

A6.66 Purple Sandpiper *Calidris maritima*

1. Status in UK

Biological status		Legal status		Conservation status	
Breeding	✓	Wildlife and Countryside Act 1981	General Protection Schedule 1(1)	Species of European Conservation Concern	SPEC 4 Favourable conservation status (secure) but 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	21,300	210	1,973 (9% of GB total)
Ireland	1,000	50 (see section 5.1.2 for rationale)	No SPAs selected in Northern Ireland
Biogeographic population	50,500	500	1,973 (4% of biogeographic population)

GB population source: Cayford & Waters 1996

All-Ireland population source: Cranswick et al. 1999

Biogeographic population source: Rose & Scott 1997

3. Distribution

Purple Sandpipers breed in the western part of the Arctic, being distributed from north-east Canada, Greenland, Iceland, Scandinavia and Spitsbergen to the Taimyr Peninsula and Arctic islands off north Siberia (Cramp & Simmons 1983). In some parts of its distribution (*e.g.* east Greenland, Russia) the species is found nesting in the very high Arctic, whereas in other areas (*e.g.* west Greenland, Iceland and Scandinavia) in nests in low Arctic or sub-Arctic biomes. In winter, birds nesting in the western Arctic migrate to the Atlantic coasts of the United States, Canada and south Greenland, whilst birds nesting in the eastern Arctic overwinter on the coasts of northern Russia and north Norway, south to the north coast of Spain. The species is monotypic.

The Purple Sandpiper is found on most Atlantic open shores in Europe, especially those of an exposed or rocky nature. The species winters on open coasts all around Britain and Ireland, but is found in its greatest numbers in the Outer Hebrides, Orkney, Shetland, north-east Scotland and north-east England (Atkinson *et al.* 1978; Nicoll *et al.* 1988). A long-billed population, thought to originate from Canada or east Greenland, predominates in the north and west, and a short-billed population from southern Norway in the south and east (Buxton *et al.* 1985; Nicoll *et al.* 1988; Rae *et al.* 1986; Summers *et al.* 1992; Summers 1994). The

small numbers that breed in the Scottish Highlands have been reported as forming part of the latter population (Dennis 1983).

A small number of Purple Sandpipers from a separate breeding population, possibly from Russia, also winter along the coast of south-east England (Nicoll *et al.* 1988; Summers 1994). Only small numbers occur in Northern Ireland. The species is characteristic of rocky shores, occurring in high numbers on wave-cut platforms, but may also occur in other intertidal habitats, particularly in the north (Summers *et al.* 1988). Purple Sandpipers are highly faithful to their wintering sites, both within and between years (Burton & Evans 1997; Dierschke 1998; Summers *et al.* 1990).

4. Population structure and trends

Two biogeographical populations of Purple Sandpipers have been described (Rose & Scott 1997). Of these, those occurring on the coasts of western Europe belong to the East Atlantic Flyway population. This is currently estimated to comprise 50,500 individuals (Rose & Scott 1997).

Due to their preference for rocky shores (often in remote areas), Purple Sandpipers are poorly monitored by the Wetland Bird Survey (WeBS). The best recent UK population estimates have been obtained by the 1984/85 Winter Shorebird Count (Moser & Summers 1987) and the 1998 Non-estuarine Waterfowl Survey (NEWS). A British estimate of 21,300 was calculated for the period 1987/88–1991/92, based on data from the former survey, together with recorded population changes from 40 sites covered in both periods, as well as WeBS data (Cayford & Waters 1996). This figure represents 42% of the biogeographic population indicating the particular importance of the UK coastline for this species.

Precise information on wintering numbers outside the UK remains limited, however, and it is possible that numbers on the coast of Norway, and thus the biogeographic population as a whole, may be substantially underestimated (see Summers *et al.* 1990). Results from NEWS are only provisional, but preliminary unpublished analyses indicate that the UK non-estuarine population has risen by 3,800 (15%) since 1984/85 to 25,100. Numbers have increased greatly in the Outer Hebrides (from 5,400 to 14,400) and have also risen in Shetland. Elsewhere, particularly in eastern Scotland and north-east England, there have been substantial declines, which account for the previously reported fall of 44% calculated from a comparison of numbers at sites covered in both surveys (Cranswick *et al.* 1999). The population in Scotland as a whole is estimated to have risen by 23%. Only 1,100 Purple Sandpipers are now estimated to winter in England (a decline of 32%), less than 200 in Northern Ireland (an 84% decline) and just over 100 in Wales (a 36% decline).

