# A6.102a Chough *Pyrrhocorax pyrrhocorax* (breeding)

## 1. Status in UK

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

# 2. Population data

	Population sizes (pairs)	Selection thresholds	Totals in species' SPA suite
GB	340	3	112 (33% of GB population)
Ireland	906	9	No SPAs selected in Northern Ireland
Biogeographic population	12,265	123	112 (c. 1% of biogeographic population)

GB population source: Bignal et al. 1997 All-Ireland population source: Berrow et al. 1993 Biogeographic population source: Hagemeijer & Blair 1997

## 3. Distribution

The Chough's global range extends from the European Atlantic coast in the west through montane areas of southern Europe and central Asia, to the Himalayas and China in the east (Cramp & Perrins 1994). Southwards, it reaches the Canaries, while the Scottish Hebrides represent the north-western edge of its global range (Bignal *et al.* 1997). Isolated populations are found in Morocco and Ethiopia, and throughout the rest of its range, the species' distribution is sparse and fragmented (Cramp & Perrins 1994). With such a widely scattered and isolated distribution, it is unsurprising that there is a high degree of geographic variation, and eight sub-species have been described. Of these, three races are found in Europe. The nominate *P. p. pyrrhocorax* is restricted to Britain and Ireland, whilst *P. p. erythrorhamphus* is distributed from Iberia and southern France through the Alps to Austria and south through Italy to Sicily and Sardinia. The race *P. p. docilis* is found in southern Yugoslavia, Greece, Crete, and east through Turkey and the Middle East, as far as Afghanistan.

The European distribution of Chough is highly localised. In Britain and Ireland it is essentially a coastal species, whilst in other countries (France, Austria, Italy, Greece and Switzerland) it occurs in mountainous areas. Only in Spain is the species widespread (Hagemeijer & Blair 1997).

Within the UK, the Chough is now restricted to isolated localities on the western coasts of Scotland, Wales and Ireland (Monaghan 1988) with a few isolated pairs remaining in inland parts of north and central Wales. Historically it was much more widespread in Britain, occurring along much of the coastline of south and west Britain from Kent and Sussex, westwards to Cornwall, and up the west coast to the former counties of Cumberland and Westmoreland (Parslow 1973; Owen 1989). In Scotland, it formerly occurred on the east coast (Berwickshire and Fife), as well as on the coast of Dumfries and Galloway, Arran, and through the Inner Hebrides to Skye. There are also records from north-western Sutherland. The sequence and timing of local extinctions of Chough from much of its former UK range is closely related to patterns of spread of intensive agriculture and the loss of traditional mixed farming (Warnes 1983). In England, the Chough became extinct as a breeding species in Cornwall in 1948.

## 4. Population structure and trends

The European Chough population is estimated to be in the range 12,265–17,370 pairs (Hagemeijer & Blair 1997). Britain holds about 27% of the nominate sub-species which is restricted in distribution to Britain and Ireland.

Not least, because the distribution of Choughs in Europe comprises populations that are small and isolated, the European status of Chough has been categorised as vulnerable (Tucker & Heath 1994). The species is estimated to be declining in about 90% of its range, as well as showing a contraction in its distribution. This decline is almost entirely attributed to the loss of traditional low-intensity livestock farming (Bignal & Curtis 1988; Tucker & Heath 1994).

Within the UK, persecution had an impact on Choughs for much of the early part of the 20<sup>th</sup> century (Owen 1989), and the population decline continued in more recent decades because of agricultural intensification. However, there has been some reversal in this downward trend over the last 20 years.

The British and Irish population is highly fragmented, with a restricted distribution, but censuses in 1982 and 1992 showed an increase from 923–949 to 1,246 breeding pairs (Newbery 1998) (although in part this may have reflected methodological differences between the surveys). The British population consists of three self-contained groups with no apparent interchange of individuals demonstrated by ringing programmes: in Scotland on the islands of Islay, Jura and Colonsay; on the Isle of Man; and in Wales. Colour-ringing studies have shown that movement within these populations can, however, be large and follow regular annual patterns. Thus birds fledged from the Anglesey and Lleyn coasts move up to 60 km to traditional wintering sites in Snowdonia.

The Welsh population is stable or increasing overall, with increases in coastal areas, but declines at inland sites in mid-Wales. Numbers inland in North Wales remain stable.

There are concerns about the Scottish population which is almost entirely concentrated on Islay and Colonsay and which has experienced a significant decrease in recent years (McKay, pers. comm.), especially on the Oa peninsula (Madders *et al.* 1998). Choughs regularly move between different areas of Islay (Bignal *et al.* 1989), as well as between Islay, Jura and Colonsay, but there is no exchange of individuals with other populations (Bignal *et al.* 1997). Numbers have declined on Islay, but increased over the same period on Colonsay.

