

A6.12 Shag *Phalacrocorax aristotelis* (breeding)

1. Status in UK

Biological status		Legal status		Conservation status	
Breeding	✓	Wildlife and Countryside Act 1981	General Protection	Species of European Conservation Concern	SPEC 4 Favourable conservation status (secure) and 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 (pairs)	Selection thresholds	Totals in species' SPA suite
GB	37,500	375	17,584 (47% of GB population)
Ireland	8,800	88	No SPAs selected in Northern Ireland
Biogeographic population	125,000	1,250	17,584 (14% of biogeographic population)

GB population source: Lloyd et al. 1991

Ireland population source: Lloyd et al. 1991

Biogeographic population source: Lloyd et al. 1991

3. Distribution

In contrast to the closely related Cormorant, the Shag has a much more restricted global distribution, being found only in the Western Palearctic, where it breeds in North Atlantic coastal areas from Iceland in the north, south to Morocco, including the whole of the Norwegian coastline as far north as the Kola Peninsula. It also has a restricted and discontinuous breeding distribution along the shores of the Mediterranean and Black Seas.

Three sub-species of Shag have been described. The nominate *P. a. aristotelis* is the most abundant, occurring through most of the global range in north and west Europe. The small numbers of birds occurring in north-west Africa belong to *P. a. riggenbachi*, whilst *P. a. desmarestii* is endemic to the Mediterranean basin (Aguilar & Fernández 2000).

In the UK, the Shag is restricted to rocky coasts of Britain, being mostly absent from southern and eastern England, *i.e.* from the Isle of Wight in southern England, to Northumberland in north-east England. Most of the population breeds in the northern isles and in western Scotland (Lloyd *et al.* 1991; Gibbons *et al.* 1993).

Shags in Britain and Northern Ireland stay close to their breeding colonies throughout the year (Stone *et al.* 1995), thus the species' distribution remains coastal outside the breeding season.

4. Population structure and trends

There have been two complete British and Irish censuses of Shags, in 1969/70 (Cramp *et al.* 1974) and 1985-87 (Lloyd *et al.* 1991). The latter census recorded a 40% increase in numbers, with 37,500 pairs in Britain, and 8,800 pairs in Ireland (260 pairs of which were in Northern Ireland). There was some regional variation in proportional increases between these two surveys (Lloyd *et al.* 1991). This population increase has probably been caused by a relaxation in levels of illegal persecution and also by a general increase in the supply of sandeels – one of their preferred foods.

Shags are particularly susceptible to rapid changes in breeding numbers, though usually the effects are local or regional, rather than national. These fluctuations have been caused by poisoning from (natural) toxic algal blooms (Coulson *et al.* 1968), but more frequently relate to fluctuations in food supply (Harris *et al.* 1987).

The biogeographic population has increased in past decades, and is currently estimated at 125,000 (although may be as low as 85,500). Long-term trends at an international scale are generally obscured however, by the effects of short-term fluctuations at individual colonies or within specific regions.

5. Protection measures for population in UK

SPA suite

In the breeding season, the UK's SPA suite for Shag supports an average of 17,584 pairs. This amounts to about 47% of the British breeding population, and over 14% of the international population. This total is contained within 13 sites (Table 6.12.1) for which Shag has been listed as a qualifying species. Within an all-Ireland context, there have been no SPAs selected for Shags in Northern Ireland.

6. Classification criteria

All four Shag colonies in the UK that support more than 1% of the international breeding population (Firth of Forth Islands, Foula, East Caithness Cliffs and the Shiant Isles) were considered under Stage 1.2. All were selected after consideration of Stage 2 judgements. Additionally, nine sites were selected under Stage 1.3 (see section 5.3), since Shag was identified as an important component of the breeding seabird assemblages at these localities.

All sites selected are multi-species SPAs, important for a range of other seabirds. The SPA suite is spread through most of the Shag's UK range, from Shetland in the north-east, through to the Isles of Scilly in the extreme south-west. Some UK SPAs for this species have a very long recorded history of occupancy. For example, Shags are known to have been breeding on Foula, Sule Skerry and Sule Stack, East Caithness Cliffs, St Abb's Head, the Firth of Forth Islands (Bass Rock), and the Farne Islands since at least the last quarter of the nineteenth century (Holloway 1996).

Distribution map for breeding Shag SPA suite

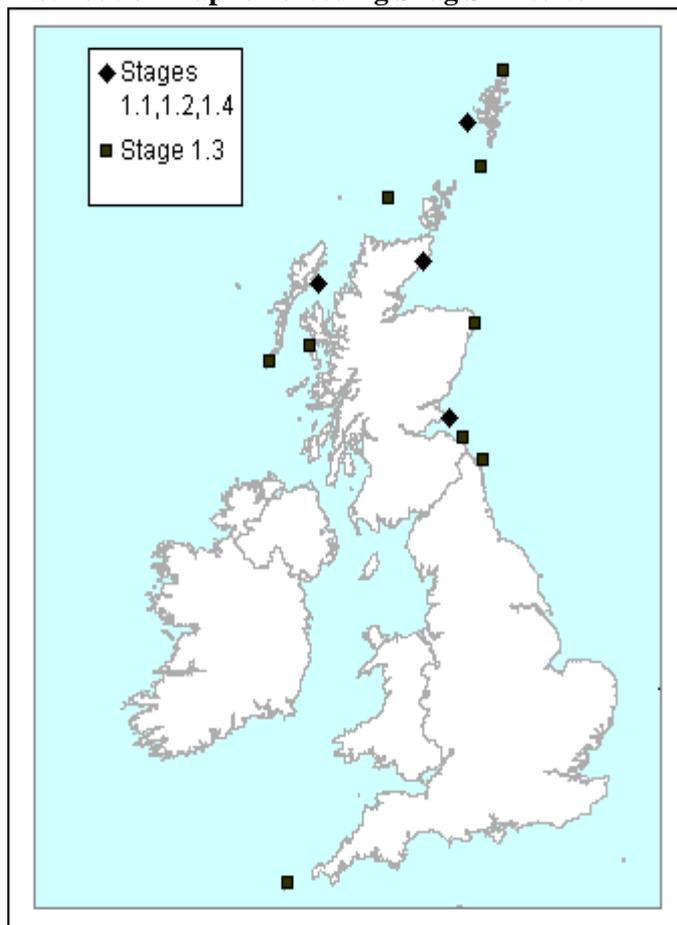


Table 6.12.1 – SPA suite

Site name	Site total	% of biogeographical population	% of national population	Selection stage
Buchan Ness to Collieston Coast	1,045	0.8	2.8	1.3
Canna and Sanday	1,140	0.9	3.0	1.3
East Caithness Cliffs	2,345	1.9	6.3	1.2
Fair Isle	1,099	0.9	2.9	1.3
Farne Islands	994	0.8	2.7	1.3
Firth of Forth Islands	2,887	2.3	7.7	1.2
Foula	2,400	1.9	6.4	1.2
Hermaness, Saxa Vord and Valla Field	540	0.4	1.4	1.3
Isles of Scilly	1,108	0.9	3.0	1.3
Mingulay and Berneray	721	0.6	1.9	1.3
Shiant Isles	1,780	1.4	4.8	1.2
St Abb's Head to Fast Castle	651	0.5	1.7	1.3
Sule Skerry and Sule Stack	874	0.7	2.3	1.3
TOTALS	17,584	14.1%	46.9%	