The reasons for the observed declines are not clear, but may relate to reduced organic inputs from sewage outfalls, or climate change. Future results from the 1998 European Non-Estuarine Wader Survey (which included Scandinavia) should provide a better estimate of the biogeographic population.

5. Protection measures for population in UK

SPA suite

In the non-breeding season, the UK's SPA suite for Purple Sandpipers supports, on average, 1,973 individuals. Owing to a lack of January data for these sites, the total comprises the sum of the peak means. This probably slightly overestimates the total for the SPA suite, which amounts to about 9.3% of the British population and about 4% of the international flyway population. Within an all-Ireland context, there have been no SPAs selected in Northern

Ireland. The suite comprises three sites where Purple Sandpipers have been listed as a qualifying species (Table 6.66.1).

6. Classification criteria

The two sites in the UK supporting more than 1% of the international population (East Sanday Coast and Northumbria Coast) were considered under Stage 1.2, and both were selected after consideration of Stage 2 judgements. A further site (North Uist Machair and Islands) was considered and selected under Stage 1.4 as a site holding a comparatively large population and contributing significantly to range coverage.

The sites are located in the main wintering areas of Purple Sandpipers in the UK – Orkney, the Outer Hebrides and the north-east coast of England. All sites are multi-species SPAs, of importance also for a range of other waterbirds.

Distribution map for Purple Sandpiper SPA suite

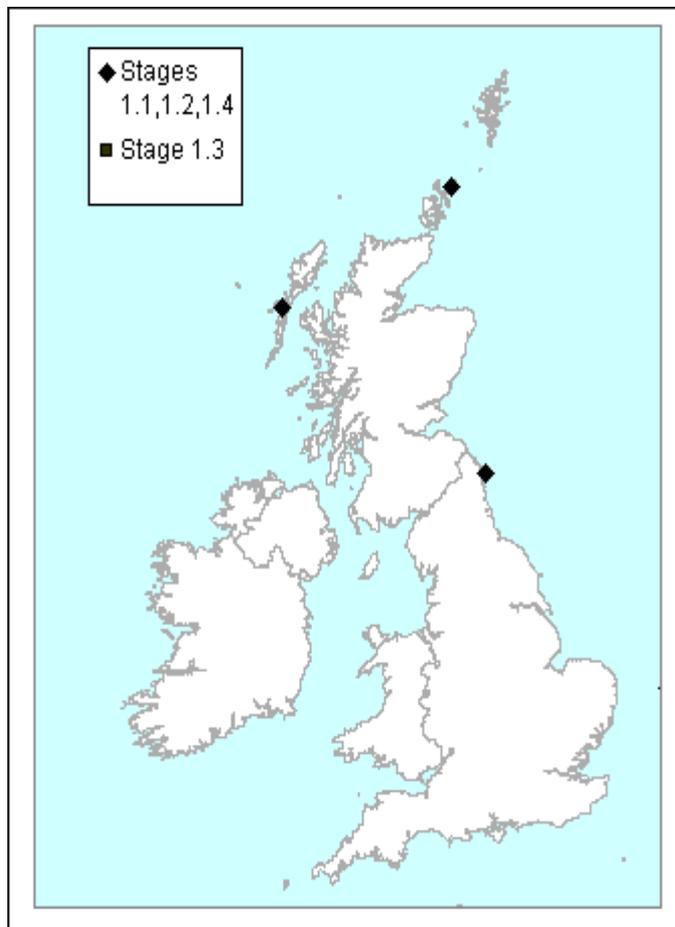


Table 6.66.1 – SPA suite

Site name	Site total	% of biogeographical population	% of national population	Selection stage
East Sanday Coast	840	1.7	3.9	1.2
North Uist Machair and Islands	370	0.7	1.7	1.4
Northumbria Coast	763	1.5	3.6	1.2
TOTALS	1,973 ¹	3.9%	9.3%	

¹ Owing to lack of January data for these sites, the SPA suite total comprises the sum of the peak means for the individual sites. This will probably slightly over-estimate the total for the SPA suite.