

UK SPA SCIENTIFIC WORKING GROUP

8 May 2002

Selection of sites for wintering waterbirds: 'minimum of 50' rule

Background

Stage 1.1 of the SPA Selection Guidelines states that an area should be considered for SPA designation if it "...is used regularly by 1% or more of the Great Britain (or in Northern Ireland, the all-Ireland) population of a species listed in Annex 1 of the Birds Directive (79/409/EEC as amended) in any season".

The identification of terrestrial SPAs for non-breeding waterbirds in the UK under Selection Stage 1.1 currently requires that at least 50 individuals must be regularly present on a site before the area is considered for selection (for reasons explained in section 4.1.2 of the Review — see Appendix to this paper). This threshold has been used by the statutory agency since the 1980s to define the lower threshold of 'site importance' since the 1980s. It has also been adopted by the WeBS Partnership in the annual presentation of sites or national importance for waterbirds¹.

However, this rule may have the inadvertent effect of excluding populations from qualifying on SPAs and therefore requires further attention.

Principles

Criteria for site selection typically relate to *proportions* of populations. The rationale for the 'greater than 50 rule' is to exclude from consideration those sites that may hold proportions >1% but very small *absolute numbers* of birds — and where those numbers may realistically contribute little to the overall viability of a population. It applies typically to a number of waterbird populations where large numbers occur in the non-breeding season further south, but only very small numbers occur at the edge of the winter range in the UK.

Previously, the SPA Working Group for Bittern agreed to not to apply the rule for this species in view of its (then) globally threatened status and the strong conservation case for the selection of SPAs in winter. This was linked to the implementation of the Biodiversity Action Plan for this species.

Future exemptions from the rule would seem to require a similarly strong case or otherwise clear justification of conservation benefit at either national or international scales. There are a significant number of cases where the rule might be relaxed and the more exemptions are made, the more difficult it will be to sustain its application in other circumstances.

Accordingly, an initial first step for discussion may be therefore to determine the circumstances (perhaps in terms of conservation benefits) where exemptions from the rule might be considered.

Species with national 1% thresholds below 50

Table 1 shows those regularly occurring Annex 1 species of waterbirds in the UK during the non-breeding season with actual national 1% thresholds below 50. Of those species listed, Slavonian Grebe, Bittern, Little Egret, Bewick's Swan, Avocet and Ruff already qualify for at least one terrestrial SPA based on Selection Guideline 1.1. Population estimates used to calculate 1% thresholds are taken from sources given by Stone *et al.* (1997)ⁱⁱ.

There are three species for which sites could be theoretically selected with the application of Selection Guideline 1.1, but which were not selected apparently because their national 1% thresholds are below 50 — Black-throated Diver, Great Northern Diver and Smew.

There are also many more sites that could theoretically be selected for the other species listed in Table 1.

Table 1. Regularly occurring Annex 1 species of waterbirds in the UK during the non-breeding season with national 1% thresholds below 50

Species/ Population	SPEC status ⁴	International & national 1% threshold for non-breeding season ¹	Has at least one terrestrial SPA been designated for this species during the non- breeding season?	Were Stage 1.1 guidelines used to identify at least one SPA?	No. of WeBS sites regularly supporting >1% of the national popn.? ²	% of int. and nat. popns supported by nationally important WeBS sites ³
Red-throated Diver	3	750 - Int 50 – GB 10 – All- Ireland	Yes [1] (sites under consideration in marine SPA review)	Yes	-	-
Black-throated Diver	3	1,200 - Int 7 – GB 1 – All-Ireland	No (but sites under consideration in marine SPA review)	-	9	Int. – 0.1 GB – 2.8 NI – 0.4
Great Northern Diver	—	50 - Int 30 – GB	No (but sites under consideration in marine SPA review)	-	3	Int. - 24 GB – 40
Slavonian Grebe	—	50 - Int 4 – GB	Yes [3] (sites under consideration in marine SPA review)	Yes	-	-
Bittern	3	250 - Int 1 – GB	Yes [10]	Yes	-	-
Little Egret	—	1,200 - Int 5 – GB	Yes [3]	Yes	-	-
Bewick's Swan	3	170 - Int 25 – All- Ireland	Yes [2 – Ire]	Yes	-	-
Smew	3	250 - Int 2 – GB	No	-	58	Int. – c.1 GB - 100
Avocet	3	670 - Int 10 – GB	Yes [16]	Yes	-	-
Ruff	4	10,000 - Int 7 – GB	Yes [8]	Yes	-	-

¹ Only national 1% thresholds ≥ 1 are presented.

² Based on five-year means presented in *Wildfowl & wader counts: 1999-2000*, including counts of birds from below the mean high water mark.

