Europe/N Africa	2*		
	2		

	Α	В	С
Anser anser rubrirostris <sup>4</sup>		_	
- Black Sea & Turkey		1	
- W Siberia/Caspian & Iraq		1	[1]
Branta leucopsis			L'J
- E Greenland/Scotland & Ireland		1	
- Svalbard/SW Scotland	2		
- Russia/Germany & Netherlands			1
Branta bernicla bernicla			
- W Siberia/W Europe		2b	
Branta bernicla hrota		-	
- Svalbard/Denmark & UK	1c		
- Canada & Greenland/Ireland	2		
Branta ruficollis			
- N Siberia/Black Sea & Caspian	<b>1a</b> 1b <b>3a</b>		
Alopochen aegyptiacus			
- Western Africa <sup>5</sup>	2		
- Eastern & Southern Africa <sup>5</sup>			(1)
Tadorna ferruginea			(')
- Northwestern Africa	1c		
- E Med & Black Sea/NE Africa	2		
- W Asia & Caspian/Iran & Iraq	Z	1	
Tadorna cana		I	
- Southern Africa		1	
Tadorna tadorna		I	
		2a	
- Northwestern Europe - Black Sea & Mediterranean <sup>6</sup>			
		1	
- W Asia/Caspian & Middle East		1	
Plectropterus gambensis gambensis - Western Africa <sup>7</sup>	20		
- Western Africa	3c		4
			1
Plectropterus gambensis niger		4	
- Southern Africa		1	
Sarkidiornis melanotos melanotos			
- Western Africa <sup>8</sup>		1	
- Southern & Eastern Africa <sup>8</sup>			1
Nettapus auritus			
- Western Africa	1c <b>2</b>		(4)
- Southern & Eastern Africa			(1)
Anas penelope			
- W Sib & NE Europe/NW Europe			1
- W Sib & NE Europe/B Sea & Med		2c	
- W Sib/SW Asia & NE Africa		2c	
Anas strepera strepera			
- Northwestern Europe		1	
- NE Europe/Black Sea & Med		1 <b>2c</b>	
- W Sib/SW Asia & NE Africa			1 <b>(1)</b>
Anas crecca crecca			
- Northwestern Europe			1
- W Sib & NE Europe/B Sea & Med			1
- W Sib/SW Asia & NE Africa		2c	
Anas capensis			
- E Africa to Western Africa <sup>9</sup>	[2]		1
- Southern Africa <sup>9</sup>			1

	Α	В	С
Anas platyrhynchos platyrhynchos			-
- Northwestern Europe			1
- N Europe/Western Mediterranean <sup>10</sup>			1
- E Europe/Black Sea & E Med <sup>10</sup>		2c	-
- Western Siberia/SW Asia			1 (1)
Anas undulata undulata			
- Southern Africa		1	[1]
Anas acuta			
- Northwestern Europe		1	
- W Sib, NE & E Eur/S Eur & W Afr <sup>11</sup>		2c	
- W Siberia/SW Asia & E Africa			1 (1)
Anas erythrorhyncha			
- Southern Africa <sup>12</sup>			1
- Eastern Africa <sup>12</sup>			1
- Madagascar <sup>13</sup>	2		
Anas hottentota			
- Western Africa	(1c) <b>1c</b>		
- Eastern Africa <sup>14</sup>			1
- Southern Africa <sup>14</sup>		[1]	1
Anas guerguedula		1.1	
- W Siberia & Europe/W Africa		[2c]	1
- W Sib/SW Asia, NE & E Africa		[]	1 (1)
Anas clypeata			
- NW & Central Europe (win)		1	
- W Sib, NE & E Eur/S Eur & W Afr <sup>15</sup>		(2c)	1
- W Sib/SW Asia, NE & E Africa		2c	1
Marmaronetta angustirostris			
- W Mediterranean/W Africa	<b>1a</b> 1b <b>1c</b>		
- Eastern Mediterranean	1a 1b 1c		
- Southwestern Asia	1a 1b 2		
Netta rufina			
- SW & Cent Europe/W Med	2*		
- Black Sea & E Mediterranean	3c		
- Western & Central Asia/SW Asia			1
Netta erythrophthalma brunnea			
- Southern & Eastern Africa		1	(1)
Aythya ferina			
- NE Europe/NW Europe		2c	
- Cent & NE Europe/B Sea & Med		2c	
- Western Siberia/SW Asia		(2c)	
Aythya nyroca		· · · · · · · · · · · · · · · · · · ·	
- W Mediterranean/W Africa	<b>1a 1b</b> 1c		
- E Europe/E Med & Africa	<b>1a 1b</b> 3c		
- W Asia/SW Asia & NE Africa	<b>1a 1b</b> 1c		
Aythya fuligula			
- Northwestern Europe (win)			1
- Cent Europe, B Sea & Med (win)			1
- W Sib/SW Asia & NE Africa			1 <b>(1)</b>
Aythya marila marila			
- Northern Europe/Western Europe			1
- W Siberia/B Sea & Caspian		1	1

