

A6.52 Capercaillie *Tetrao urogallus*

1. Status in UK

Biological status		Legal status		Conservation status	
Breeding	✓	Wildlife and Countryside Act 1981	General Protection Schedule 2(1) Schedule 9(1) Schedule 3(3)	Species of European Conservation Concern	SPEC 3 Unfavourable conservation status (vulnerable) but not concentrated in Europe
Migratory		Wildlife (Northern Ireland) Order 1985		(UK) Species of Conservation Importance	Table 2
Wintering	✓	EC Birds Directive 1979	Annex I Annex II/2 Annex III/2	All-Ireland Vertebrate Red Data Book	Extinct

2. Population data

	Population sizes (individual adults)	Selection thresholds	Totals in species' SPA suite
GB	2,200	22	364 (17% of GB population)
Ireland			
Biogeographic population	419,000	4,190	364 (<0.1% of biogeographical population)

GB population source: Catt et al. 1994, 1998

Biogeographic population source: Hagemeyer & Blair 1997

3. Distribution

The global range of Capercaillie extends through northern temperate and boreal forests from Britain and Spain in the west, across the taiga of northern Eurasia to about 120°E (roughly as far as the Lena River in Russia). Its range in the west (Europe) has decreased and become highly fragmented owing to forest loss and degradation, especially in lowland areas. The species is polytypic with four sub-species described, all of which occur in Europe. The nominate sub-species *Tetrao u. urogallus* occurs in Europe from Britain, Scandinavia and central Europe east to north-west Siberia north of about 60°N. *T. u. rudolfi* occurs in the southern and eastern Carpathians, *T. u. aquitanicus* occurs in the Pyrenees and north-west Spain, whilst *T. u. taczanowskii* occurs in Russia to the south of the nominate race (Cramp & Simmons 1980).

In Europe, Capercaillie occurs generally in montane and upland forest areas, including the mountains of northern Spain, Pyrenees, Alps and Carpathians and the Scottish Highlands. The distribution in Fennoscandia is more continuous and extends eastward to Siberia

(Rogačeva 1992). Over 90% of the European population is found in Scandinavia, but other important concentrations are found in forests from the Baltic to the Pyrenees (Batten *et al.* 1990; Hagemeyer & Blair 1997).

Within the UK, Capercaillie breeds only within Scotland, with highest densities in east Highland, Grampian and Tayside (Gibbons *et al.* 1993). Its range is linked closely to mature coniferous woodland, especially native Scots Pine *Pinus sylvestris* woodland, in which there is a well-developed Bilberry *Vaccinium myrtillus* field layer (Gibbons *et al.* 1993).

Throughout its range, the Capercaillie is a largely sedentary species, although there are sometimes local movements, exceeding 25 km, in the non-breeding season.

4. Population structure and trends

The Capercaillie has declined throughout its world range, particularly since the 1960s (Batten *et al.* 1990; Moss 1994). In Siberia, Capercaillie populations have been described as “greatly decimated” owing to the effects of excessive shooting through most of its range (Rogačeva 1992). In Norway and Finland, declines are reflected in annual shooting bags, with drops of over 67% in numbers in both countries in the 1980s (Batten *et al.* 1990). The most recent estimate of the European population is 209,405–296,085 pairs (Hagemeyer & Blair 1997).

Throughout Europe, declines have been attributed mainly to habitat loss owing to forestry practices, but also to hunting, disturbance, predation, habitat degradation, and climatic fluctuation (Cramp & Simmons 1980; Hagemeyer & Blair 1997; Moss *et al.* 2000). The original UK population became extinct in the late 18th century, possibly due to habitat loss and hunting, but was re-established through re-introductions of Swedish birds in the 1830s (Thom 1986). Extensive tree felling during the first half of the 20th century again resulted in a decline, but subsequent recovery led to a peak in population size and range in the early 1970s.

Since the 1970s, there has been a further decline in both numbers and range, with a loss of birds in 64% of previously occupied 10 x 10 km squares between 1968–1972 and 1988–1991 (Gibbons *et al.* 1993; Moss 1994), and a decrease in numbers in 80% of woods which previously held Capercaillie (Batten *et al.* 1990).

The estimate of the Scottish population used for this review was made in 1992–1994, is of 2,200 individual adults (Catt *et al.* 1998). However, additional data, currently unpublished, suggest that this decline continued through the late 1990s. The species is widely dispersed within Scotland and occurrence at low densities means there are few areas supporting large concentrations of birds. Causes of the UK decline are complex, involving habitat loss, changes in forestry practice (leading to loss of the Bilberry *Vaccinium* field layer and altered tree species composition), climate change, changes in land management practices, excessive shooting and increased mortality due to deer fence strikes. The most recent analysis of the Scottish population (Moss *et al.* 2000) indicates that poor productivity, exacerbated by mortality from deer fence strikes, is probably the main cause of the decline.