³ Based on five-year means of all nationally important sites (not restricted to a single month). Northern Ireland (NI) totals are presented as a proportion of the All-Ireland population.

⁴ 3 = unfavourable conservation status & not globally concentrated in Europe;
4 = favourable conservation status & globally concentrated in Europe
— = favourable conservation status & not globally concentrated in Europe

Species with SPAs selected on the basis of numbers >1% of national populations but <50 individuals

Two species have been selected on the basis of numbers <50 but which are nationally important: Slavonian Grebe, Bittern and Little Egret (all listed on Annex I).

- For Slavonian Grebe, the Exe Estuary was selected (Stage 1.1) as holding 20 individuals (5.0% of the national population).
- The approach for Bittern was discussed and agreed by the SPA Steering Group, with 10 sites selected (all Stage 1.1) in the non-breeding season “in light of its status on the shortlist of the Globally Declining Species of the UK Biodiversity Action Plan”. [Note however, that since the commencement of the SPA Review, Bittern are no longer listed as a Globally Threatened Speciesⁱⁱⁱ].
- For Little Egret, Tamar Estuary was selected (Stage 1.1) as holding 42 individuals (8.4% of the national population).

Sites monitored by WeBS supporting >1% of national populations of Black-throated Diver, Great Northern Diver and Smew

Table 1 presents rough estimates of the number of sites monitored by WeBS currently supporting >1% of the national populations of Black-throated Diver, Great Northern Diver and Smew and the proportion of the national/international populations that these sites support. Lists of sites monitored by WeBS for each species which may qualify are presented in Table 2.

Table 2. UK sites monitored by WeBS supporting >1% of the national populations of Black-throated Diver, Great Northern Diver and Smew during the non-breeding season (terrestrial sites are highlighted in bold)

Species	Site	WeBS five-year (1995/6-1999/2000) mean count	
Black-throated Diver	Scapa Flow	57	
	Loch Ewe	28	
	Moray Firth	14	
	Loch Coalisport	12	
	Forth Estuary	11	
	Gruinard Bay	10	
	Girvan-Turnberry	9	
	Strangford Lough	3	
Belfast Lough	1		
Great Northern Diver	Scapa Flow	781	
	Tankerness	362	
	Whiteness-Scarvister	44	
Smew*	Wraysbury Gravel Pits	SPA: SW London Waterbodies (<i>no waterbird assemblage</i>)	49
	Dungeness Gravel Pits	SPA: Dungeness to Pett Level (<i>no waterbird assemblage</i>)	26
	Lee Valley Gravel Pits	SPA: Lee Valley (<i>no waterbirds assemblage</i>)	22
	Fen Drayton Gravel Pits		16
	Thorpe Water Park		16
	Cotswold Water Park (west)		15
	Rutland Water	SPA (<i>waterbird assemblage</i>)	14
	Twyford Gravel Pits		12
	Earls Barton Gravel Pits		11
	Chew Valley Lake	SPA (<i>no waterbird assemblage</i>)	10
	Middle Tame Valley Gravel Pits		10
	Hornsea Mere	SPA (<i>no waterbird assemblage</i>)	10
	Seaton Gravel Pits		9
	Rye Harbour & Pett Level	SPA: Dungeness to Pett Level (<i>no waterbird assemblage</i>)	8
	Eyebrook Reservoir		8
	Loch of Strathbeg	SPA (<i>waterbird assemblage</i>)	7
	Hoveringham Gravel Pits		6
	Little Paxton Gravel Pits		6
	Croxall Pits		6
	Colne Valley Gravel Pits		6
Pitsford Reservoir		6	
Eglwys Nunydd Reservoir		6	
Leybourne/New Hythe Gravel Pits		6	
Bedfont & Ashford Gravel Pits		5	

*Given the large number of sites monitored by WeBS supporting <1% of the national non-breeding population of Smew, a qualifying level of five has been chosen to select sites for presentation.

Black-throated Diver and Great Northern Diver occur at some WeBS sites, but the areas used are generally marine and such information that is available on distributions within sites suggest that the divers occur outwith the boundaries of the terrestrial SPAs. For Black-throated Diver —Moray Firth, Forth Estuary and Belfast Lough; for Great Northern Diver — Lough Foyle. SPA provision for these species is being considered as part of the current marine SPA review.

1% thresholds for national populations of migratory species

In addition, national 1% thresholds are also used to identify important components within internationally important assemblages (Stage 1.3). Table 3 lists those non-Annex I species of waterbird for which terrestrial SPAs have been identified under Selection Guideline 1.3 using the minimum 50 rule, but whose true national 1% thresholds are below 50.