	Α	В	С
Somateria mollissima mollissima			
- Baltic, Denmark & Netherlands <sup>16</sup>			1
- Norway & Russia <sup>16</sup>			1
Somateria mollissima islandica			
- Svalbard & Franz Joseph (bre) <sup>16</sup>		1	
Somateria spectabilis			
- E Greenland, NE Europe & W Sib			1
Polysticta stelleri			
- Western Siberia/NE Europe	1a 1b 2	1	
Clangula hyemalis <sup>17</sup>			
- Iceland & Greenland		2c	1
- Western Siberia/North Europe			1
Melanitta nigra nigra			
- W Sib & N Eur/W Eur & NW Africa		2a	
Melanitta fusca fusca			
- W Siberia & N Europe/NW Europe		2a	
- Black Sea & Caspian	1c		
Bucephala clangula clangula			
- NW & Central Europe (win)			1
- NE Europe/Adriatic <sup>18</sup>		1	
- W Siberia & NE Europe/Black Sea <sup>18</sup>	2		
- Western Siberia/Caspian	2		
Mergellus albellus			
- NW & Central Europe (win)	3a		
- NE Europe/Black Sea & E Med		1	
- Western Siberia/SW Asia		1	
Mergus serrator serrator			
- NW & Central Europe (win) <sup>19</sup>			1
- E Greenland, Iceland, UK & Irel. <sup>19</sup>	2		
- NE Europe/Black Sea & Med		1	
- Western Siberia/SW & Cent Asia	1c		
Mergus merganser merganser			
- NW & Central Europe (win)			1
- NE Europe/Black Sea	1c		
- Western Siberia/Caspian	2		

# Footnotes to Table 1a

- 1: These two populations were treated as a single African population in the original Action Plan, and given the conservation status C1.
- 2: These two populations were treated as a single African population in the original Action Plan, and given the conservation status C1.
- 3: These two populations were treated as a single West Mediterranean population in the original Action Plan, and given the conservation status A1a.
- 4: *Anser anser rubrirostris* was considered to be synonymous with *Anser anser anser* in the original Action Plan.
- 5: These two populations were treated as a single population in the original Action Plan, and given a provisional conservation status of C1.

- 6: Birds occurring in the West Mediterranean were treated as a separate population in the original Action Plan, and given the conservation status A2.
- 7: These two populations were treated as a single West African population in the original Action Plan, and given the conservation status C1.
- 8: These two populations were treated as a single African population in the original Action Plan, and given a provisional conservation status of C1.
- 9: These two populations were treated as a single population in the original Action Plan, and given a provisional conservation status of C1.
- 10: These two populations were treated as a single Black Sea/Mediterranean wintering population in the original Action Plan, and given the conservation status B2c.
- 11: Birds wintering in West Africa were treated as a separate population in the original Action Plan, and given the conservation status C1.
- 12: These two populations were treated as a single Southern/Eastern African population in the original Action Plan, and given the conservation status C1.
- 13: This population was not included in the original Action Plan, because it was not thought to be migratory. However, there is some evidence to suggest that large scale movements occur between Madagascar and the African mainland.
- 14: These two populations were treated as a single Southern/Eastern African population in the original Action Plan, and given a provisional conservation status of C1.
- 15: The birds wintering in the West Mediterranean were treated as a separate population in the original Action Plan, and given the conservation status B2a.
- 16: These three populations were treated as part of a single large European population of *mollissima*, which was given the conservation status C1. Nine populations are now recognized in Western Eurasia and Greenland, but six of these are mainly sedentary. *S.m. islandica* was listed under the name *S.m. borealis* in the second edition of Waterfowl Population Estimates.
- 17: The original Action Plan includes a Caspian Sea wintering population with a conservation status of A1c. There is no evidence that the species occurs in the Caspian region as anything other than a scarce vagrant, and these birds are now regarded as being stragglers from the large Northwest European wintering population.
- 18: These two populations were treated as a single Black Sea/Mediterranean wintering population in the original Action Plan, and given the conservation status A2\*. The few birds wintering in the East Mediterranean are included in a Western Siberia & Northeast Europe/ Black Sea population.
- 19: These two populations were treated as a single Northwest European wintering population in the original Action Plan, and given the conservation status C1.

