

**7<sup>th</sup> MEETING OF THE TECHNICAL COMMITTEE**  
29 October - 01 November 2006, Bern, Switzerland

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**GUIDANCE ON ASSESSMENT OF DEGREE OF CONCENTRATION ON A  
SMALL NUMBER OF SITES**

*(Report by TC Working Group 2)*

**BACKGROUND**

The third meeting of parties called for guidance on the interpretation of criteria used in Table 1 of the AEWA Action Plan as follows:

*Recalling* Resolution 2.1 and the call of the MOP upon the Technical Committee to develop guidance for the interpretation of the term “significant long-term decline” in the context of Table 1 of the AEWA Action Plan;

*Noting* the responsive output presented by the Technical Committee to MOP3, being a succinct guidance (document MOP 3.11);

*Further noting* that there are more criteria used to classify species in various categories in Table 1 of the AEWA Action Plan for whose application no clear guidance exists;

*The Meeting of the Parties:*

*Calls upon* the Technical Committee to develop guidelines for interpretation of other criteria used in Table 1 of the Action Plan, notably:

- the degree of concentration on a small number of specific sites at any stage of annual cycle;
- the dependence on a habitat type which is under severe threat; and
- the extent of fluctuation in population size or trend.

The use of this term in the Criteria within the Action Plan table relates to two scenarios:

**Column A**

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;

**Column B**

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;

## A POSSIBLE APPROACH

It seems important to approach the task of developing this definition from the dual perspectives of the need to try and keep things as simple as possible (owing to data deficiency for many species and regions), as well as the important need to try to ensure harmonisation with concepts and approaches already developed by other relevant MEAs.

One way to consider this issues is perhaps to go back to Ramsar's 1% criterion (Criterion 6) — since 2005 adopted also for non-avian taxa (Criterion 9). By its nature, the criterion distinguishes between aggregating species (where concentrations can be identified such that site-protection is an appropriate conservation measure), and dispersed species, widely spread in a landscape and where wider landscape-scale or 'wider-countryside' conservation policies are desirable/necessary to address conservation issues (Atkinson-Willes 1976; Atkinson-Willes *et al.* 1982; Stroud in prep.).

Sites are identified as of international importance if they hold 1% or more of a biogeographic population of waterbird. Thus theoretically, at any single stage of its life cycle there may never be more than 100 sites of international importance for a population (in a scenario where the population was equally distributed in a season at 100 separate sites). In reality, patterns of distribution mean that for many species the number of sites would be very much fewer in a season. Throughout the whole annual cycle, there may be more than 100 sites holding >1% of a population, owing to migratory movements, and statistics to this end could be readily drawn from flyway atlas analyses and the International Waterbird Census. Typically, many migratory waterbirds congregate in the non-breeding season but occur at lower densities in the breeding season (especially the case for many arctic breeders). Colonially breeding species often are aggregated year-round. However, at an international scale, and given the large migratory ranges of most species (which have distribution encompassing thousands of kilometres) those species to which Criterion 6 applies could be considered to use a "a small number" of sites: often it will be tens of sites, sometimes in may be (lower) hundreds, but never thousands.

**A simple and pragmatic definition might be to say that a species which concentrates "onto a small number of sites..." is one where (any) sites of international importance, holding 1% or more of a population, can be identified?**

This guidance would then readily distinguish between aggregating species and those which disperse through landscapes (*e.g.* snipe and some of the sandpipers perhaps) — and it would use data and information that already readily exist.

Using this approach to categorise waders mapped in the first draft of the Wader Flyway Atlas, the approach would give the following lists:

### **Species site dependent (concentrations exist at >1% of population: *i.e.* dependent on a small number of sites)**

Oystercatcher  
Black-winged Stilt  
Avocet  
Golden Plover *P.a. apricaria*  
Grey Plover  
Ringed Plover  
? Kittlitz's Plover (very few sites)  
Chestnut-banded Plover  
Kentish Plover  
White-fronted Plover  
? White-headed Plover  
? Greater Black-winged Lapwing  
Black-tailed Godwit  
Bar-tailed Godwit

Curlew  
Common Redshank  
Turnstone  
Knot  
Sanderling  
Dunlin  
Broad-billed Sandpiper  
Ruff

**Species landscape dependent (no [or very few] concentrations of >1% of population)**

Golden Plover other than *P. a. apricaria*  
Pacific Golden Plover  
Three-banded Plover  
Lapwing  
African Wattled Plover  
Blacksmith Plover  
Lesser Black-winged Lapwing  
Crowned Lapwing  
Whimbrel  
[? Spotted Redshank]  
[? Greenshank]  
[? Little Stint]  
Temminck's Stint  
Purple Sandpiper  
[? Curlew Sandpiper]  
Red-necked Phalarope  
Grey Phalarope

[Note that more recent data collected for the *Wader flyway atlas* might change this categorisation].

## **ALTERNATIVE APPROACHES**

An alternative approach might be to erect scenarios such as "where more than **X**% of a population occur on less than **YY** sites". There are at least two problems with this:

- it involves an inevitable degree of arbitrariness in selecting the values of **X** and **Y**; and
- it requires more complete data at population scale than the earlier approach (since it requires data from at least **YY** sites).

## **REFERENCES**

- Atkinson-Willes, G.L. 1976. The numerical distribution of ducks, swans and coots as a guide in assessing the importance of wetlands in midwinter. *In: Proceedings of the international conference on the conservation of wetlands and waterfowl, 2-6 December 1974, 199-254.* Heiligenhafen, Federal Republic of Germany.
- Atkinson-Willes, G.L., Scott, D.A. & Prater, A.J. 1982. Criteria for selecting wetlands of international importance. *In: Proceedings of the conference on the conservation of wetlands of international importance especially as waterfowl habitat. Cagliari, Italy, 24-29 November 1980, pp. 1017-1042.* Supplemento alle Ricerche di Biologia della Selvaggina, 81 (1).
- Stroud, D.A. In prep. Selecting Ramsar sites: the development of criteria from 1971 to 2005. *Ramsar Technical Report*