A single breeding pair remains in Northern Ireland and the Chough there is on the verge of extinction.

# 5. Protection measures for population in UK

### **SPA** suite

In the breeding season, the UK's SPA suite for Chough supports, on average 112 pairs. This amounts to 33% of the British breeding population. The suite contains about 0.9% of the international population. In an all-Ireland context, no sites have been selected in Northern Ireland. The SPA suite contains nine sites (Table 6.102a.1) where Chough has been listed as a qualifying species.

### Other measures

As understanding of Chough ecology increases (Bignal & Curtis 1988; Bignal *et al.* 1997), the impact of changes in agricultural practice on Chough populations is becoming apparent. In Northern Ireland, specific prescriptions have been introduced to the Environmentally Sensitive Areas Scheme to protect the foraging habitat of remaining breeding Choughs. Similar measures are being taken in Scotland, where some farmers who have Choughs on their land are being paid through management agreements and agri-environment schemes to undertake habitat management that will benefit the species.

Action has also been taken to create and protect breeding sites. In Wales a number of artificial cliff nest sites (on sea-cliffs, quarry faces and in mine shafts) have been successfully created. In Wales, these now support 5% of the population. RSPB Cymru is beginning a three-year, EU-funded project to improve Chough habitats at a range of sites throughout Wales. On Islay, farmers are given financial support to renovate barns in a way that maintains suitable nesting sites for Chough (Bignal & Bignal 1987). The need to manage habitats for Choughs in Wales is promoted through a number of 'Chough Conservation Strategies' (for example Hodges 1994) which promote awareness of the species' requirements both within and outside SPAs.

At sites where Choughs nest on recognised rock-climbing routes, disturbance during the breeding season is prevented by voluntary climbing restrictions.

# 6. Classification criteria

All sites in the UK that support more than 1% of the national breeding population of Chough were considered under Stage 1.1, and all, except for Gruinart Flats, The Oa peninsula and the Kilmeny area of Islay, were selected after consideration of Stage 2 judgements. The Oa was not selected because of current declines in numbers there (Madders *et al.* 1998). The decreasing population there cannot currently be confirmed as viable. Gruinart Flats and Kilmeny were not selected because they have the lowest density population and a higher proportion of birds nesting in buildings than other sites. A general point of difficulty for the selection is SPAs for Choughs on Islay is that the species is increasingly breeding in manmade sites rather than natural ones, raising issues of site and population viability.

All of the sites are of high naturalness, with a long history of occupation by Chough, and all make a significant contribution to the species' European range. Most sites have been selected solely because of their importance for Chough, although three of the sites (Rinns of Islay; Glannau Aberdaron and Ynys Enlli/Aberdaron Coast and Bardsey Island; and Skomer and Skomer) are multi-species sites.

# Distribution map for breeding Chough SPA suite

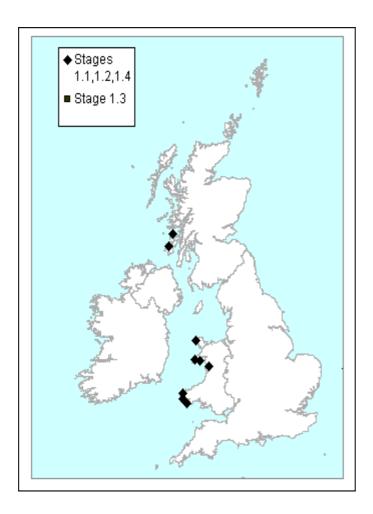


Table 6.102a.1 – SPA suite

Site name	Site total	% of biogeo- graphical population	% of national population	Selection stage
Castlemartin Coast	12	0.1	3.5	1.1
Craig yr Aderyn	6	< 0.1	1.8	1.1
Glannau Aberdaron and Ynys Enlli/Aberdaron Coast and Bardsey Island	12	0.1	3.5	1.1
Glannau Ynys Gybi /Holy Island Coast	18	0.1	5.3	1.1
North Colonsay and Western Cliffs	9	< 0.1	2.7	1.1
Mynydd Cilan, Trwyn y Wylfa ac Ynysoedd Sant Tudwal/Mynydd Cilan, Trwyn y Wylfa and the St Tudwal Islands	9	<0.1	2.7	1.1
Ramsey and St David's Peninsula Coast	11	0.1	3.2	1.1
Rinns of Islay	31	0.3	9.1	1.1
Skomer and Skokholm	4	<0.1	1.2	1.1