#### Table 1b

#### STATUS OF THE POPULATIONS TO BE ADDED TO THE ACTION PLAN

#### NOTES

The brief descriptions used to identify the populations follow the second edition of *Waterfowl Population Estimates*, except that a slash sign (/) is used only to distinguish between breeding areas and wintering areas.

The conservation status of each population is based on the population estimates and trends given in the second edition of *Waterfowl Population Estimates* (Rose & Scott, 1997). Where recent evidence suggests that the actual conservation status of a population differs significantly from that implied in the second edition of *Waterfowl Population Estimates*, the proposed new status is given in square brackets.

Conventional brackets are used to indicate that the conservation status is uncertain.

	A	В	C
Gavia stellata			
- Northwestern Europe (win)	3c	[2c]	
- Caspian, B Sea & E Med (win)		(1)	
Gavia arctica arctica			
- Western Siberia/Europe		[2c]	1
Gavia arctica suschkini			
- Central Siberia/Caspian			(1)
Gavia immer			
- Europe (win)	1c		
Gavia adamsii			
- Northern Europe (win)	(2)		
Podiceps grisegena grisegena			
- Northwestern Europe (win)	2	[1]	
- Black Sea & Med (win)	2	[(1)]	
- Caspian (win)	2		
Podiceps auritus auritus			
- NW Europe (large billed)	1c		
- NE Europe (small billed)		1	
- Caspian & South Asia (win)	2		
Pelecanus onocrotalus			
- Europe & Western Asia (bre)	1a 3c		
Pelecanus crispus			
- Black Sea & Mediterranean (win)	1a 1b 1c		
- SW Asia & S Asia (win)	1a 1b 2		
Phalacrocorax pygmaeus			
- Black Sea & Mediterranean	2		
- Southwestern Asia	1c	[1]	
Phalacrocorax nigrogularis			
- Gulf & Arabian Sea		2a (2c)	
Egretta vinaceigula			
- Southern Africa	1b 1c		

	Α	В	С
Ardea purpurea purpurea		_	•
- Western Mediterranean (bre)	2		
- E Europe & SW Asia (bre)	-	(2c)	
Casmerodius albus albus		(20)	
- Black Sea & Med (win)	2		
- Southwestern Asia (win)	<u> </u>	(1)	
Ardeola idae		(1)	
- Madagascar & Aldabra (bre)	1c		
Ardeola rufiventris	10		
- Tropical E & S Africa		(1)	
Ixobrychus minutus minutus		(1)	
- Europe & Northern Africa (bre)	3c	[2c]	
- West & Southwest Asia (bre)	50	(1)	
		(1)	
Ixobrychus sturmii - Subsaharan Africa		(1)	
- Subsanaran Africa Botaurus stellaris stellaris		(1)	
	20		
- Europe (bre)	3c		
- Southwestern Asia (win)	2		
Phoenicopterus ruber roseus	0.5		
- Western Africa	<u>3a</u>		
- Eastern Africa	3a 3c		
- Southern Africa	3a [3c]		
- Western Mediterranean	3a		
- Eastern Med, SW & S Asia		2a	
Phoenicopterus minor			
- Western Africa	2		
- Eastern Africa		2a [2c]	
- Southern Africa	[3a 3c]	2a	
Grus leucogeranus			
- Iran (win)	1a 1b 1c		
Grus virgo <sup>1</sup>			
- Black Sea (bre)	1c		
- Turkey (bre)	1c		
- Kalmykia (bre)		1	
Grus paradisea			
- Extreme Southern Africa	1b 2		
Grus carunculatus			
- Northernmost Southern Africa	1b 2		
Grus grus			
- Northwest Europe (bre)		1	
- NE & Central Europe (bre)		1	
- Black Sea & E Med (win)	3c		
- Black Sea & Turkey (bre)	1c		
- Southwest Asia (win)	3c		
Sarothrura boehmi			
- Central Africa	(3b)		
Porzana parva parva	(-~)		
- Western Eurasia/Africa		2c	
Porzana pusilla intermedia			
- Europe (bre)	2		

