

8th MEETING OF THE TECHNICAL COMMITTEE
03 - 05 March 2008, Bonn, Germany

**PRIORITY WATERBIRD TAXA THAT WOULD BENEFIT FROM AN EARLY
REVIEW OF THE LIMITS OF THEIR POPULATIONS**

(Report by TC Working Group 1)

BACKGROUND

Background to previous discussions is given in the paper to TC7 appended.

CURRENT PROPOSAL

A species-orientated, and criteria based approach has been developed, with five quantitative (1-5) and six qualitative (A-F) criteria (see Table 1 below).

- The quantitative criteria are meant to determine the ranking of the priority list. A species could meet maximum two of the five quantitative criteria – criterion 1 and one of criteria 2 to 5.
- The qualitative criteria are based on additional considerations and they would only affect the timing of the review of limits of populations, but not actual prioritisation.

Table 1. Criteria for prioritising waterbird taxa, which would benefit from an early review of limits of their populations

1. Species that in relation to a documented negative or suspected negative change in the conservation status of one or more biogeographic populations **need a review of their population limits** in order to develop effective action for their conservation (like developing a species action plan); **(4 points** if the criterion is met, **0 points** if it is not met)
2. Species for which no earlier assessment has been done; **(4 points** if the criterion is met, **0 points** if it is not met)
3. Species for which an assessment has been done more than 27 years ago (1980 or earlier); **(3 points** if the criterion is met, **0 points** if it is not met)
4. Species for which an assessment has been done 18-26 years ago (1990-1981); **(2 points** if the criterion is met, **0 points** if it is not met)
5. Species for which an assessment has been done 9-17 years ago (1999-1991); **(1 point** if the criterion is met, **0 points** if it is not met)

Other considerations to affect timing (not prioritisation) of review:

- A. Species for which there is special interest in relation to an emerging issue (e.g. Avian Influenza, climate change);

- B. Species for which there is special interest in relation to significant economic or socio-economics aspects of species;
- C. Species for which relevant new (recent) information is available (on distribution, abundance or relevant behavioural aspects) to assess the limits of their populations;
- D. Selecting those taxa, the review of which would inform current processes to identify and establish protected area networks;
- E. Selecting those taxa for which there is an interest or a data need. An example might be the EU target to establish national networks of marine SPAs by 2010 means that there is currently a pressing need for good overviews of key sites for seaducks and divers in European waters. Together with recent new survey information, updating these species accounts and providing good international site inventories should be a high priority; or
- F. Selecting those taxa for which there is significant specialist group or expert group activity and associated databases *e.g.* for colonial waterbirds (Storks, ibises, spoonbills, cranes, herons).

Criterion 1 would be applicable only for species with declining or suspected declining populations, but only if there is an explicit need of a review of their population limits, which would in turn help to develop effective conservation action. For example, Siberian Crane (*Grus leucogeranus*) and Red-breasted Goose (*Branta ruficollis*) are two species with declining numbers, but they both have small populations with limited distribution, simple flyways and clear biogeographical limits, which at present would not necessarily need additional clarification.

In criteria 2-5 the term “assessment (of limits of biogeographic populations)” is defined as the critical evaluation of data and information on waterbird distribution and movements so as best to define populations – as further described using the procedures described in document AEWA/MOP 3.12 (http://www.unep-awea.org/meetings/en/mop/mop3_docs/word-docs/mop3_12_guidance_biographical_population_waterbird.doc). Such evaluations should have been typically published as scientific papers, flyway atlases, *etc.*

In criteria 2-5 the reference to previous assessment (or lack of such), *i.e.* 9-17 years ago, 18-26 years ago and >27 years ago, is based on the triennial cycles of the sessions of the Meetings of the Parties (MOP) to AEWA calculated back from 2008 (MOP4).

CONCLUSIONS

Where next? The approach to date has implemented criteria at the scale of individual species. Yet, (aside from the activities of individual waterbird specialists) most, if not all previous reviews of biogeographical populations have been undertaken at higher taxonomic scales, covering whole families or other groups of species (see Table 1 of TC 7.8 paper appended).

There are good reasons for this since typically it is cost-effective in time to collate data for related species – which typically derive from common monitoring schemes. Likewise, the expertise to undertake such reviews are typically taxonomically based, for example within the waterbird Specialist Groups of Wetlands International.

It might be theoretically possible to review status of *ad hoc*, high priority species, of disparate waterbird families, but in building funding support for such work, it would seem more effective to tackle groups of related species together.

To this end, the spreadsheet aggregates individual species scores, to give an overall score for a higher groupings of waterbirds. This is summarised in Table 2.