Table 3. Actual 1% thresholds of non-Annex I species to which the minimum threshold of 50 individuals currently applies in the non-breeding season (see section 5.1.2. of the introductory 'SPA Review' text for explanation of the rationale)

<i>Species</i>	<i>All-Ireland threshold</i>	<i>GB threshold</i>
Little Grebe		30
Great Crested Grebe	30	
Red-necked Grebe		1
Black-necked Grebe		1
Cormorant		
Bean Goose		4
Icelandic Greylag Goose	40	
Svalbard Brent Goose		25
Scaup	30	
Eider	20	
Common Scoter	40	
Velvet Scoter		30
Red-breasted Merganser	20	
Grey Plover	40	
Sanderling	35	
Purple Sandpiper	10	
Greenshank	9	

For all of these species there is already good coverage in species' SPA suites.

Conclusions

1. There is a need for consistency in the application of the greater than 50 rule'. Future exemptions from the rule require a strong case or otherwise clear justification of conservation benefit at either national or international scales. There are a significant number of cases where the rule might be relaxed and the more exemptions are made, the more difficult it will be to sustain its application in other circumstances.
2. For three species (Black-throated Diver, Great Northern Diver, and Smew) the application of the 'minimum of 50 rule' during the terrestrial SPA review appears to have resulted in no sites being selected.
3. For Black-throated Diver and Great Northern Diver however, the reason no sites were selected during the terrestrial review was that although some count sites have the same names as sites in the terrestrial SPA series, the areas used by the divers are outwith the designated boundary (offshore and below MLWS level). Provision for these species in the marine environment will be made through the marine SPA review.
4. Smew occurs on inland waters, and there is currently no SPA suite as a result of the application of the minimum of 50 rule. UK lies at the edge of the winter range of the species, with most of the population in occurring in The Netherlands. Selection of the top four sites monitored by WeBS (Table 2) would result in a SPA suite holding at least half the national population. There are eight count sites on seven SPAs (Table 2) which collectively hold about three-quarters of the national population). There are assemblages of waterbirds at only two of these SPAs, however.

Recommendations

In light of these conclusions, it is recommended that the UK SPA Scientific Working Group:

- ◆ **Discuss and agree** those circumstances (perhaps in terms of conservation benefits) where exemptions from the 'greater than 50 rule' might be considered.

- ◆ **Note** the anticipated SPA coverage of for Black-throated Diver and Great Northern Diver as a result of the marine SPA review.
- ◆ In the light of the earlier agreement of principles, **discuss and agree** whether there are grounds for the selection of an appropriate SPA suite for Smew – the only (terrestrial) Annex I species for which the application of the minimum of 50 rule has resulted in no terrestrial SPAs being selected.
- ◆ **Support** the continued application of the 'minimum of 50 rule' as a pragmatic means of defining a lower limit to 'site importance' in the context of identification of statutory sites in the UK.

James Robinson, WWT
David Stroud, JNCC

Appendix

4.1.2 *Minimum numbers for wintering waterbirds*

The size of the national population of some wintering waterbirds is very small. This typically is the case for those species whose main range in the non-breeding season occurs either to the south (e.g. for Ruff and Greenshank) or east (e.g. Bean Goose and Smew) of the UK. For these species, 1% of national populations give small values, often amounting to just a few individuals. In an international context these very small numbers are not of major significance for sustaining viable biogeographical populations of these species.

With this in mind, it has been the statutory agencies' long-standing practice to require at least 50 individuals to be regularly present on a site before that area is considered for site selection (Salmon 1981). This has been the practice with regard to the selection of SSSIs and has also been adopted for this review of SPAs.

Note that the guideline has only been applied in the context of wintering waterbirds. It would not be appropriate for breeding birds where the rarest breeding populations of many species are characterised by just a few pairs. Nor would it be appropriate where the global population size is small (for example, a globally threatened species of waterbird such as Bittern). In such a case, it would be entirely appropriate to select a site based on small absolute numbers (as indeed, is urged by the Ramsar Convention's site selection guidance – Res. C.VII.11).

ⁱ Cranswick, P., Pollitt, M., Musgrove, A. & Hughes, B. 1999. *The Wetland Bird Survey 1997-98: Wildfowl and Wader Counts*. Slimbridge: BTO, WWT, RSPB & JNCC. 218 pp.

ⁱⁱ Stone, B.H., Sears, J., Cranswick, P.A., Gregory, R.D., Gibbons, D.W., Rehfisch, M.H., Aebischer, N.J. & Reid, J.B. 1997. Population estimates of birds in Britain and in the United Kingdom. *British Birds* 90: 1-22.

ⁱⁱⁱ BirdLife International 2000. *Threatened birds of the world*. Barcelona and Cambridge, UK: Lynx Edicions and BirdLife International. 852 pp.