	Α	В	С
Porzana porzana			
- Europe/Africa		2c	
Aenigmatolimnas marginalis			
- Subsaharan Africa		(2b)	
Fulica atra atra		()	
- Black Sea & Med (win)		2c	[1]
Dromas ardeola			[·]
- NW Indian Ocean, Red Sea & Gulf	3a		
Himantopus himantopus himantopus			
- Subsaharan Africa (bre)			(1)
- Western Mediterranean (bre)		1	(•)
- B Sea & E Mediterranean (bre)		1	
- Southwestern Asia (win)	2		
Recurvirostra avosetta	2		
- Southern Africa (bre) <sup>2</sup>	2		
- Eastern Africa (bre) <sup>2</sup>		(1)	
- W Europe & W Med (bre)		1	
- B Sea & E Mediterranean (bre)	(3c)		
- W & SW Asia/Eastern Africa	2		
Glareola pratincola pratincola	2		
- Western Mediterranean (bre)	2		
- B Sea & E Mediterranean (bre)	2		
- Southwestern Asia (bre)	2	(1)	
Glareola nordmanni		(1)	
- W & Cent Asia/E & S Africa		2b 2c	
Pluvialis apricaria		20 20	
- Northern Europe (bre)		2c	[1]
- Iceland & Faroes/E Atlantic <sup>3</sup>		20	<u>[']</u>
- N Europe/W Europe & NW Africa <sup>3</sup>			1
- UK, Ireland, DK & Ger (bre) <sup>3</sup>	3c		I
- Western Siberia (bre)	30	(1)	
Pluvialis squatarola		(1)	
- Eastern Atlantic (win)			1
		1	I
- SW Asia & Eastern Africa (win) Charadrius hiaticula hiaticula		1	
		4	
- Europe & Northern Africa (win)		1	(1)
- Western Africa (win) Charadrius hiaticula tundrae			(1)
			(4)
- SW Asia, Eastern & Southern Africa (win)			(1)
Charadrius dubius curonicus			4
- Europe/Western Africa		+	1 (1)
- West & SW Asia/Eastern Africa		+	(1)
Charadrius pecuarius pecuarius			(4)
- Subsaharan Africa			(1)
Charadrius tricollaris tricollaris			(4)
- Southern & Eastern Africa			(1)
Charadrius forbesi			
- Western & Central Africa		(1)	
Charadrius pallidus pallidus	ļ		
- Southern Africa	1c		
Charadrius pallidus venustus	(2.)		
- Eastern Africa	(2c)		

	Α	В	С
Charadrius alexandrinus alexandrinus		_	
- Eastern Atlantic	3c		
- Black Sea & E Mediterranean (bre)	[3c]	1	
- SW Asia & NE Africa (win)	[00]	•	(1)
Charadrius marginatus tenellus			(.)
- Southern & Eastern Africa <sup>4</sup>		(1)	
Charadrius marginatus mechowi		(.)	
- West-central Africa <sup>5</sup>		(1)	
Charadrius mongolus pamirensis		(•)	
- SW Asia & Eastern Africa (win)		(1)	
Charadrius leschenaultii columbinus		(•)	
- B Sea & E Mediterranean (bre)	1c		
Charadrius leschenaultii crassirostris	10		
- SW Asia & Eastern Africa (win)		(1)	
Charadrius asiaticus		(1)	
- Western Asia/E & S Africa	[3c]	1	
Eudromias morinellus	[00]		
- Europe (bre)		2c	
- Asia (bre)		(1)	
Vanellus vanellus		(1)	
- Europe (bre)		[2c]	1
- Western Asia (bre)		[20]	(1)
Vanellus spinosus			(1)
- Black Sea & Mediterranean (bre)	2	[1]	
Vanellus albiceps	<b>L</b>	[']	
- Western & Central Africa		(1)	
Vanellus senegallus senegallus		(')	
- Western Africa		(1)	
Vanellus senegallus solitaneus		(')	
- Southwestern Africa		(1)	
Vanellus senegallus lateralis		(')	
- Eastern & Southeastern Africa		(1)	
Vanellus lugubris		(')	
- SW West Africa, & Cent & E Africa		(1)	
Vanellus melanopterus minor		(')	
- Southern Africa		(1)	
Vanellus coronatus coronatus		(')	
- Eastern Africa			(1)
- Central Africa <sup>6</sup>	+	(1)	\'/
Vanellus coronatus xerophilus	+	('/	
- Southwest Africa <sup>7</sup>	+	(1)	
Vanellus superciliosus		('/	
- Western & Central Africa	(2)		
Vanellus gregarius <sup>8</sup>	\ <del>``</del> /		
- Western Asia/NE Africa <sup>9</sup>	1a 1b 1c		
Vanellus leucurus			
- SW Asia & NE Africa (win) <sup>10</sup>	2	[1]	
Gallinago media		[']	
- Scandinavia (bre)	1c	[1]	
	10	1 1 1	

