



3rd SESSION OF THE MEETING OF THE PARTIES TO THE AGREEMENT ON THE CONSERVATION OF AFRICAN-EURASIAN MIGRATORY WATERBIRDS (AEWA)
23 – 27 October 2005, Dakar, Senegal

PROPOSAL FOR NEW SPECIES TO BE ADDED TO
AEWA ANNEX 2

INTRODUCTION

AEWA's 2nd Session of the Meeting of the Parties in Resolution 2.1 requested the Technical Committee of the Agreement, *inter alia*, to review further development of the Agreement by including additional species of wetland birds and species traditionally considered to be seabirds, looking in the first instance at the species listed in Table 2 and Table 3 of the document AEWA/MOP 2.9. The Technical Committee was also requested to consider in particular, the extent to which the existing Action Plan is adequate in its scope to address differing conservation problems faced by birds of prey, passerines and other taxonomic groups using wetlands.

The issue of inclusion of new species to the Agreement was discussed by the Technical Committee at its fourth (in 2003), fifth (in 2004) and more substantively at its sixth (in 2005) meeting. As a result of these discussions the technical Committee decided to recommend to MOP3 for the time being not to include any bird species from Table 3 of the document AEWA/MOP 2.9, which listed wetland dependent passerines, birds of prey and owls.

The Technical Committee felt that it is still premature to include large number of passerine species for several reasons. Firstly, the concern was that the passerines would dilute the focus on the current species and might weaken the effectiveness of the Agreement. About most of them is lacking necessary scientific knowledge for effective conservation. At the same time it was felt that passerines anyway would benefit from appropriate management of wetlands for the current AEWA species.

Birds of prey and owls were rejected on the ground that CMS is currently looking at the options that might lead to another intergovernmental instrument for their conservation.

As a result, the Technical Committee decided to analyse closer the seabird species listed in Table 2 of the document AEWA/MOP 2.9 in order to assess the degree to which may be appropriate to include in the Agreement's Annex 2. Information on these species and threats that they are facing was summarised in three tables, which are appended to this paper. It is worth mentioning that already in the current Annex 2 of the Agreement a

number of seabird species have been listed in the past, both in the original listings and further Southern African species added at MoP2.

In Table 1 (*Summarised information on the candidate seabird species for inclusion in the AEWA and Action Plan*) was collated information about species'/sub-species' population sizes, distribution ranges and overlap with the Agreement area, migration patterns and threats. Two criteria were used to filter out species/sub-species for further consideration:

- 1) *A species/sub-species should breed within the Agreement area and its range should overlap with the Agreement area by 75% or more.* It is thought that only in cases when a species/sub-species occurs mainly within the Agreement area, i.e. it overlaps with its range by at least $\frac{3}{4}$, the flyway approach could be applied and AEWA could potentially make a contribution towards its conservation. However, as an exception to this criterion was suggested to consider species/sub-species whose range overlaps with the Agreement area by less than 75%, but whose breeding population is concentrated in the Agreement area and main known threats are occurring in the breeding sites;
- 2) *A species/sub-species should demonstrate clear migration (wandering) patterns.*

After applying these two criteria 30 species/sub-species out of 55 were selected. However, of these, only 13 meet to greater extent the definition of migratory species, i.e. those that cyclically and predictably cross one or more national jurisdictional boundaries. These species/sub-species are shaded in darker grey in Table 1. The remaining 17 species/sub-species are largely wandering (dispersive) or some of them (Great Frigatebird, Lesser Frigatebird, Black Noddy and Black Guillemot) even generally sedentary with poorly known dispersal patterns of juveniles and non-breeders, therefore poorly fit into the definition of migratory species, though they fly over long distances and probably cross national borders. Nearly all of them are pelagic in the non-breeding season, i.e. spend part of their annual cycle far offshore, often in international waters. These species are shaded in lighter grey in Table 1.

Concerns have been raised that the threats confronted by these pelagic birds fall into a completely different category from those tackled by AEWA so far. The dimension is also quite different, because the habitat of the pelagic birds in the non-breeding season has a status of international waters. However, it should be noted that the Agreement area covers large parts of the Atlantic and the Indian Oceans as well as other seas. The fact that no measures have been envisaged in the Action Plan to tackle threats to waterbirds in international waters should not be seen as a reason for avoiding activities in these parts of the Agreement area in future, if considered appropriate.

In addition were identified 3 exceptions, as described above in criterion 1 – one new sub-species of an already qualifying species and two new species. In Table 1 they are shaded in black. However, all the three exceptions fall into the group of wandering pelagic birds.

