

A6.36 Scaup *Aythya marila*

1. Status in UK

Biological status		Legal status		Conservation status	
Breeding		Wildlife and Countryside Act 1981	General Protection Schedule 1(1) Schedule 3(3)	Species of European Conservation Concern	SPEC 3 (winter) Unfavourable conservation status (localised in winter) but not concentrated in Europe
Migratory	✓	Wildlife (Northern Ireland) Order 1985	General Protection Schedule 1(2) Schedule 2(1)	(UK) Species of Conservation Importance	Table 4
Wintering	✓	EC Birds Directive 1979	Annex II/2 Annex III/2 Migratory	All-Ireland Vertebrate Red Data Book	

2. Population data

	Population sizes (individuals)	Selection thresholds	Totals in species' SPA suite
GB	11,000	110	1,671 (15% of GB total)
Ireland	3,000	50 (see section 5.1.2 for rationale)	1,558 (52% of all-Ireland total)
Biogeographic population	310,000	3,100	3,229 (1% of biogeographic population)

GB population source: Kirby *et al.* 1993

Ireland population source: Delany 1996

Biogeographic population source: Rose & Scott 1997

3. Distribution

The Scaup is the most northerly distributed of the *Aythya* species. It breeds at high latitudes across northern Eurasia and North America, and winters in temperate coastal waters along both coasts of North America, north-west Europe, the Black and Caspian Seas and east Asia (Scott & Rose 1996; del Hoyo *et al.* 1992). In Europe, it winters especially on Atlantic and North Sea coasts as well as in large numbers in western parts of the Baltic. Two sub-species are recognised, the nominate race (*A. m. marila*) of north Eurasia from Iceland east to central Siberia, and *A. m. mariloides* from central Siberia to the Bering Sea and North America (del Hoyo *et al.* 1992). Ringing recoveries indicate that birds wintering in the UK come from Iceland, Fennoscandia and Russia (Campbell 1986c).

In the UK, Scaup are sparsely but widely distributed, except in north-west Scotland and south-west England (Kirby *et al.* 1993). The single UK site holding more than 1% of the international population is Lough Neagh and Lough Beg in Northern Ireland. In Scotland,

smaller, although still notable, concentrations are found in the Solway Firth, Loch Indaal on Islay, Loch Ryan in south-west Scotland, and Largo Bay in the Firth of Forth. In north-east Scotland there are regular concentrations on the Loch of Stenness in Orkney and in the Cromarty Firth. In England and Wales, the Dee Estuary holds the only major concentration of Scaup, although this is small in comparison with Scottish flocks (Kirby *et al.* 1993). Co-ordinated counts indicate that there may be some redistribution of birds between UK sites within winters, especially between the Scottish firths (Pollitt *et al.* 2000).

In winter, Scaup are found mainly in areas of soft-shore coastlines, often in brackish areas (Kirby *et al.* 1993). They are also found on lagoons, estuaries, sheltered bays and shallow marine waters, as well as inland seas, and – infrequently – large lakes (Scott & Rose 1996). Scaup feed at night, their diet consisting mainly of the Blue Mussel *Mytilus edulis*, although some feed on waste grain or artificially high densities of marine worms, such as those found around sewage outfalls (Kirby *et al.* 1993).

In severe winters, it is estimated that over 90% of the European population is concentrated at fewer than ten sites, mostly on the Baltic coast of Denmark, Germany and Poland (Scott & Rose 1996).

4. Population structure and trends

Two populations of the nominate sub-species are recognised in western Eurasia. The north-west European population is the larger, estimated at 310,000, while that of western Siberia/Black and Caspian Seas numbers 100,000–200,000 (Rose & Scott 1997). The British non-breeding total is estimated at 11,000 (Kirby *et al.* 1993), representing 3.5% of the north-west European biogeographic population.

Numbers of Scaup wintering in Europe were poorly known until the late-1980s, so overall trends in both the north-west European population and that wintering in the Black and Caspian Seas are unclear (Scott & Rose 1996; Delany *et al.* 1999). Increases in non-breeding numbers had been noted during the mid-1970s in The Netherlands, along the German and Polish Baltic coasts, while wintering numbers in the 1980s were reported to be declining in Britain, Ireland and Denmark (Kirby *et al.* 1993).

The most recent British peak count represents a continued increase in numbers since effective monitoring of the species began in the late 1980s, although numbers in Northern Ireland may be declining (Cranswick *et al.* 1999). Numbers wintering in the Republic of Ireland have remained relatively stable throughout the 1990s (Colhoun 2000). Large fluctuations in the west European breeding population since the mid-1960s may have been due to the species' susceptibility to oil pollution and hunting (Campbell *et al.* 1978; Haldin 1997). Waste grain and the super-abundance of worms originally attracted these large flocks of Scaup to distillery and sewage outfalls in Scotland. However, reductions in grain discharges and the introduction of new sewage treatment procedures during the 1970s resulted in lower numbers of birds using some sites in Scotland, especially in the Firth of Forth (Campbell 1984).