Table 2. Average scores for different waterbird groups, ranked according to highest priority for review of biogeographical limits. *Italics and yellow indicate groups with a very small number of species listed by AEWA.*

<i>Penguin</i>	9.0
<i>Gannet</i>	9.0
<i>Flamingo</i>	7.0
Cranes	6.4
Divers	6.0
Cormorants	5.7
<i>Pelican</i>	5.3
Hérons and egrets	4.8
Gulls	4.7
Geese	4.6
Terns & skimmers	4.1
Grebes	4.0
<i>Flufftail</i>	3.3
Ibises, storks, spoonbills	3.1
Rails	2.8
Swans	2.5
Waders	2.5
Snipe & Woodcock	2.4
Ducks	2.3

In some contexts, the low ranking for ducks is counter-intuitive, given the considerable interest currently in the movement of duck populations for HPAI risk assessment at various scales.

SUGGESTED DISCUSSION POINTS

- At what scale to present the outcome of this work to MOP4? Species level or higher groupings? Or mixed (high priority groups, with a few urgent priority species highlighted. If so, which??
- Can we give indicative costings (even broadly) as to the resources necessary to undertake one or more of these reviews? [Note this will depend crucially on the extent of voluntary time committed by Specialist Groups. To date, it has not been possible to consult with SGs]
- How to develop these conclusions as a work plan?
- How to take this to MOP4? Suggest this doesn't need a separate Resolution again.
- What are the key messages for MOP4? Suggested:
 - Reinforce the need for these evaluations, and that they should be integrated analyses involving distribution data from count and monitoring schemes, with information on movements from ringing databases
 - Set some targets as to which groups/species to review first? (Note possible link to Conservation Status Review 4 conclusions)
 - Others?



7th MEETING OF THE TECHNICAL COMMITTEE
29 October - 01 November 2006, Bern, Switzerland

**PRIORITY WATERBIRD TAXA THAT WOULD BENEFIT FROM AN EARLY
REVIEW OF THE LIMITS OF THEIR POPULATIONS**

(Report by TC Working Group 1)

BACKGROUND

Through resolution 3.2 the Third Meeting of the Parties called for procedures to review biogeographical limits of waterbird populations

Recalling Resolution 2.1, which, inter alia, called upon the Technical Committee to provide clarification on the procedures used to delimit biogeographical populations of waterbirds,

Welcoming the Committee's conclusions in AEWA/MOP 3.12, in particular the need for a clear audit of information and assumptions used to define biogeographic populations; the value of integrating these assessments with analyses of the results from waterbird ringing; and the desirability of bringing this information together in the form of flyway atlases so as to provide international contextual information for Contracting Parties and those responsible for the conservation and management of waterbirds and their habitats,

Stressing the importance of robust procedures for defining and evaluating the limits of biogeographical populations, given their importance as practical units for the conservation management of migratory waterbirds, and

Recognising the value of genetic research as an aid to the delimitation of biogeographical populations,

Noting that past work to define waterbird populations has largely been undertaken by Wetlands International Waterbird Specialist Groups operating voluntarily, and that further significant work will require resourcing.

The Meeting of the Parties:

1. *Requests* Wetlands International and its Waterbird Specialist Groups, in consultation with the IUCN Species Survival Commission, in their support to the Agreement, resources permitting, to continue to assess the limits of biogeographical populations of migratory waterbirds, to clearly document the assumptions underpinning such assessments, and to forward all the relevant information to the Secretariat which will transmit it for assessment by the Technical Committee;
2. *Considers* that it is desirable that the assumptions underlying the definition of individual biogeographical waterbird populations are reviewed periodically, ideally at intervals of no more than nine years, so that these units of practical conservation management continue to be defined so as best to reflect contemporary knowledge;
3. *Further requests* Wetlands International and its Waterbird Specialist Groups, working with the Technical Committee, to prioritise which waterbird taxa would benefit from an early review of the limits of their populations in the light of recent data and information, resources permitting, and to bring this assessment to MOP4;

4. *Requests* Wetlands International to work with the Secretariat to assess the extent of necessary resources needed to facilitate the future review of waterbird population definitions, and to seek to locate these; and

5. *Calls upon* Contracting Parties and donor organisations to help provide necessary financial means to facilitate this task.

This draft paper addresses point 3: prioritise which waterbird taxa would benefit from an early review of the limits of their populations in the light of recent data and information, resources permitting, and to bring this assessment to MOP4;

INTRODUCTION

Following from the conclusions of the paper to MoP3 on this topic, it is recognised that the best approach to the review of population limits is an integrated one which includes analysis of both census information (numbers and distribution) alongside information on movement of birds (ringing or satellite tracking), and maps this information geographically, i.e. as flyway maps or atlases that bring together maps of groups of species.