In Table 2 (*Threats posed on candidate seabirds for inclusion in the AEWA and Action Plan*) appended to this paper have been summarised the threats to all seabird species considered by the Technical Committee (note the light and dark shading of those species that

met the two criteria applied to Table 1 and black shading for the exceptions). Ten general types of threats were highlighted by the analysis. Those relevant to the seabirds proposed for further consideration are shaded: light grey for the dispersal pelagic species, dark grey for the genuine migratory species and black for the exceptions. In addition the global and European threat status has been listed for each species accordingly. Major finding is that they all are Least Concern according to the IUCN Red List classification with one exception only (the Ascension Frigatebird is Vulnerable). At European level only four species are considered to be either Vulnerable, Rare or Depleted, while the rest are thought to be Secure (some with provisional status).

In Table 3 (*List of threats and references to paragraphs of the AEWA Action Plan (2003–2005) that deal with them*) are listed all ten general types of threats against numbers of relevant paragraphs from the AEWA Action Plan that deal with such threats. They are presented in descending order based on the number of proposed new species exposed to each particular threat. This simple analysis revealed that the current AEWA Action Plan does not tackle four types of threats (shaded). For each of them is suggested where in the Action Plan should a new paragraph/sub-chapter be developed. Climate change is thought to have (potential) impact on all species, including also the current AEWA species, and therefore was recognized as most significant amongst all listed threats; a separate sub-chapter of the Action Plan is suggested. The other threats that will require additional paragraph in the Action Plan are overfishing, oil spills, and bycatch in fishing equipment.




This proposal was approved for submission to MOP3 by the Standing Committee at its 3rd meeting in July 2005.

ACTION REQUESTED FROM THE MEETING OF THE PARTIES

The Meeting of the Parties is requested to review and discuss the proposal, and to decide on some or all suggested options for extension of the AEWA species list (Annex 2).

Table 1. Summarised information on the candidate seabird species for inclusion in the AEWA and Action Plan

LEGEND:

-  Species/subspecies whose range overlaps with AEWA area by at least 75% and is migratory (meets criteria 1 and 2 above)
-  Species/subspecies whose range overlaps with AEWA area by at least 75%, but is wandering (dispersive) (meets criterion 1 only)
-  Species/subspecies whose range does overlaps with AEWA area by less than 75%, but main threats occur in breeding areas (exception from criterion 1)

Species name (global population size)	Sub-species name	Relative population size (within the agreement area)	Relative overlap of distribution with the AEWA area (% within)	Migration pat- terns	Threats
PHAETHONTIDAE					
<i>Phaethon aethereus</i> Red-billed Tropicbird < 10,000 pairs	<i>aethereus</i>	<3,000 pairs	50% (S Atlantic)	No regular migra- tion. Extensive dis- persal of juv. Over waters around the breeding grounds.	Terrestrial preda- tors (cats and rats)
	<i>mesonauta</i>	100 pairs (Cape Verde Islands, esti- mation 1990)	Ca. 20% (E Atlantic, E Pacific, Caribbean)	No regular migra- tion. Extensive dis- persal of juv. Over waters around the breeding grounds (birds from Cape Verde move to ar- eas of upwelling off W Africa fairly close to breeding colonies)	Terrestrial preda- tors (cats and rats)

	<i>indicus</i>	? x 100 pairs	Ca. 100% (Persian Gulf, Gulf of Aden, Red Sea)	No regular migration. Extensive dispersal of juv. Over waters around the breeding grounds.	Terrestrial predators (cats and rats)
<i>Phaethon rubricauda</i> Red-tailed Tropicbird Stable population, several tens of thousands pairs (20-30,000)	<i>rubricauda</i>	? x 1,000 pairs	Ca. 100% (W Indian Ocean)	No regular migration. Probably more dispersal than the other Tropicbird species.	Terrestrial predators (cats and rats). Unsustainable human exploitation for food (not mentioned for the W Indian Ocean)
<i>Phaethon lepturus</i> White-tailed Tropicbird At least 24,000-30,000 pairs, probably more	<i>lepturus</i>	Ca. 2,500 pairs	Ca. 50% (Indian Ocean). Most colonies located within <u>the Agreement area.</u>	Resident and dispersive, adults and juv. Often wandering extensively as much as 1,000 km.	Terrestrial predators (cats and rats). Unsustainable human exploitation for food (not mentioned for the W Indian Ocean)