	Α	В	С
Gallinago gallinago gallinago			
- Europe (bre)		2c	
- Western Siberia (bre)		2c	[1]
- Iceland (bre) (faroeensis)		-	1
Lymnocryptes minimus			
- Europe (bre)	(3c)		
- Western Siberia (bre)		(1)	
Limosa limosa limosa			
- Western Europe/W Africa		2c	
- Eastern Europe/Eastern Africa		[2c]	(1)
- SW Asia & NE Africa (win) <sup>11</sup>		(1)	
Limosa limosa islandica		( )	
- Iceland (bre)	3a		
Limosa lapponica lapponica			
- Western Palearctic (win)		2a	
- West & Southwest Africa (win) <sup>12</sup>		2a	
- SW Asia & Eastern Africa (win)			(1)
Numenius phaeopus phaeopus			
- Europe/Western Africa			1
- Western Siberia/S & E Africa			(1)
Numenius phaeopus alboaxillaris <sup>13</sup>			
- SW Asia/Eastern Africa	1c		
Numenius tenuirostris			
- Gulf, Med & Morocco (win)	1a 1b 1c		
Numenius arquata arquata			
- Europe (bre)		2c	[1]
Numenius arguata orientalis			L · J
- SW Asia & Eastern Africa (win)	[3c]	(1)	
Tringa erythropus			
- Europe/Western Africa			(1)
- SW Asia & Eastern Africa (win)		(1)	
Tringa totanus totanus			
- East Atlantic (win)		2c	
- E Europe/E Med & Africa <sup>14</sup>		2c	
Tringa totanus ussuriensis			
- SW Asia & Eastern Africa (win)			(1)
Tringa totanus robusta			
- Iceland & Faroes (bre)		2c	[1]
Tringa stagnatilis			
- Europe/Western Africa		(1)	
- SW Asia & E & S Africa (win)		(1)	
Tringa nebularia			
- Europe/Western Africa			1
- SW Asia & E & S Africa (win)			(1)
Tringa ochropus			
- Europe/Western Africa			1
- SW Asia & Eastern Africa (win)			(1)
Tringa glareola			
- Europe (bre)		2c	
- SW Asia, E & S Africa (win)			(1)
Tringa cinerea			
- SW Asia & Africa (win)		1	

	Α	В	С
Tringa hypoleucos			•
- Europe (bre)		2c	[1]
- SW Asia & Eastern Africa (win)		20	(1)
Arenaria interpres interpres			(1)
- Western Palearctic (win)		1	
- Western Africa (win) <sup>15</sup>		1	
- SW Asia, E & S Africa (win) <sup>16</sup>		(1)	
Calidris tenuirostris		(1)	
- SW Asia & W South Asia (win)	1c		
Calidris canutus canutus	10		
- Western & Southern Africa (win)		2a [2c]	
Calidris canutus islandica		20 [20]	
- NE Can & Greenland/NW Europe		2a	
Calidris alba		24	
- E Atlantic, W & S Africa (win)			1
- SW Asia, E & S Africa (win)			(1)
Calidris minuta			\'/
- Europe & Western Africa (win)			1
- SW Asia, E & S Africa (win)			(1)
Calidris temminckii			(1)
- Europe/Western Africa		(1)	
- SW Asia & Eastern Africa (win)		(1)	
Calidris maritima		(')	
- Eastern Atlantic (win)		1	
Calidris alpina alpina		1	
- N Siberia/Europe & N Africa		2c	
- SW Asia & NE Africa (win)		20	(1)
Calidris alpina schinzii			(')
- Iceland & Greenland (bre)			1
- Baltic, UK & Ireland (bre)	2 [3c]		•
Calidris alpina arctica			
- Greenland (bre)	2		
Calidris ferruginea			
- SW Europe & W Africa (win)			1
- SW Asia, E & S Africa (win)			1
Limicola falcinellus falcinellus			
- N Europe/SW Asia & E Africa	2 [3c]		
Philomachus pugnax	LJ		
- Western Africa (win)		2c	
- SW Asia, E & S Africa (win)			(1)
Phalaropus lobatus			
- Western Eurasia (bre)			1
Phalaropus fulicaria			
- African Atlantic coasts (win)			(1)
Larus leucophthalmus			
- Red Sea & nearby coasts	1a 1b 2		
Larus hemprichii			
- Red Sea, Gulf, Arabia & E Africa	3a	[2a]	
Larus audouinii			
- Med/N & W Africa coasts	1a 3a		
Larus armenicus			
- Armenia, E Turkey & W Iran	3a		

