A6.87 Kittiwake *Rissa tridactyla* (breeding)

1. Status in UK

Biological status		Legal status		Conservation status
Breeding	✔	Wildlife and Countryside Act 1981	**General Protection**	Species of European Conservation Concern
Migratory	✔	Wildlife (Northern Ireland) Order 1985	**General Protection**	(UK) Species of Conservation Importance
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	490,000	4,900	383,775 (78% of GB population)
Ireland	50,200	502	6,822 (14% of all-Ireland population)
Biogeographic population	3,170,000	31,700	390,597 (12% of biogeographic population)

GB population source: Lloyd et al. *1991*
All-Ireland population source: Gibbons et al. *1993*
Biogeographic population source: Lloyd et al. *1991*

3. Distribution

The Kittiwake has a circumpolar distribution throughout the temperate and Arctic zones of the northern hemisphere. Breeding colonies are found on both sides of the Atlantic from the Gulf of St. Lawrence to Portugal, from the southern Kuril Islands to Greenland and the high Arctic islands of the Arctic Ocean. Kittiwakes are polytypic, with two sub-species described. The nominate race *R. t. tridactyla* occurs in its North Atlantic range, whilst another sub-species occurs throughout the North Pacific.

The Kittiwake is a colonial breeding seabird and occurs discontinuously along the shores of north-west Europe, from the coasts of Portugal and Galicia (north-west Spain) in the south, through Brittany (France), Ireland and Britain, Iceland and along Scandinavian coasts to the Kola Peninsula. In the UK, Kittiwakes occur on most coasts, although there are few colonies on the south and east coasts of England.

The steep sea cliffs favoured for nesting are often shared with other seabirds, particularly Guillemot, and include some of the most impressive seabird colonies in Britain. Hence, a high percentage of the British Kittiwake population nests in northern Scotland and along the North Sea coast south to East Yorkshire. Smaller colonies are widespread but are often separated by long stretches of unoccupied coast. From Lincolnshire around to Dorset, there are few colonies, generally reflecting a shortage of suitable cliff sites. At Lowestoft, Suffolk,

old buildings and a pier are used as nesting sites. At Sizewell, another Suffolk site, birds have colonised the offshore rigs associated with the cooling system of the nearby nuclear power station (Crewe 1998).

Outside the breeding season, Kittiwakes range widely in the seas around northern Europe. Between November and March they occur especially in offshore areas, although at other times of the year they move closer inshore to feed (Stone *et al.* 1995).

4. Population structure and trends

A total of 540,200 pairs breed in Britain and Ireland (50,200 in Ireland, 490,000 in Britain). This combined total represents about 31% of total numbers in Europe. In many parts of the Kittiwake's range, precise breeding numbers are unknown, but it seems likely that at least half the world population breed in Svalbard, Iceland and the Faeroe Islands (Lloyd *et al.* 1991). Together, these areas probably support three million breeding pairs with a further 1,250,000 breeding in Alaska.

The Bempton-Flamborough cliffs hold possibly the largest colony (83,700 pairs in 1986) in the North Atlantic (Lloyd *et al.* 1991). Other colonies holding over 10,000 breeding pairs include Handa (Sutherland), Fair Isle (Shetland), St Abb's Head (Borders) and Fowlsheugh (Grampian).

Along with many other seabird species, the Kittiwake began to expand its range after protection measures came into force at the beginning of the 20th century. There was a range extension southwards between the late 1930s and the 1970s. Over this period, Kittiwakes colonised Denmark, Sweden and more recently Spain and Portugal. They have recolonised Helgoland (Germany) and spread south into France (Cramp *et al*. 1983). Breeding numbers have probably increased throughout the species' range during the 20th century though there are signs that this is slowing in Alaska, Denmark, the Faeroe Islands, Britain and Ireland (Lloyd *et al.* 1991).