Species name (global population size)	Sub-species name	Relative population size (within the agreement area)	Relative overlap of distribution with the AEWA area (% within)	Migration pat- terns	Threats
SULIDAE					
<i>Sula (Morus) bas- sana</i> Northern Gannet Global population > 600,000 birds (estimation 1984/85)	-	Ca. 225,000 pairs (es- timation 1984/85)	Ca. 75%	Well-known N-S migration, reaches the equator.	Overfishing
<i>Sula dactylatra</i> Masked Booby Difficult to estimate, probably between 200,000 and 400,000 (very rough estimation)	<i>dactylatra</i>	Ca. 32,500-57,500 pairs	Touches upon the boundaries of the Agreement area (Car- ibbean and SW Atlan- tic)	Most adults spend all year round in the vicinity of the col- ony, extensive dis- persal of young, sometimes of adults too. May forage 1,000 km away from any land.	Terrestrial preda- tors (cats and rats). Unsustain- able human ex- ploitation for food. Tourism development.
	<i>melanops</i>	Declining, few colo- nies left, protection essential.	100% (W Indian Ocean)	Most adults spend all year round in the vicinity of the col- ony, extensive dis- persal of young, sometimes of adults too. May forage 1,000 km away from any land.	Terrestrial preda- tors (cats and rats). Unsustain- able human ex- ploitation for food. Tourism development.

<p><i>Sula sula</i> Red-footed Booby Global population > 1,000,000 birds</p>	<p><i>sula</i></p>	<p>Ca. 100 pairs (S Atlantic)</p>	<p>Touches upon the boundaries of the Agreement area (Caribbean and SW Atlantic)</p>	<p>Extensive dispersal over tropical oceans. Obscure regular movements.</p>	<p>Habitat destruction (tree nesting species). Terrestrial predators (cats and rats). Egg-collection and poaching. Tourism development.</p>
	<p><i>rubripes</i></p>	<p>Declining, not numerous.</p>	<p>Ca. 7% (tropical W & C Pacific and Indian Ocean)</p>	<p>Extensive dispersal over tropical oceans. Obscure regular movements.</p>	<p>Habitat destruction (tree nesting species). In the W Indian Ocean at least 12 colonies lost over the last 100 years due to habitat loss. Terrestrial predators (cats and rats). Egg-collection and poaching. Tourism development.</p>

<p><i>Sula leucogaster</i> Brown Booby Most numerous of the family, but difficult estimate, probably several hundred thousand individuals</p>	<i>leucogaster</i>	? x 1,000 pairs	Ca. 50% (Caribbean and tropical Atlantic)	Adults more or less resident, juv. spread widely, records of inter-colony exchange	Terrestrial predators (cats and rats). Unsustainable human exploitation for food. Tourism development.
	<i>plotus</i>	? x 1,000 pairs	Ca. 15% (Red Sea and W Indian Ocean to C Pacific)	Adults more or less resident, juv. spread widely, records of inter-colony exchange	Terrestrial predators (cats and rats). Unsustainable human exploitation for food. Tourism development.

Species name (global population size)	Sub-species name	Relative population size (within the agreement area)	Relative overlap of distribution with the AEWA area (% within)	Migration pat- terns	Threats
PHALACROCORACIDAE					
<i>Phalacrocorax aris- totelis</i> European Shag Ca. 100,000 pairs	<i>aristotelis</i>	? x 10,000 to ? x 100,000	100% (Iceland and N Scandi- navia S to Iberian Pen- insula)	Sedentary with post-breeding dis- persion mostly of young over short distances. Birds from Norwegian and British popula- tion move up to 1,000 km from colonies.	No specific threats, general ones with impact on cliff breeding seabirds.
	<i>desmarestii</i>	Ca. 10,000 pairs, de- clining	100% (C Mediterranean E to Black Sea)	Sedentary with lim- ited post-breeding dispersal.	No specific threats, general ones with impact on cliff breeding seabirds.
	<i>riggenbachi</i>	? x 1,000	100% (Coast of Morocco)	Sedentary with lim- ited post-breeding dispersal.	No specific threats, general ones with impact on cliff breeding seabirds.

