

## A6.103 Scottish Crossbill *Loxia scotica*

### 1. Status in UK

Biological status		Legal status		Conservation status	
Breeding	✓	Wildlife and Countryside Act 1981	General Protection Schedule 1(1) Schedule 4	Species of European Conservation Concern	<b>SPEC 1</b> Global conservation concern (insufficiently known)
Migratory		Wildlife (Northern Ireland) Order 1985		(UK) Species of Conservation Importance	<b>Table 1</b>
Wintering	✓	EC Birds Directive 1979	<b>Annex I</b>	All-Ireland Vertebrate Red Data Book	

### 2. Population data

	Population sizes (pairs)	Selection thresholds	Totals in species' SPA suite
<b>GB</b>	300 <sup>1</sup>	3	295 (98% of GB population)
<b>Ireland</b>			
<b>Biogeographic population</b>	300	3	295 (98% of biogeographic population)

GB population source: Stone et al. 1997

Biogeographic population source: Stone et al. 1997

### 3. Distribution

The Scottish Crossbill is globally endemic to the UK, where it occurs in the northern and eastern Highlands of Scotland (Voous 1978; Gibbons *et al.* 1993; Summers *et al.* in press). It is a species associated with remnant native Scots Pine *Pinus sylvestris* forests, and plantations of Scots Pine and other conifers. Breeding distribution is limited by suitable food supply, the main food being Scots Pine seeds (Cramp & Perrins 1994). The species is monotypic with its type location in East Ross-shire.

### 4. Population structure and trends

The Scottish Crossbill was long regarded as a race of other crossbills *Loxia* spp., and was recognised as a separate species in 1978 (Cramp & Perrins 1994; Voous 1978). The Scottish Crossbill can be identified by its calls, and although its range is now better described, there has been no good national population estimate to date. The distribution overlaps with

<sup>1</sup> Note that the national population estimate for Scottish Crossbill has a very high degree of uncertainty attached to it and thus the proportions presented in this review are indicative rather than exact assessments.

Common Crossbill *Loxia curvirostra* and Parrot Crossbill *Loxia pytyopsittacus* (Summers *et al.* in press). The most recent estimate of population size was a minimum of 300 pairs (European Birds Database). The species' population size and/or distribution varies with natural fluctuations in the Scots pinecone crop (Summers 1999).

## **5. Protection measures for population in UK**

### **SPA suite**

The UK's SPA suite for Scottish Crossbill contains the habitats used throughout the year by, on average, 295 pairs. This is estimated to about 98% of the British breeding population and, as the species is endemic to Scotland, also 98% of the world population. As noted above, there is a high degree of uncertainty associated with both the overall total and the proportion contained within the SPA suite, owing to very poor quantitative information on the species both at key sites and elsewhere. The suite contains five sites (Table 6.103.1) where Scottish Crossbill is a qualifying species.

### **Other measures**

A Species Action Plan has been published as part of the UK Biodiversity Action Plan (Biodiversity Steering Group 1995), with the objective of maintaining current range and population size. Among the specific actions proposed are: consideration of additional protection for the remaining native pinewoods holding important crossbill populations; minimising the impact of development proposals that would damage relevant SSSIs; consideration of aerial insecticide spraying proposals on a case by case basis to ensure local crossbill populations are not affected; and enhancement of native pine wood management for the benefit of crossbills, with emphasis on isolated Scots Pine woods within the range of the Scottish Crossbill.

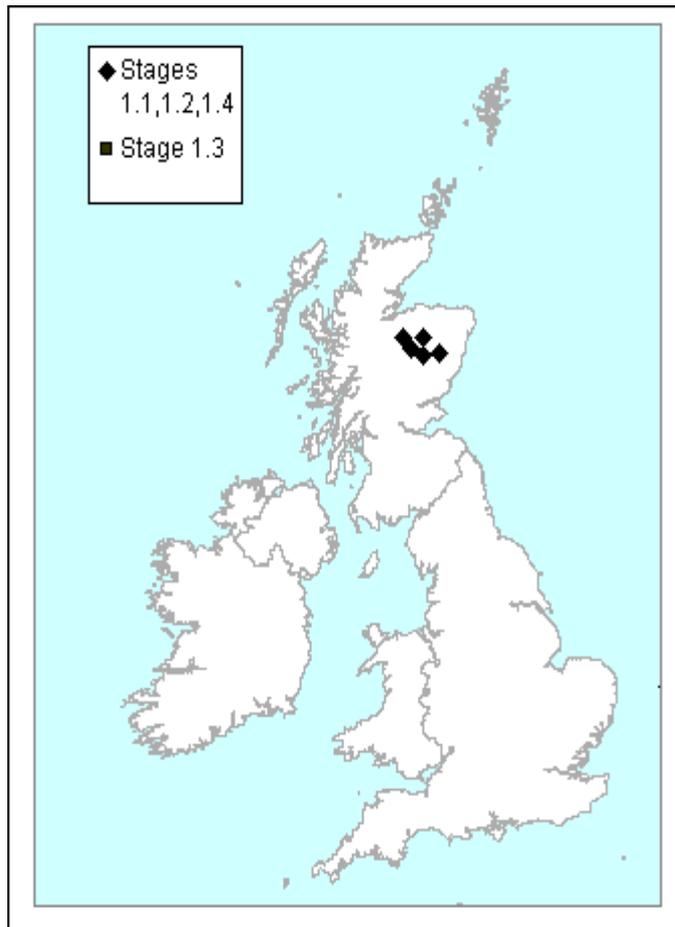
## **6. Classification criteria**

All sites in the UK that were known to support more than 1% of the breeding population of Scottish Crossbills were considered under Stage 1.1, and all were selected after consideration of Stage 2 judgements. The distribution of the SPAs (Abernethy; Cairngorms; Glen Tanar; Kinveachy; and Ballochbuie) closely matches the core range of the species in Scotland and includes the best Caledonian pinewood habitat for this species. The Forest of Birse was assessed using Stage 1.4, but was not selected since this site did not add significant additional coverage of range or numbers (given the inclusion in the suite of the neighbouring larger population at Glen Tanar).

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 or are otherwise subject to active conservation management.

There is a history of occupancy at a number of the sites since the studies in 1974 which first led to clear understanding of the distribution and identification of Scottish Crossbills (Knox 1990a, 1990b). These sites include Glen Tanar, Ballochbuie, and Mar (within the Cairngorms SPA). Indeed, there are records of crossbills in these areas from the 19<sup>th</sup> century, indicating that this has long been the core range.

**Distribution map for Scottish Crossbill SPA suite**



**Table 6.103.1 – SPA suite**

Site name	Site total	% of biogeographical population	% of national population	Selection stage
Abernethy Forest	175	58.3	58.3	1.1
Ballochbuie	10	3.3	3.3	1.1
Cairngorms	50	16.7	16.7	1.1
Glen Tanar	50	16.7	16.7	1.1
Kinveachy	10	3.3	3.3	1.1

<b>TOTALS</b>	295	98%	98%
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