

A6.26 Svalbard Light-bellied Brent Goose *Branta bernicla hrota*

1. Status in UK

Biological status		Legal status		Conservation status	
Breeding		Wildlife and Countryside Act 1981	General Protection	Species of European Conservation Concern	SPEC 3 Unfavourable conservation status (vulnerable) but not concentrated in Europe
Migratory	✓	Wildlife (Northern Ireland) Order 1985	General Protection	(UK) Species of Conservation Importance	Table 4
Wintering	✓	EC Birds Directive 1979	Migratory	All-Ireland Vertebrate Red Data Book	

2. Population data

	Population sizes (individuals)	Selection thresholds	Totals in species' SPA suite
GB	2,430	50 (see section 5.1.2 for rationale)	1,844 (75.9% of GB total) ¹
Ireland			
Biogeographic population	5,000	50	1,844 (36.9% of biogeographic population)

GB population source: Cranswick et al. 1992

Biogeographic population source: Rose & Scott 1997

3. Distribution

Brent Geese have a circumpolar distribution breeding in the extreme high Arctic in all northern countries. The range extends from Greenland to Svalbard and northern Russia, continuing through Alaska to the Canadian Arctic Archipelago. There are three sub-species, only two of which regularly occur in Europe (section 6.24). The sub-species *B. b. hrota* occurs generally in the western Arctic (Canada to Svalbard and Franz Joseph Land). Two distinct populations of *B. b. hrota* occur in Britain and Ireland. One breeds in Canada and winters in Ireland (section 6.25); the other breeds in Svalbard and north-east Greenland, wintering in Denmark and England.

The whole population of the Svalbard Light-bellied Brent Goose migrates along the Norwegian coast to arrive in Denmark in October. A variable proportion of the population then moves on to Lindisfarne on the Northumberland coast later in the winter (Clausen *et al.* 1998). The peak number of birds wintering in England depends on weather conditions on the continent and, during severe winters, nearly the whole population has been recorded at

¹ This assessment underestimates the actual coverage of the population within the SPA suite owing to lag in reporting times and more recent assessments of numbers. The actual UK proportion is c. 100% and the corresponding international proportion is 54.2%.

Lindisfarne (Clausen *et al.* 1998). The majority of birds usually depart their English wintering grounds in mid-January following food depletion.

In common with other Brent Goose populations, the Svalbard birds feed on mudflat vegetation, mainly eelgrasses *Zostera noltii* and *Z. marina* and green seaweeds *Enteromorpha* and *Ulva* spp.. More recently, a small but increasing number of Svalbard Light-bellied Brent Geese have also taken to feeding on farmland adjacent to their coastal wintering areas.

4. Population structure and trends

It is estimated that the biogeographic population of Svalbard Light-bellied Brent Geese stood at around 40,000 to 50,000 individuals in the early 20th century (Scott & Rose 1996). At this time they were common and widespread in their UK wintering grounds with approximately 10,000 geese, nearly all light-bellied birds, wintering in the Moray Firth (Owen *et al.* 1986). However, by the 1930s, this had dropped to 4,000 birds and the site was deserted soon after. Similarly, at Lindisfarne, the population was reduced to 4,000 geese by the 1950s, and further reduced to between 2,500 and 3,000 birds by the 1960s.

The total population declined to its lowest level in the early 1970s when numbers breeding on Svalbard were estimated to be about 2,000 individuals (Owen *et al.* 1986). The population crash this century, in common with other Brent Goose populations, has been attributed to an eelgrass die-off due to disease, in combination with shooting and disturbance (Salomonsen 1958). However, unlike other populations, and despite total protection throughout its range, the Svalbard Light-bellied Brent Goose remains depressed. More recent estimates of the biogeographic population are of 3,400 birds in 1983 (Lack 1986) and between 4,000 and 5,800 in the early 1990s (Clausen *et al.* 1998). Suggested explanations for this very slow recovery include competition with an expanding Barnacle Goose *Branta leucopsis* population on the breeding grounds, as well as heavy predation there by Polar Bears *Ursus maritimus* and Arctic Foxes *Alopex lagopus* (Owen *et al.* 1986; Madsen *et al.* 1989, 1992).