Species name (global population size)	Sub-species name	Relative population size (within the agreement area)	Relative overlap of distribution with the AEWA area (% within)	Migration pat- terns	Threats
FREGATIDAE					
<i>Fregata aquila</i> Ascension Frigatebird 1,000-1,500 pairs or less	-	1,000-1,500 pairs or less	100% (Ascension Island)	Sedentary, rarely wandering more than 150 km from colony	Terrestrial preda- tors (cats and rats). Intensified human activities on the island since 1982 when a military base was established.
<i>Fregata magnificens</i> Magnificent Frigate- bird Several 100,000 birds	-	Probably declined to 10 birds only (Cape Verde islands)	Ca. 15% (E Pacific, Caribbean, SW Atlantic, E Atlan- tic)	Sedentary with dis- persal of imm. and non-breeders.	Habitat destruc- tion, disturbance, persecution (by fishermen).
<i>Fregata minor</i> Great Frigatebird 500,000 to 1,000,000 birds	<i>aldabrensis</i>	? x 1,000	100% (W Indian Ocean)	Sedentary with dis- persal of imm. and non-breeders.	Habitat destruc- tion, disturbance, persecution (by fishermen), ter- restrial predators.
<i>Fregata ariel</i> Lesser Frigatebird Several 100,000 birds	<i>iredalei</i>	? x 1,000	100% (W Indian Ocean)	Sedentary with dis- persal of imm. and non-breeders.	Habitat destruc- tion, disturbance, persecution (by fishermen), ter- restrial predators.

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STERCORARIDAE					
<i>Catharacta antarctica</i> Brown (Subantarctic) Skua Ca. 13,000-14,000 pairs	<i>lonnbergi</i>	Not breeding within the Agreement area.	<5% (Antarctic Peninsula, subantarctic islands of Atlantic, Indian and Pacific Oceans)	Usually sedentary, at harsh winter disperse in sea.	Persecution.
<i>Catharacta skua</i> Great Skua 13,600 pairs	-	13,600 pairs	100% (breeding range), ca. 80% (wintering range)	Well-defined N-S migration	Persecution, (over)fishing.
<i>Stercorarius pomarinus</i> Pomarine Skua Several 10,000 pairs	-	? x 1,000 (to ? x 10,000)	Ca. 30% (breeding range) (Arctic Zone of Palearctic and Holarctic). Part of the wintering range covers the W and SW African coast, Persian Gulf and red Sea.	Well-defined N-S migration.	No specific threats are described.
<i>Stercorarius parasiticus</i> Arctic Skua Several 100,000 pairs	-	? x 10,000	Ca. 30% (breeding range) (Arctic Zone of Palearctic and Holarctic). Part of the wintering range covers the SW, S and SE African coast.	Well-defined N-S migration.	Persecution.

<i>Stercorarius longicaudus</i> Long-tailed Skua Several 100,000 pairs	<i>longicaudus</i>	? x 10,000 (to ? x 100,000)	100% (breeding range) (Arctic and subarctic Zone of Palearctic). Wintering range is offshore S Africa and S South America.	Well-defined N-S migration.	Probably climate change.
	<i>pallescens</i>	? x 10,000 (to ? x 100,000)	Ca. 25% (breeding range) (Arctic and subarctic Zone of Holarctic and Palearctic). Wintering range is offshore S Africa and S South America.	Well-defined N-S migration.	Probably climate change.

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LARIDAE					
<i>Pagophila eburnea</i> Ivory Gull 9,000-25,000 pairs	-	Rough estimation 3,000-5,000 pairs	Ca. 20% (breeding range) (High arctic of Holarctic and Palearctic)	Spends most year along ice edges, may wander as far as edge of pack ice, may even go N of breeding grounds. In non-breeding season most birds concentrate in Lab- rador Sea along ice edge of Davis Strait (between Greenland and Baffin Island)	Disturbance, probably climate change.
<i>Rissa tridactyla</i> Black-legged Kittiwake Ca. 6,000,000- 7,000,000 pairs	<i>tridactyla</i>	? x 1,000,000 pairs	Ca. 90% (breeding range). Win- ters S to Sargasso Sea and W Africa.	Post-breeding dis- persal to open ocean, relatively pelagic.	Unsustainable harvest.
<i>Sterna anaethetus</i> Bridled Tern Probably >200,000 pairs	<i>melanopterus</i>	? x 10,000 pairs	100% (W Africa)	Unknown, wanders in open sea.	Disturbance.
	<i>fuligula</i>	Ca. 130,000 pairs	Ca. 95% (Red Sea and E Africa, Persian Gulf and Ara- bian Sea to W India)	Unknown, wanders in open sea.	Disturbance.