	Α	В	С
Larus ichthyaetus			•
- Black Sea & Caspian/SW Asia	3a		
Larus genei	50		
- Western Africa (bre)	2		
- Black Sea & Mediterranean (bre)	<u>ک</u>	2a	
- W, SW & S Asia (bre)		2a	
Larus melanocephalus		20	
- W Europe, Med & NW Africa		2a	
Sterna nilotica nilotica <sup>17</sup>		20	
- Western Europe/Western Africa	2		
- Black Sea & E Mediterranean (bre)	2		
- Southwestern Asia (win)	2		
Sterna caspia caspia	2		
	10		
- Southern Africa (bre)	1c 2		
- Western Africa (bre)			
- Europe (bre)	<u>1c</u>		
- Caspian (bre)	1c	+	
Sterna maxima albidorsalis			
- Western Africa (bre)	3a		
Sterna bengalensis bengalensis			
- Gulf/Southern Asia	3a	[2a]	
Sterna bengalensis par			
- Red Sea/Eastern Africa	3a		
Sterna bengalensis emigrata			
- S Med/NW & W Africa coasts	1c		
Sterna bergii bergii			
- S Africa & Madagascar (bre)	2		
Sterna bergii thalassinus			
- Eastern Africa & Seychelles (bre)	1c		
Sterna bergii velox			
- Northeast Africa, SW & S Asia	3a	[2a]	
- Red Sea & NE Africa <sup>18</sup>	3a		
Sterna sandvicensis sandvicensis			
- Western Europe/Western Africa		2a	
- Black Sea & Mediterranean (bre)		2a (2c)	
- SW & S Asia (win)		2a	
Sterna dougallii dougallii			
- Europe (bre)	1c		
Sterna hirundo hirundo			
- Southern & Western Europe (bre)			1
- Northern & Eastern Europe (bre)			1
- Western Asia (bre)			(1)
Sterna paradisaea			\ /
- Arctic (bre)/S Oceans (win)			(1)
- Western Eurasia (bre) <sup>19</sup>			1
Sterna albifrons albifrons			
- Eastern Atlantic (bre)	3b	1	
- B Sea & E Mediterranean (bre)	3c	1	
- Caspian (bre)	2	+	
Sterna albifrons guineae	<u> </u>		
- Western Africa (bre)	(2)		
	(4)		

	Α	В	С
Sterna saundersi			
- W S Asia, Red Sea, Gulf & E Afr		(1)	
Sterna balaenarum			
- S & Central Africa Atlantic	2		
Sterna repressa			
- W S Asia, Red Sea, Gulf & E Afr		2c	
Chlidonias leucopterus			
- E Europe & W Asia/Africa		2c	
Chlidonias niger niger			
- Europe & Asia (bre)		[2c]	(1)

#### Footnotes to Table 1b

- 1: This species is listed in Appendix II of the Bonn Convention under the name *Anthropoides virgo*.
- 2: These two populations are treated as a single population in *Waterfowl Population Estimates* (Southern/Eastern Africa breeding).
- 3: These three populations are treated as a single large population in *Waterfowl Population Estimates* (Northwestern Europe breeding).
- 4: The range of this population is given as 'Southeastern Africa' in *Waterfowl Population Estimates*.
- 5: The range of this population is given as 'Eastern Africa' in *Waterfowl Population Estimates.*
- 6: The range of this population is given as 'Southwestern Africa' in *Waterfowl Population Estimates.*
- 7: The range of this population is given as 'Namibia' in *Waterfowl Population Estimates*.
- 8: This species is listed as *Chettusia gregaria* in Appendix I of the Bonn Convention.
- 9: The range of this population is given as 'Western Asia/Eastern Africa' in *Waterfowl Population Estimates.*
- 10: The range of this population is given as 'SW Asia/Eastern Africa (wintering)' in *Waterfowl Population Estimates*.
- 11: The range of this population is given as 'East Mediterranean/SW Asia (wintering)' in *Waterfowl Population Estimates*.
- 12: The range of this population is given as 'Southwestern Africa (wintering)' in *Waterfowl Population Estimates*.
- 13: The form '*alboaxillaris*' is thought by some authors to be only a colour morph of nominate *phaeopus*.
- 14: This population was inadvertently omitted from *Waterfowl Population Estimates*.
- 15: The range of this population is given as 'Western/Southern Africa (wintering)' in

#### Waterfowl Population Estimates.

- 16: The range of this population is given as 'SW Asia/Eastern Africa (wintering)' in *Waterfowl Population Estimates*.
- 17: This species is listed as *Gelochelidon nilotica* in *Waterfowl Population Estimates*.
- 18: This population is treated as part of a larger 'NE Africa/SW & S Asia' population in *Waterfowl Population Estimates*.
- 19: This population is treated as part of a single world population of the species in *Waterfowl Population Estimates*.