In Britain and Ireland, numbers at most important sites peak in late December or early January and decline rapidly thereafter (Owen *et al.* 1986; Thom 1986). This pattern changes somewhat during severe winters when large numbers of birds arrive from the Baltic (Salmon 1988). The paucity of ringing recovery data makes it impossible to assess whether birds wintering in the UK return to the same sites each year.

5. Protection measures for population in the UK

SPA suite

In the non-breeding season, the UK's SPA suite for Scaup supports, on average, 3,229 individuals (calculated using WeBS January site totals for the period 1992/93 to 1996/97 – see section 4.4.1 and Appendix 2 for further explanation). This total amounts to about 15% of the British population, about 52% of the all-Ireland population, and about 1% of the international flyway population. The suite comprises six sites where Scaup has been listed as a qualifying species (Table 6.36.1).

6. Classification criteria

The single site (Lough Neagh and Lough Beg) in the UK supporting more than 1% of the international population was considered under Stage 1.2, and was selected after consideration of Stage 2 judgements. A further four terrestrial sites (Belfast Lough, Cromarty Firth, Firth of Forth and Upper Solway Flats and Marshes) were considered and selected under Stage 1.3 (see section 5.3), with Scaup identified as an important component of the non-breeding waterbird assemblages at these localities.

The Inner Moray Firth was selected under Stage 1.4 on the grounds of providing additional population coverage at one of the main centres for UK wintering birds, and also in view of the close association of birds using this Firth and those in the adjacent Cromarty Firth. These areas together provide the largest concentration of Scaup in northern Scotland.

The sites include the main terrestrial centres of the population in the UK, especially in Northern Ireland and Scotland. All sites are multi-species SPAs, of importance also for a range of other waterbirds. There is a very long recorded history of occupancy at most of these sites (Boyd in Atkinson-Willes 1963).

Distribution map for Scaup SPA suite

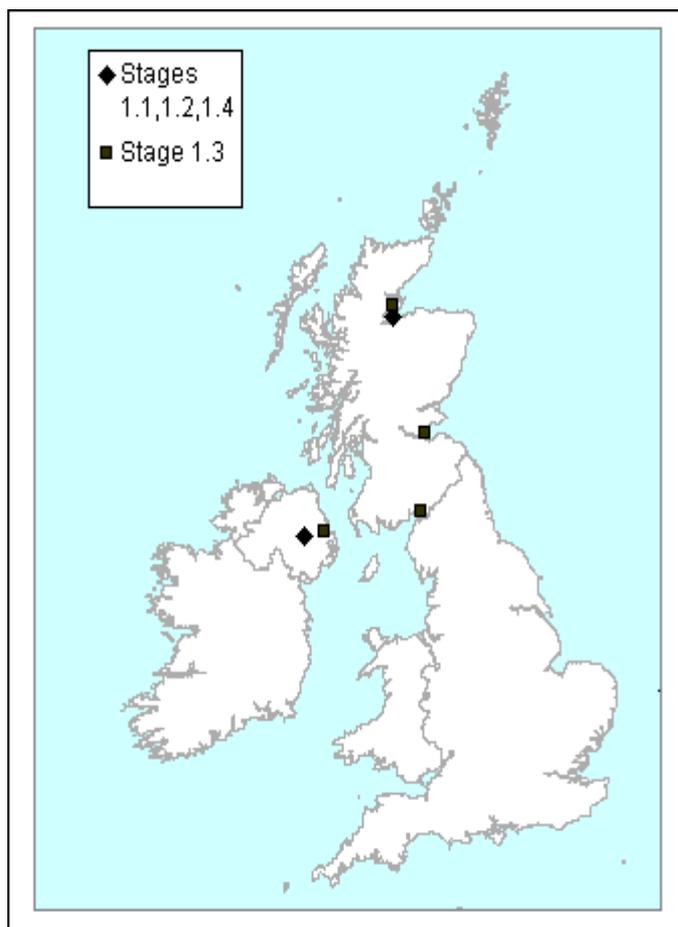


Table 6.36.1 – SPA suite

Site name	Site total	% of biogeographical population	% of national population	Selection stage
Belfast Lough	146	<0.1	4.9 (Ire)	1.3
Cromarty Firth	302	0.1	2.8	1.3
Firth of Forth	220	<0.1	2.0	1.3
Inner Moray Firth	97	<0.1	0.9	1.4
Lough Neagh and Lough Beg	3,798	1.2	100 (Ire)	1.2
Upper Solway Flats and Marshes	1,544	0.5	14.0	1.3
TOTALS	3,229 (in January)	1.0%	15.2% 51.9% (Ire)	