	<i>antarctica</i>	? x 10,000 pairs	Ca. 75% (Madagascar, Aldabra, Seychelles and Mascarenes through Maldives to Andman Islands)	Unknown, wanders in open sea.	Disturbance.
<i>Sterna fuscata</i> Sooty Tern Probably >25,000,000 pairs	<i>fuscata</i>	? x 100,000 or 1,000,000 pairs	Ca. 25-30% (Gulf of Mexico, incl. W Indies and E Mexico, Louisiana, Texas, islands in Gulf of Guinea and S Atlantic)	Pelagic, rarely seen on water. Once breeding is over the adults leave the colony and spread into the sea. Long distance wanderers.	Terrestrial predators (cats and rats). Unsustainable egg harvest (Indian Ocean). Disturbance (low flying jets). Oil pollution and spills.
	<i>nubilosa</i>	? x 100,000 or 1,000,000 pairs	Ca. 50% (Red Sea, Gulf of Aden and Indian Ocean E to Ryukyu Islands and Philippines)	Pelagic, rarely seen on water. Once breeding is over the adults leave the colony and spread into the sea. Long distance wanderers.	Terrestrial predators (cats and rats). Unsustainable egg harvest (Indian Ocean). Disturbance (low flying jets). Oil pollution and spills.
<i>Anous stolidus</i> Brown Noddy Ca. 300,000-500,000 pairs	<i>stolidus</i>	? x 1,000 or 10,000 pairs	Ca. 25-30% (Caribbean, S Atlantic islands, and Gulf of Guinea to Cameroon)	Poorly known. Disperse to sea after breeding, directed movements not known. Pelagic, rarely seen on shore in non-breeding season.	Terrestrial predators (cats and rats).

	<i>plumbeigularis</i>	? x 1,000 or 10,000 pairs	100% (Red Sea and Gulf of Aden)	Poorly known. Disperse to sea after breeding, directed movements not known. Pelagic, rarely seen on shore in non-breeding season.	Terrestrial predators (cats and rats).
	<i>pileanus</i>	? x 1,000 or 10,000 pairs	Ca. 5-10% (Seychelles and Madagascar E to N Australia, Polynesia, Hawaii, and Easter Island)	Poorly known. Disperse to sea after breeding, directed movements not known. Pelagic, rarely seen on shore in non-breeding season.	Terrestrial predators (cats and rats).
<i>Anous minutus</i> Black Noddy >200,000 pairs	<i>atlanticus</i>	? x 1,000 or 10,000 pairs	Ca.80-90% (Atlantic islands N & E to Gulf of Guinea)	Poorly known. Some dispersal up to 3,000 km (in the Pacific races). High racial variation suggests that the species is generally sedentary, with isolated populations.	No specific threats mentioned.
<i>Anous tenuirostris</i> Lesser Noddy Not known, probably several 10,000 pairs	<i>tenuirostris</i>	? x 10,000 pairs	Ca. 95% (Seychelles, Mascarene Islands, and probably Maldives, possible breeding attempts in Somalia, non-breeders visiting Arabia and rarely Tanzania)	Poorly known. Post-breeding dispersal, often seen off E African coast.	Some colonies vulnerable, although no specific threats mentioned.

<p><i>Gygis alba</i> White Tern Not known, probably >100,000 pairs</p>	<i>alba</i>	? x 1,000 or 10,000 pairs	Ca. 5% or less (Caroline Is through Melanesia to Norfolk Island and Kermadec Is, Hawaii, W Mexico, Costa Rica, S Atlantic Islands)	Poorly known. Post-breeding dispersal to sea, although resident on some islands. No movement patterns are known.	No specific threats mentioned.
	<i>candida</i>	? x 1,000 or 10,000 pairs	Ca. 5% or less (Seychelles and Mascarenes through Indian Ocean to SC Pacific)	Poorly known. Post-breeding dispersal to sea, although resident on some islands. No movement patterns are known.	No specific threats mentioned.