The first complete census of Kittiwakes was made in 1969–1970 and the results showed that the total population for Britain and Ireland was in excess of 400,000 pairs with 75% of these birds nesting on the east coast and in Shetland and Orkney (Cramp *et al*. 1974). In that period the large Bempton-Flamborough, Yorkshire colonies held 30,800 pairs.

The second complete census of Kittiwakes was in 1985–1987. An outline of the census results is given by (Lloyd *et al*.1991). Then 540,000 Kittiwakes were nesting in Britain and Ireland. Of these, 70% bred in Scotland and about 25% in England, Wales, the Channel Islands and the Isle of Man. Less than 10% were found in Ireland. Overall, the entire breeding population had increased by about 20% between 1969 and 1987 with major changes only in limited areas. Numbers in Scotland remained stable overall because declines in places like Orkney, the Moray Firth, and Dumfries and Galloway were offset by increases in all other areas. In Ireland, some coastline in Donegal was not surveyed in 1985–1987, but allowing for this, numbers still showed a decline in north-west Ireland between 1969–1970 and 1985–1987. In contrast, on the east coast and particularly Antrim, colonies showed an increase, so that the overall situation in Ireland was a stable population. In England, the huge Bempton-Flamborough colonies showed little growth with an increase of only 2% per annum being recorded – the slowest since 1950. Other colonies in England and Wales, however, showed growth of about 8% a year over the same period.

Coulson (1983) suggested that food availability during the breeding season was probably the most likely factor behind regional fluctuations in population status. The implication was that

food stocks were highest on the North Sea coast but even here, changes in fish stocks may be having an adverse affect on Kittiwakes. A North Shields colony studied by Coulson & Thomas (1985) recorded a gradual decline in Kittiwake numbers, breeding success and adult survival, which paralleled a decline in North Sea herring stocks. In Shetland, there is strong evidence that Kittiwake decline is linked to sandeel availability (Monaghan 1992; Hamer *et al.* 1993), although skua predation is also a significant factor (Heubeck *et al.* 1999).

5. Protection measures for population in UK

SPA suite
In the breeding season, the UK's SPA suite for Kittiwake supports, on average, 390,597 pairs. This amounts to about 78% of the British breeding population, and about 14% of the all-Ireland population. The suite contains about 12% of the international (North Atlantic) population. The SPA suite total is contained within 33 sites (Table 6.87.1) where Kittiwakes are a qualifying species.

6. Classification criteria

The three Kittiwake colonies in the UK that support more than 1% of the international breeding population (East Caithness Cliffs; Flamborough Head and Bempton Cliffs; and Fowlsheugh) were considered under Stage 1.2, and all were selected after consideration of Stage 2 judgements. At an additional 30 sites (Table 6.87), Kittiwake was identified as an important component of a wider breeding seabird assemblage. Accordingly, all these sites were selected under Stage 1.3 (see section 5.3), after consideration of Stage 2 judgements. All sites selected are multi-species SPAs, important for a range of other seabirds. A number have a very long history of occupancy with written records from at least the latter part of the 19th century (Holloway 1996).

The suite encompasses sites in Northern Ireland, the west, north and east coasts of Scotland, as well as south-west Wales and eastern England, and thus spread throughout the breeding range of the Kittiwake. As the selection of sites under Stages 1.2 and 1.3 resulted in a suite which gives adequate coverage of the population and breeding range in the UK, it was not considered necessary to select additional sites using Stage 1.4.