#### Table 2

#### CHANGES TO DESCRIPTIONS OF POPULATIONS LISTED IN ORIGINAL TABLE 1

**Original version** 

Mycteria ibis Entire population Ciconia nigra W Africa/W Europe Central/E Europe (bre) Ciconia episcopus microscelis **Tropical Africa** Ciconia ciconia ciconia South Africa NW Africa/W Europe (bre) Central/E Europe (bre) W Asia (bre) Plegadis falcinellus falcinellus Subsaharan Africa W Africa/Europe E Africa/SW Asia Geronticus eremita Morocco SW Asia Threskiornis aethiopicus aethiopicus Subsaharan Africa Iran/Irag Platalea leucorodia leucorodia E Atlantic Central/SE Europe (bre) Platalea leucorodia archeri Red Sea Platalea leucorodia major SW/S Asia (win) Platalea alba Entire population Dendrocygna bicolor Africa Africa Dendrocygna viduata Africa Africa Thalassornis leuconotus leuconotus W Africa E/S Africa Oxyura leucocephala W Mediterranean W Mediterranean E Mediterranean/W Asia Cygnus olor NW Europe Black Sea (win) Caspian Sea (win) Cygnus cygnus Iceland (bre)

**Revised version** 

Subsaharan Africa

SW Europe/Western Africa Central & Eastern Europe (bre)

**Tropical Africa** 

Southern Africa Iberia & NW Africa (bre) Central & Eastern Europe (bre) Southwestern Asia (win)

Subsaharan Africa (bre) Black Sea & Med/W Africa Southwestern Asia/E Africa

Morocco Southwestern Asia

Subsaharan Africa Iraq & Iran

Eastern Atlantic Central & SE Europe (bre)

**Red Sea** 

SW & S Asia (win)

Subsaharan Africa

Western Africa Eastern & Southern Africa

Western Africa Eastern & Southern Africa

Western Africa Eastern & Southern Africa

Western Mediterranean Algeria & Tunisia E Med, Turkey & SW Asia

NW Mainland & Central Europe Black Sea W & Central Asia/Caspian

Iceland/UK & Ireland

NW Europe (win) Black Sea (win) W Asia (win) Cygnus columbianus bewickii Europe (win) Caspian Sea (win) Anser brachyrhynchus Iceland (bre) Svalbard (bre) Anser fabalis fabalis W Taiga (bre) W Tundra (bre) Anser albifrons albifrons NW Europe (win) Central Europe (win) Black Sea (win) Caspian Sea (win) Anser albifrons flavirostris Greenland (bre) Anser erythropus Black Sea/Caspian Sea (win) Anser anser anser Iceland (bre) N Europe/W Mediterranean Central Europe/N Africa Anser anser rubrirostris Black Sea (win) West Siberia/Caspian Sea Branta leucopsis Greenland (bre) Svalbard (bre) Russia (bre) Branta bernicla bernicla Siberia (bre) Branta bernicla hrota Svalbard (bre) Ireland (win) Branta ruficollis Entire population Alopochen aegyptiacus Entire population Entire population Tadorna ferruginea W Mediterranean E Mediterranean/Black Sea SW Asia Tadorna cana Entire population Tadorna tadorna **NW Europe** W Mediterranean Black Sea Caspian Sea Plectropterus gambensis gambensis W Africa W Africa Plectropterus gambensis niger S Africa

**NW Mainland Europe** N Europe & W Sib/B Sea & E Med W & Cent Siberia/Caspian W Siberia & NE Europe/NW Europe Northern Siberia/Caspian E Greenland & Iceland/UK Svalbard/NW Europe W Sib & NE Europe/NW Europe W & C Siberia/NE & SW Europe NW Sib & NE Europe/NW Europe W Siberia/Central Europe W Siberia/Black Sea & Turkey N Siberia/Caspian & Iraq Greenland/Ireland & UK N Europe & W Sib/B Sea & Caspian Iceland/UK & Ireland **NW Europe/SW Europe** Central Europe/N Africa **Black Sea & Turkey** W Siberia/Caspian & Iraq E Greenland/Scotland & Ireland Svalbard/SW Scotland **Russia/Germany & Netherlands** W Siberia/W Europe Svalbard/Denmark & UK Canada & Greenland/Ireland N Siberia/Black Sea & Caspian Western Africa Eastern & Southern Africa **Northwestern Africa** E Med & Black Sea/NE Africa W Asia & Caspian/Iran & Iraq Southern Africa **Northwestern Europe Black Sea & Mediterranean** Black Sea & Mediterranean W Asia/Caspian & Middle East Western Africa **Eastern Africa** Southern Africa