Species name (global population size)	Sub-species name	Relative population size (within the agreement area)	Relative overlap of distribution with the AEWA area (% within)	Migration pat- terns	Threats
ALCIDAE					
<i>Alle alle</i> Little Auk Ca. 12,000,000 (8,000,000-18,000,000) pairs	<i>alle</i>	Ca. 12,000,000- 13,000,000 pairs	100% (E Baffin island through Greenland and Iceland to Juan Mayen, Spitsbergen, Bear Iis- land and Novaya Zem- lia)	Mobile, undertak- ing migrations of substantial length. Movement patterns known.	Oil pollution and spills. Probably climate change.
	<i>polaris</i>	Ca. 250,000 pairs	Ca. 20% (Franz Josef Land, from Severnaya Zem- lya E to Berring Sea)	Mobile, undertak- ing migrations of substantial length. Movement patterns known.	Oil pollution and spills.
<i>Uria aalge</i> Common Guillemot Ca. 9,000,000 pairs	<i>aalge</i>	? x 100,000 pairs	Ca. 80-90% (E North America, Greenland and Iceland, through Faeroes and Scotland to S Norway and Baltic Sea)	Winters offshore at sea, mostly within breeding range. During post- breeding dispersal (very complex) usually cross “na- tional borders”.	Unsustainable harvest, overfish- ing, gill-net fish- eries, oil pollution and spills, distur- bance.
	<i>albionis</i>	? x 100,000 pairs	100% (Ireland and S Britain through Brittany to W Iberia; Helgoland)	Winters offshore at sea, mostly within breeding range. During post- breeding dispersal (very complex) usually cross “na- tional borders”.	Unsustainable harvest, overfish- ing, gill-net fish- eries, oil pollution and spills, distur- bance.

	<i>hyperborea</i>	? x 100,000 pairs	100% (Svalbard through N Norway and Murmansk to Novaya Zemlya)	Winters offshore at sea, mostly within breeding range. During post-breeding dispersal (very complex) usually cross “national borders”.	Unsustainable harvest, overfishing, gill-net fisheries, oil pollution and spills, disturbance.
<i>Uria lomvia</i> Brunnich’s Guillemot Ca. 11,000,000 pairs	<i>lomvia</i>	Ca. 3,000,000-4,000,000 pairs	Ca. 75-80% (NE Canada to Gulf of St Lawrence, and Greenland E to Franz Josef Land, Novaya Zemlya and Severnaya Zemlya). Center of concentration (ca. 25% of the global population) in the NW Atlantic, especially in E Canada Arctic and NW Greenland.	Winters mostly offshore at sea. Dispersal determined by ice conditions and food availability. Two major migration pathways: associated with (1) Labrador current and (2) E to W Greenland Currents. Often crosses “national borders”.	Unsustainable harvest, overfishing, gill-net fisheries, oil pollution and spills, introduced terrestrial predators (foxes), disturbance.
<i>Alca torda</i> Razorbill Ca. 700,000 (300,000-1,200,000) pairs	<i>torda</i>	ca. 80,000 pairs	Ca. 85-90% (E North America, Greenland and E to Bear Island, Norway, Denmark, Baltic Sea region, Murmansk and White Sea)	Winters offshore at sea. During post-breeding dispersal usually cross “national borders”. Reaches quite S waters (N African and Mediterranean coasts).	Overfishing, gill-net fisheries, oil pollution and spills, introduced terrestrial predators (foxes).

	<i>islandica</i>	Ca. 650,000 pairs	100% (Iceland, Faeroes, Britain, Ireland E to Helgoland, Channels Islands and NW France)	Winters offshore at sea. During post-breeding dispersal usually cross “national borders”. Reaches quite S waters (N African and Mediterranean coasts).	Overfishing, gill-net fisheries, oil pollution and spills, introduced terrestrial predators (foxes).
<i>Cepphus grylle</i> Black Guillemot Unknown, estimation of 1985 Ca. 270,000 (200,000-350,000) pairs	<i>grylle</i>	? x 1,000 or 10,000 pairs	100% (Baltic Sea)	Resident, mostly sedentary. Winter in sheltered waters near the colony. Fledglings undertake long-distance dispersal (poorly known).	Overfishing, gill-net fisheries, oil pollution and spills, introduced terrestrial predators (mink, rats).
	<i>mandtii</i>	? x 10,000 pairs	Ca. 75% (Arctic E North America S to Labrador and N Newfoundland, W & E Greenland, Jan Mayen and Svalbard E through E Siberia to N Alaska)	Resident, mostly sedentary. Winter in sheltered waters near the colony. Fledglings undertake long-distance dispersal (poorly known).	Overfishing, gill-net fisheries, oil pollution and spills, introduced terrestrial predators (mink, rats).
	<i>arcticus</i>	? x 10,000 pairs	Ca. 90% (North America and S Greenland to British Is, Norway, SW Sweden, Denmark, Murmansk and White Sea)	Resident, mostly sedentary. Winter in sheltered waters near the colony. Fledglings undertake long-distance dispersal (poorly known).	Overfishing, gill-net fisheries, oil pollution and spills, introduced terrestrial predators (mink, rats).