5. Protection measures for population in UK

SPA suite

The UK’s SPA suite for Capercaillie contains the range of habitats used throughout the year by, on average, 364 individual adults. This amounts to about 17% of the British breeding population (although given the rapid current population decline this possibly under-estimates population coverage within the suite as the figure for the national population used is likely to over-estimate current numbers). The suite contains about 0.1% of the international

population (numbers in the UK are small in comparison to those in Scandinavia and eastern Europe). This total is contained within six sites (Table 6.52.1) where Capercaillie has been listed as a qualifying species. The species no longer occurs in Northern Ireland, having become extinct in the eighteenth century.

Other Measures

A Biodiversity Action Plan has been published for this species (Biodiversity Steering Group 1995) and is being implemented as part of the UK's national response to the Biodiversity Convention.

Since 1982, the rights to shoot Capercaillie on Forestry Authority lands have not been let (Batten *et al.* 1990). In 1991, a voluntary ban on shooting was initiated by the UK government, and has largely been honoured (Catt *et al.* 1998). Advice is available for general management of forests for Capercaillie (Moss & Picozzi 1994). Recommendations for further conservation measures have been detailed in the Species Action Plan (Biodiversity Steering Group 1995), including proposals that would reduce mortality from deer fence strikes (Andrew & Baines 1997; Baines & Summers 1997).

6. Classification criteria

All sites in the UK in natural or semi-natural habitats¹ that were known to support more than 1% of the national breeding population were considered under Stage 1.1, and all were selected after consideration of Stage 2 judgements. The distribution of SPAs closely matches the core range of the species in Scotland. The Caledonian pinewood sites in Deeside and Speyside support large, high-density populations in a natural habitat. Loch Lomond supports a very dense population at the edge of the British range of this species and at the western limit of the European range. Many sites have a very long history of occupation, indeed, Ballochbuie is the site of the shooting of the last remaining native British Capercaillie in 1785 (Holloway 1996).

All the sites in the suite have a high degree of naturalness, and all are multi-species SPAs. Many are in the ownership of nature conservation organisations and are subject to active conservation management.

¹ The 1992–1994 national survey of breeding Capercaillie identified additional breeding locations, but most of these are in plantation woodlands with no specific population estimates (Catt *et al.* 1998). They have been excluded from the current SPA review until clearer population data are available. Further investigations of these and other areas are currently being undertaken.

Distribution map for Capercaillie SPA suite

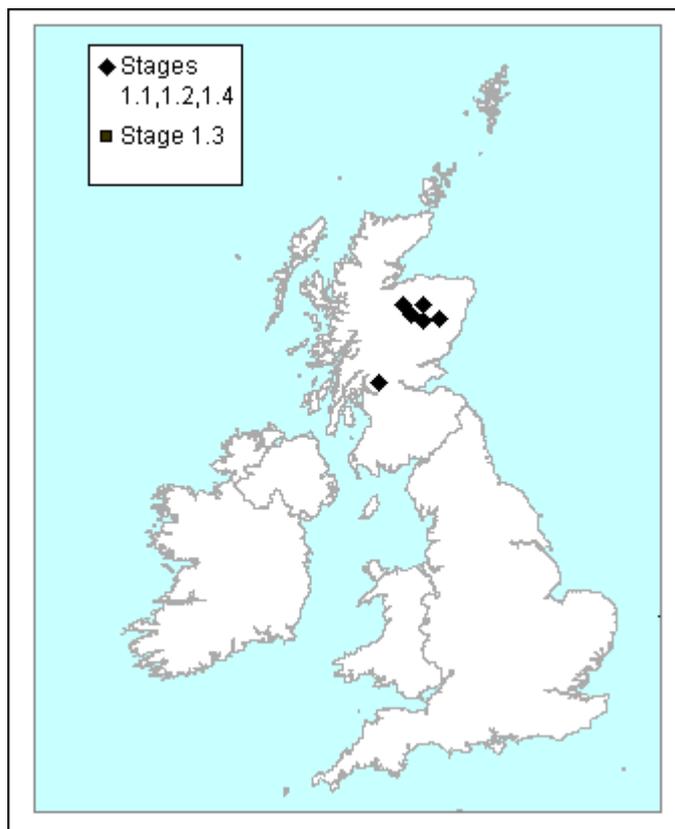


Table 6.52.1 – SPA suite

Site name	Site total	% of biogeographical population	% of national population	Selection stage
Abernethy Forest	45	<0.1	2.1	1.1
Ballochbuie	36	<0.1	1.6	1.1
Cairngorms	125	<0.1	5.7	1.1
Glen Tanar	85	<0.1	3.9	1.1
Kinveachy	40	<0.1	1.8	1.1
Loch Lomond	33	<0.1	1.5	1.1
TOTALS	364	<0.1%	16.5%	