Sarkidiornis melanotos melanotos Africa Africa Nettapus auritus W Africa S/E Africa Anas penelope NW Europe (win) Black Sea/Mediterranean SW Asia Anas strepera strepera NW Europe (win) Black Sea/Mediterranean (win) SW Asia (win) Anas crecca crecca NW Europe (win) Black Sea/Mediterranean (win) SW Asia (win) Anas capensis Entire population Entire population Anas platyrhynchos platyrhynchos NW Europe (win) Black Sea/Mediterranean (win) Black Sea/Mediterranean (win) SW Asia (win) Anas undulata undulata S Africa Anas acuta NW Europe (win) W Africa (win) Black Sea/Mediterranean (win) SW Asia/E Africa (win) Anas erythrorhyncha S/E Africa S/E Africa Anas hottentota W Africa S/E Africa S/E Africa Anas querquedula W Africa (win) E Africa/Asia (win) Anas clypeata NW Europe (win) W Mediterranean (win) Black Sea/Mediterranean (win) SW Asia (win) Marmaronetta angustirostris W Mediterranean E Mediterranean SW Asia

Western Africa Southern & Eastern Africa Western Africa Southern & Eastern Africa W Sib & NE Europe/NW Europe W Sib & NE Europe/B Sea & Med W Sib/SW Asia & NE Africa Northwestern Europe NE Europe/Black Sea & Med W Sib/SW Asia & NE Africa **Northwestern Europe** W Sib & NE Europe/B Sea & Med W Sib/SW Asia & NE Africa E Africa to Western Africa Southern Africa **Northwestern Europe** N Europe/Western Mediterranean E Europe/Black Sea & E Med Western Siberia/SW Asia Southern Africa **Northwestern Europe** W Sib, NE & E Eur/S Eur & W Afr W Sib, NE & E Eur/S Eur & W Afr W Siberia/SW Asia & E Africa Southern Africa Eastern Africa Madagascar Western Africa **Eastern Africa** Southern Africa W Siberia & Europe/W Africa W Sib/SW Asia, NE & E Africa NW & Central Europe (win) W Sib, NE & E Eur/S Eur & W Afr W Sib, NE & E Eur/S Eur & W Afr W Sib/SW Asia, NE & E Africa

W Mediterranean/W Africa Eastern Mediterranean Southwestern Asia Netta rufina SW/Central Europe SE Europe SW Asia Netta erythrophthalma brunnea S/E Africa Aythya ferina NW Europe (win) Black Sea/Mediterranean (win) SW Asia Aythya nyroca Africa (win) Europe (win) SW Asia Aythya fuligula NW Europe (win) Black Sea/Mediterranean (win) SW Asia (win) Aythya marila marila E Atlantic (win) Black Sea/Caspian Sea (win) Somateria mollissima mollissima Europe Europe Somateria mollissima borealis Europe Somateria spectabilis **NE Europe** Polysticta stelleri NE Europe (win) Clangula hyemalis Iceland/Greenland (bre) NW Europe (win) Caspian Sea (win) Melanitta nigra nigra NW Europe (win) Melanitta fusca fusca NW Europe (win) Black Sea/Caspian Sea (win) Bucephala clangula clangula NW Europe (win) Black Sea/Mediterranean (win) Black Sea/Mediterranean (win) Caspian Sea (win) Mergellus albellus NW Europe (win) Black Sea/Mediterranean (win) SW Asia (win) Mergus serrator serrator NW Europe (win) NW Europe (win) Black Sea/Mediterranean (win) SW Asia (win) Mergus merganser merganser NW Europe (win) Black Sea/Mediterranean (win) SW Asia (win)

SW & Cent Europe/W Med Black Sea & E Mediterranean Western & Central Asia/SW Asia Southern & Eastern Africa **NE Europe/NW Europe** Cent & NE Europe/B Sea & Med Western Siberia/SW Asia W Mediterranean/W Africa E Europe/E Med & Africa W Asia/SW Asia & NE Africa Northwestern Europe (win) Cent Europe, B Sea & Med (win) W Sib/SW Asia & NE Africa Northern Europe/Western Europe W Siberia/B Sea & Caspian **Baltic, Denmark & Netherlands** Norway & Russia Svalbard & Franz Joseph (bre) E Greenland, NE Europe & W Sib Western Siberia/NE Europe **Iceland & Greenland** Western Siberia/North Europe W Sib & N Eur/W Eur & NW Africa W Siberia & N Europe/NW Europe Black Sea & Caspian NW & Central Europe (win) **NE Europe/Adriatic** W Siberia & NE Europe/Black Sea Western Siberia/Caspian NW & Central Europe (win) NE Europe/Black Sea & E Med Western Siberia/SW Asia NW & Central Europe (win) E Greenland, Iceland, UK & Irel. NE Europe/Black Sea & Med Western Siberia/SW & Cent Asia NW & Central Europe (win) **NE Europe/Black Sea** Western Siberia/Caspian