	<i>islandicus</i>	Ca. 50,000	100% (Iceland)	Resident, mostly sedentary. Winter in sheltered waters near the colony. Fledglings undertake long-distance dispersal (poorly known).	Overfishing, gill-net fisheries, oil pollution and spills, introduced terrestrial predators (mink, rats).
	<i>faeroeensis</i>	? x 1,000 or 10,000 pairs	100% (Faeroes)	Resident, mostly sedentary. Winter in sheltered waters near the colony. Fledglings undertake long-distance dispersal (poorly known).	Overfishing, gill-net fisheries, oil pollution and spills, introduced terrestrial predators (mink, rats).
<i>Fratercula arctica</i> Atlantic Puffin Ca. 6,000,000 (3,800,000-8,200,000) pairs	<i>arctica</i>	? x 1,000,000	Ca. 75% (SE Baffin Island and Hudson Bay S to Maine, and E through SW & S Greenland and Iceland to Bear Island, C & N Norway, Kola Peninsula and S Novaya Zemlya)	Winters offshore widely dispersed. Post-breeding dispersal is very complex, however cross “national borders”.	Overfishing, gill-net fisheries, oil pollution and spills, introduced terrestrial predators (rats, cats, dogs), grazing livestock, disturbance (tourism).
	<i>naumanni</i>	? x 1,000,000	100% (NE Canada (high E Arctic), NW & E Greenland to Jan Mayen, Spitsbergen and N Novaya Zemlya)	Winters offshore widely dispersed. Post-breeding dispersal is very complex, however cross “national borders”.	Overfishing, gill-net fisheries, oil pollution and spills, introduced terrestrial predators (rats, cats, dogs), grazing livestock, disturbance (tourism).

	<i>grabae</i>	Ca. 4,500,000 pairs	100% (Faeroes, S Norway and SW Sweden S through British Is to Channel Is and NW France)	Winters offshore widely dispersed. Post-breeding dis- persal is very com- plex, however cross “national borders”.	Overfishing, gill- net fisheries, oil pollution and spills, introduced terrestrial preda- tors (rats, cats, dogs), grazing livestock, distur- bance (tourism).
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Table 2. Threats posed on candidate seabirds for inclusion in the AEWA and Action Plan

LEGEND:

- Species/subspecies whose range overlaps with AEWA area by at least 75% and is migratory (meets criteria 1 and 2 above)
- Species/subspecies whose range overlaps with AEWA area by at least 75%, but is wandering (dispersive) (meets criterion 1 only)
- Species/subspecies whose range does overlaps with AEWA area by less than 75%, but main threats occur in breeding areas (exception from criterion 1)

Species scientific name	Species common name	Threats										Threat status, global & (Europe) (after BirdLife International, 2004)	SPEC (after BirdLife International, 2004)	Comments	
		habitat loss	hunting & persecution	introduced predators (rats, cats, etc)	unsustainable human exploitation	limited to few sites	disturbance	accidental mortality (nets, hooks)	climate change	food shortage (overfishing)	pollution (oil spills)				
PHAETONIDAE															
<i>Phaethon aethereus</i>	Red-billed Tropicbird			X										LC	Cap Verde: alarming decline
<i>Phaethon rubricauda</i>	Red-tailed Tropicbird			X	X									LC	
<i>Phaethon lepturus</i>	White-tailed Tropicbird			X	X									LC	
SULIDAE															
<i>Sula (Morus) bassana</i>	Northern Gannet					X		X		X				LC (S)	susceptible to catastrophes
<i>Sula dactylatra</i>	Masked Booby			X	X		X							LC	
<i>Sula sula</i>	Red-footed Booby	X		X	X		X							LC	
<i>Sula leucogaster</i>	Brown Booby			X	X		X							LC	
PHALACROCORACIDAE															
<i>Phalacrocorax aristotelis</i>	European Shag													LC ((S))	decline in some populations
FREGATIDAE															
<i>Fregata aquila</i>	Ascension Frigatebird			X	X	X	X	X						VU	
<i>Fregata magnificens</i>	Magnificent Frigatebird	X	X				X							LC	
<i>Fregata minor</i>	Great Frigatebird	X	X	X			X		X					LC	
<i>Fregata ariel</i>	Lesser Frigatebird	X	X	X			X		X					LC	