Currently estimated at 5,000 birds (Rose & Scott 1997), this is one of the smallest and most vulnerable goose populations in the world.

Recent total winter counts for both Light-bellied Brent Geese and Wigeon *Anas penelope* at Lindisfarne represent only 40 % of the potential population that the food supply could support (Percival *et al.* 1998). This suggests that numbers have been held down by some factor other than food supply.

5. Protection measures for population in UK

SPA suite

In the non-breeding season, the UK's SPA suite for the Svalbard population of Light-bellied Brent Geese supports, on average, 1,844 individuals (the five year peak mean count at Lindisfarne for the period 1991/92 to 1995/96). This total amounts to all of the British population, and about 37% of the international flyway population. The species does not occur in Northern Ireland. The suite comprises a single site where these geese have been listed as a qualifying species (Table 6.26.1).

6. Classification criteria

The single UK site identified under Stage 1.2, by regularly supporting 1% or more of the biogeographical population, has been selected for the species' SPA suite after consideration

of Stage 2 judgements. The site is located in north-east England, the only area where the population regularly overwinters in the UK.

During periods of peak influxes from Denmark, when virtually the whole population is present in Britain, smaller flocks of geese can occur outside the suite, particularly in south-east England. However, no further SPAs have been selected due to the inconsistent, dispersed, low-density occurrence of the species outside the SPA suite.

Distribution map for Svalbard Light-bellied Brent Goose SPA suite

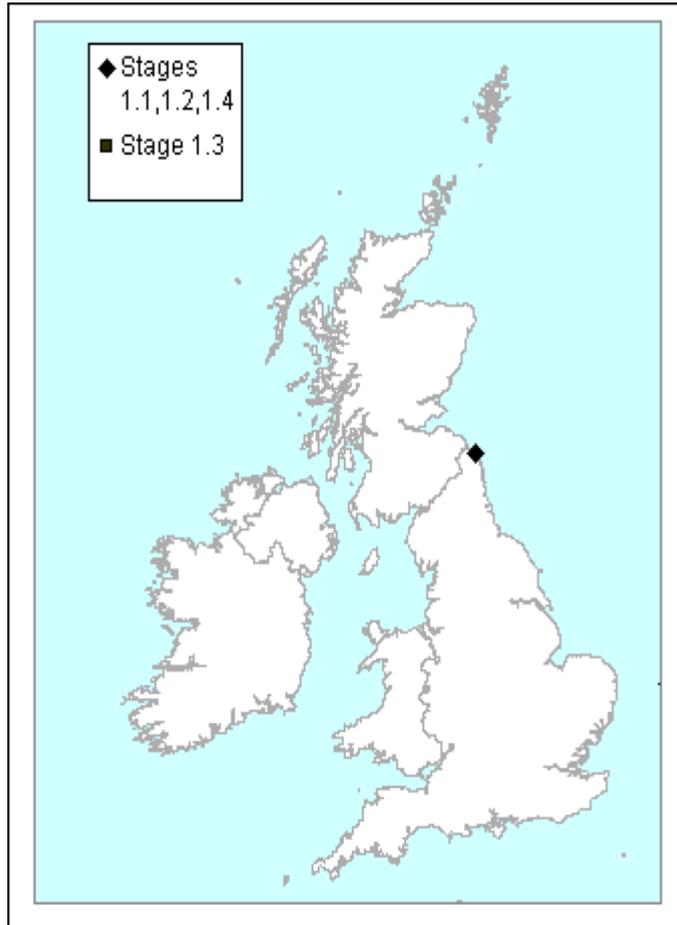


Table 6.26.1 – SPA suite

Site name	Site total	% of biogeographical population	% of national population	Selection stage
Lindisfarne	1,844	36.9	75.9	1.2
TOTALS	1,844	36.9%	75.9% ²	

² This assessment under-estimates the actual coverage of the population within the SPA suite owing to lag in reporting times and more recent assessments of numbers. The actual national proportion is close to 100% and the corresponding international proportion is 54.2%.