Distribution map for breeding Kittiwake SPA suite

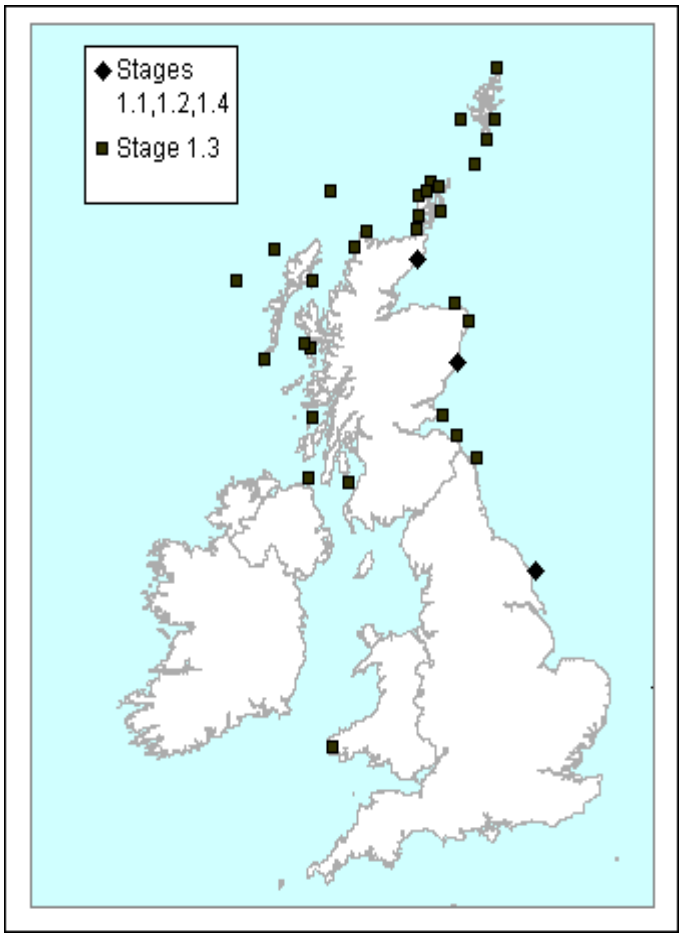

Table 6.87.1 – SPA suite

Site name	Site total	% of biogeo-graphical population	% of national population	Selection stage
Ailsa Craig	3,100	0.1	0.6	1.3
Buchan Ness to Collieston Coast	30,452	0.96	6.2	1.3
Calf of Eday	1,717	<0.1	0.4	1.3
Canna and Sanday	1,193	<0.1	0.2	1.3
Cape Wrath	9,660	0.3	2.0	1.3
Copinsay	3,610	0.1	0.7	1.3
East Caithness Cliffs	31,930	1.0	6.5	1.2
Fair Isle	9,660	0.3	2.0	1.3
Farne Islands	6,236	0.2	1.3	1.3
Firth of Forth Islands	9,380	0.3	1.9	1.3
Flamborough Head and Bempton Cliffs	83,370	2.6	17.0	1.2
Flannan Isles	2,800	<0.1	0.6	1.3
Foula	3,840	0.1	0.8	1.3

Site name	Site total	% of biogeo-graphical population	% of national population	Selection stage
Fowlsheugh	34,870	1.1	7.1	1.2
Handa	7,420	0.2	1.5	1.3
Hermaness, Saxa Vord and Valla Field	1,710	<0.1	0.4	1.3
Hoy	3,000	<0.1	0.6	1.3
Marwick Head	7,110	0.2	1.5	1.3
Mingulay and Berneray	8,610	0.3	1.8	1.3
North Caithness Cliffs	15,650	0.5	3.2	1.3
North Colonsay and Western Cliffs	4,512	0.1	0.9	1.3
North Rona and Sula Sgeir	5,040	0.2	1.0	1.3
Noss	4,270	0.1	0.9	1.3
Rathlin Island	6,822	0.2	13.6 (Ire)	1.3
Rousay	4,900	0.2	1.0	1.3
Rum	1,500	<0.1	0.3	1.3
Shiant Isles	1,850	<0.1	0.4	1.3
Skomer and Skokholm	1,959	<0.1	0.4	1.3
St Abb's Head to Fast Castle	19,600	0.6	4.0	1.3
St Kilda	7,800	0.3	1.6	1.3
Sumburgh Head	1,366	<0.1	0.3	1.3
Troup, Pennan and Lion's Heads	31,660	1.0	6.5	1.3
West Westray	24,000	0.8	4.9	1.3

TOTALS	390,597	12.3%	78.3% 13.6% (Ire)