Species scientific name	Species common name	Threats										Threat status, global & (Europe) (after BirdLife International, 2004)	SPEC (after BirdLife International, 2004)	Comments
		habitat loss	hunting & persecution	introduced predators (rats, cats, etc)	unsustainable human exploitation	limited to few sites	disturbance	accidental mortality (nets, hooks)	climate change	food shortage (overfishing)	pollution (oil spills)			
STERCORARIIDAE														
<i>Catharacta antarctica</i>	Brown (Subantarctic) Skua		X									LC		decline in some populations
<i>Catharacta skua</i>	Great Skua		X					X		X		LC (S)		decline in some populations
<i>Stercorarius pomarinus</i>	Pomarine Skua											LC ((S))		no sufficient data
<i>Stercorarius parasiticus</i>	Arctic Skua		X						X			LC ((S))		
<i>Stercorarius longicaudus</i>	Long-tailed Skua											LC ((S))		
LARIDAE														
<i>Pagophila eburnea</i>	Ivory Gull						X		X		X	LC ((R))	3	fewer than 500 bp, trend difficult to assess, large decline
<i>Rissa tridactyla</i>	Black-legged Kittiwake				X					X		LC ((S))		populations vary in size
<i>Sterna anaethetus</i>	Bridled Tern						X					LC		
<i>Sterna fuscata</i>	Sooty Tern			X	X		X				X	LC		
<i>Anous stolidus</i>	Brown Noddy			X								LC		some populations are vulnerable
<i>Anous minutus</i>	Black Noddy											LC		some populations are vulnerable
<i>Anous tenuirostris</i>	Lesser Noddy											LC		some populations are vulnerable
<i>Gygis alba</i>	White Tern											LC		
ALCIDAE														
<i>Alle alle</i>	Little Auk								X		X	LC ((S))		decline of some populations
<i>Uria aalge</i>	Common Guillemot				X		X	X		X	X	LC ((S))		decline of some populations
<i>Uria lomvia</i>	Brünnich's Guillemot			X	X		X	X		X	X	LC ((VU))	3	decline of some populations
<i>Alca torda</i>	Razorbill			X				X		X	X	LC ((S))		decline in Norway + Ireland
<i>Cephus grylle</i>	Black Guillemot			X			X	X		X	X	LC (H)	2	decline of some populations
<i>Fratercula arctica</i>	Atlantic Puffin	X		X			X	X		X	X	LC ((H))	2	large decline

IUCN Red List categories

EX – extinct, **EW** – extinct in the wild, **CR (PE)** – critically endangered (possibly extinct), **CR** – critically endangered, **EN** – endangered, **VU** – vulnerable, **NT** – near threatened, **LC** – least concern, **DD** – data deficient, **NE** – not evaluated, **NR** – not recognised

European Treat Status

CR – critically endangered, **EN** – endangered, **VU** – vulnerable, **D** – declining, **R** - rare, **H** – depleted, **L** – localised, **S** – secure, **DD** – data deficient, **NE** – not evaluated, **()** – status provisional

Categories of Species of European Conservation Concern (SPEC)

SPEC 1 – European species of global conservation concern, i.e. classified as Critically Endangered, Endangered, Vulnerable, Near Threatened or Data Deficient under the IUCN Red List Criteria at a global level

SPEC 2 – Species whose global populations are concentrated in Europe, and which have an Unfavourable conservation status in Europe

SPEC 3 - Species whose global populations are not concentrated in Europe, but which have an Unfavourable conservation status in Europe

References

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Table 3. List of threats and references to paragraphs of the AEW A Action Plan (2003–2005) that deal with them.

Threat (no. species threatened)	Action plan paragraph
Climate change / unfavorable weather conditions (all)	Virtually (potentially) affecting all species, not only the newly proposed sea-birds, but the Action Plan does not tackle the issue of climate change. Needs a new sub-chapter. Unfavorable weather conditions to go under Emergency measures (2.3)
Introduced predators (12)	2.5.3
Disturbance / tourism / leisure activities (9)	2.1.1 (b), 4.2, 4.3.5, 4.3.6, 6.3, 6.4
Food shortage (due to overfishing) (8)	Needs additional paragraph(s) 4.3.X + cross-reference to 3.2 (non-fishing zones)
Accidental mortality (fishing nets, hooks) (7)	Needs additional paragraph(s) 4.3.X
Pollution (oil spills) (7)	Needs additional subchapter 3.X or 4.X + cross-reference to 2.3
Unsustainable human exploitation (5)	2.1.1 (a)/(c), 2.1.2 (a) – (d)
Hunting / persecution (3)	4.1
Habitat destruction / habitat loss (3)	3.2, 3.3, 4.3.5, 4.3.6
Concentration on few sites (1)	Although a threat for some species it is not a human-induced factor