A number of the species under AEWA have already gone through an assessment of the limits for their populations, resulting in such publications like the *Atlas of Anatidae Populations in Africa and Western Eurasia* (Scott & Rose, 1996) or *Goose Populations of the Western Palearctic* (Madsen, Cracknell & Fox (eds.) 1999). Also the wader species from this flyway have gone through such assessment and the results are still being compiled into *An Atlas of Wader Populations in Africa and Western Eurasia* (in prep).

The assessments of the limits of the biogeographic populations of these species have been performed with care and represent the best available interpretation concerning the delimitation of populations, but following a process that, although it has been documented, is not fully transparent.

Other species have not yet been through such a process of reviewing their population limits.

A POSSIBLE APPROACH TO SETTING PRIORITIES FOR SUCH REVIEWS

This paper is proposing criteria to decide to which species priority should be given in reviewing the limits of their populations. There are multiple arguments that can be looked at when developing such criteria. On the one hand it might be argued that those species that have not yet been looked at should come first. It might also be proposed to review those for which recent (new) information is available, irrespective of whether these species have been looked at before (remember that some of the proposed limits stem from quite a while back). Yet another way of looking at it is to first consider those species for which there is a special interest, be it through an emerging issue like Avian Influenza (e.g. the so called Higher Risk Species) or in relation to (a change in) their conservation status.

A proposed set of criteria might look like this:

1. Consider those species that in relation to (a change in) their conservation status need a review of their population limits in order to develop effective action for their conservation (like developing a species action plan);
2. Consider those species for which there is special interest in relation to an emerging issue (e.g. Avian Influenza or Climate Change) or in relation to significant economic or socio-economics aspects of species;
3. Consider those species for which relevant new (recent) information is available (on distribution, abundance or relevant behavioural aspects) to assess the limits of their populations
4. Consider those species for which no earlier assessment has been done.
5. Consider those species for which an assessment has been done more than 10 years ago.
6. Other considerations, including
 - selecting those taxa, the review of which would inform current processes to identify and establish protected area networks.

- Selecting those taxa for which there is an interest or a data need. E.g. the EU target to establish national networks of marine SPAs by 2010 means that there is currently a pressing need for good overviews of key sites for seabirds and divers in European waters. Together with recent new survey information, updating these species accounts and providing good international site inventories should be a high priority.
- Selecting those taxa for which there is significant specialist group or expert group activity and associated databases e.g. for colonial waterbirds (Storks, ibises, spoonbills, cranes, herons).

Past reviews of population limits have been undertaken either as part of the process of flyway atlas production (e.g. Scott & Rose 1996) or as part of the review of population sizes (and thus distributions) (e.g. Stroud *et al.* 2004). However, the length of time taken to produce the wader atlas (eight years so far) and the WSG's wader populations review (also eight years) suggests that consideration should be given to the process of reviewing populations. Both the wader atlas and populations review are/were heavily resource constrained – in the latter case – largely being the result of voluntary activity.

Another and more modern model might be to establish a more web-based product that would allow progressive update, as and when either species accounts are drafted or new information comes to hand necessitating revision. This would allow dissemination of material already drafted by avoiding having to wait for all species accounts to be drafted. This is the approach chosen in the case of the GEF funded Wings over Wetlands project (GEF African Eurasian Flyway project) or in future projects that will produce web-based early warning systems for Avian Influenza (NEWFLUBIRD for example).

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Table 1. Summary information on status of published information on waterbird atlases and similar. Probably incomplete!

Family	Previously published?	More recent information	Considerations re priorities
Anatidae (Ducks, geese and swans)	Rose & Scott 1996	Madsen <i>et al.</i> (1999) significantly updated species accounts for western Palearctic geese, including distribution maps for some populations, but did not provide inventories of sites.	The EU target to establish national networks of marine SPAs by 2010 means that there is currently a pressing need for good overviews of key sites for seaducks and divers in European waters. Together with recent new survey information, updating these species accounts and providing good international site inventories should be a high priority.
Gaviidae (Divers)			See above re need for good overview of knowledge of marine distributions and key sites.
Podicipedidae (Grebes)	IUCN Global Species Action Plan (O'Donnel & Fjeldså 1997).		
Phoenicopteridae (Flamingos)	IUCN Global Species Action Plan??		
Ciciniidae (Storks)	?	Doesn't MedWet have colonial waterbird inventories? Yes, but only for breeding colonies	Could be done together with other colonial waterbirds
Threskiornithidae (Ibis and Spoonbills)	?	Doesn't MedWet have colonial waterbird inventories? Yes but only for breeding colonies	Could be done together with other colonial waterbirds
Ardeidae (Herons)	?	Doesn't MedWet have colonial waterbird inventories? Yes but only for breeding colonies	Could be done together with other colonial waterbirds
Pelecaniidae (Pelicans)	?	Doesn't MedWet have colonial waterbird inventories? Yes but only for breeding colonies	
Phalacrocoracidae (Cormorants)			Economic considerations would suggest value in good integrated information on this group at international scales.