

UK SPA SCIENTIFIC WORKING GROUP

13 March 2002

Additional SPAs for Chough

Background and issues

The UK SPA suite for chough currently comprises nine breeding sites and eight non-breeding sites. Selection of these sites was based upon data collected up to 1997. Subsequent and ongoing data collection has identified further possible sites in certain parts of the species' range. However, progression of classification of these sites as SPAs requires consideration of a number of issues:

- Site management, particularly stocking levels and stock type
- Dispersive behaviour, and the relationship between breeding, autumn and overwintering areas
- The use of natural or man-made breeding sites
- Overall viability of populations at sites

Consideration of these issues has different implications in each of Scotland and Wales, and will be addressed separately for each country.

- National chough survey in 2002

A summary of this survey is presented at the end of this paper.

Chough SPAs in Scotland (Nigel Buxton, SNH)

There are currently two SPAs in Scotland, both of which address breeding and non-breeding aspects of the species behaviour. Three IBA sites are currently listed (Heath and Evans 2000). Data on the chough population come from a number of sources i.e. national census, RSPB, SNH and individual research workers.

It is recognised that to encompass the full behavioural requirements of chough in Scotland both breeding and non-breeding areas need to be addressed. These may/may not overlap throughout the species main distribution in Islay and Colonsay.

Issues

Identification of a site series for the species in Scotland has required the consideration of a number of issues. These issues are distinct but nevertheless show a considerable degree of overlap and inter relationship. There appear to be three over arching issues.

1) Maintenance of suitable habitat for chough. This appears especially significant on Islay and relates directly to changing patterns of land use. Consequently feeding sites

have changed, and are changing, with knock-on effects on nesting sites. Birds are moving away from the natural cliff breeding sites with the result that man-made structures, all too often abandoned buildings, are becoming increasingly significant in certain areas and to the population as a whole. Maintenance of such sites into the future is obviously a strong consideration.

2) Viability of the current population. SPA must support, and continue to support, a suitable population of chough. The contemporary population on Islay is dispersed and current thinking suggests that it acts as a meta-population with all localities, even Colonsay, being interrelated to some degree. Nevertheless in recent years the population trend on Islay has been one of decline.

3) Identification of site boundaries. An SPA must encompass a clear site boundary. Defining a logical and robust boundary in the contemporary situation of a fluctuating, declining and widely dispersed population is a challenging and risky task – with severe penalties for unsatisfactory approaches.

Rationale

Hence it is suggested that site classification is not an automatic answer to the challenging chough population statistics in Scotland; at the present time it is prudent to take a broader perspective into account. The site selection process to date has assessed and identified an SPA list based on the most robust and hence viable localities (numbers, density, naturalness and postulated viability). Directed management, specifically for the benefit of chough, is now in place in the Argyll islands on a far wider basis than just the SPA. Whilst such management undeniably must be a cornerstone in successfully maintaining chough populations, further understanding of the population dynamics, ecology and distribution of the species is essential.

Future Approaches

Further SPA in Scotland can therefore only be confidently advocated if localities can be identified where suitable numbers of birds occur in an identifiable area with resources available appropriate to their sustained ecological needs. Consequently, for the immediate future, the priority must be to continue positive management, research the detailed ecological requirements and update the species population statistics through national survey. This would then build an appropriate base for reconsidering sites in the medium term future.

Chough SPAs in Wales (Sian Whitehead, CCW)

In Wales there are currently seven SPAs for breeding chough. With the exception of Craig yr Aderyn, all these sites are coastal, and are targeted primarily at breeding chough. Six of these sites are also classified for supporting significant non-breeding flocks, comprised partly or largely of resident territorial adults. In addition to these sites, there remain a number of other sites that may qualify, but have not yet been considered for

classification as SPAs. Data for these sites have been collated by RSPB (R. Thorpe & D. Lamacraft), who have identified a total of 12 'Key Areas' that each hold a minimum of 4 breeding pairs and/or 15 non-breeding individuals but that are outwith the current Welsh SPA suite for chough. Some of these additional sites have been identified as a result of new data (post 1997); others are traditional, long-established nesting sites but for which data on associated feeding areas has only been accumulated in the last few years. In considering these sites, many of which have few numbers present, it is essential to also consider the population trend over a number of years. To only consider the present population level may appear to set precedent for classification of sites in Scotland where low numbers occur (The Oa).

Colour-ringing data collected over the last decade has shown the inter-relationship between many chough sites – particularly between coastal breeding sites (many already classified as SPAs), and inland autumn feeding and winter roosting sites that are now known to support juveniles that originate from the coast (A.Cross & A. Stratford, pers. comm.).

Issues.

In considering these key area as possible additional SPAs, there are a number of issues that need to be addressed

- 1) How should the boundaries be determined? Many of the inland Key Areas encompass a large area of land but for which data on usage by chough is only available for a small proportion of this area. In such cases do we opt for a highly fragmented boundary that includes only those areas for which we have supporting data, or do we go for a more encompassing approach that is easier to interpret on the ground. For example, four of the Key Areas (Penmaenmawr, Llanberis, Snowdon, and Nantlle Valley) are adjacent to one another and could be included in one SPA which, between them, support breeding sites, roosting sites and autumn / winter feeding areas, and could be encompassed within one 'Eryri SPA', but which would also include large areas of habitat for which we have no data on habitat use. For some sites we have information on nest site locations, but incomplete or non-contiguous data on foraging areas? In these cases, are we justified in drawing an inclusive boundary that draws on site-specific data, but also on generic information from other chough foraging studies – i.e. do we use a rule-of-thumb that selects a boundary of, for example, 1km radius from the nest? Selection of boundaries must be robust and defensible, but should also be pragmatic.
- 2) What is the inter-relationship of these sites? Should we argue for a site on the scale of say a 'North Wales' SPA, that takes into account natal, wintering (feeding and roosting) and breeding areas? For example, colour-ringing studies show that birds born at the end of the Llyn peninsula (Aberdaron and Bardsey SPA) will move into Snowdonia post-fledging and then may settle to breed at an inland site in Snowdonia, or may move out to another coastal site (A.Cross & A.

- Stratford, pers. comm.). It is unlikely that any of the current SPAs are able to support their populations because they only relate to nesting and feeding sites used during the breeding season, and take no account of other parts of the year, when even established territorial pairs may move away from their feeding territories for part of the winter to feed. Thus the question of inter-relationship of populations also raises the question of the viability of populations within current and possible future SPAs.
- 3) Should we classify as SPAs those sites that have chough breeding in artificial nest sites? Along the Ceredigion coast there a number of pairs of chough nesting in boxes that have been installed on the cliff, or are in 'natural' sites that have been modified to make them more stable. Without future maintenance, these sites will deteriorate and will no longer be able to support breeding chough – despite the availability of feeding habitat, there are few suitable natural nest sites due to the geology of the area.
 - 4) What are the management issues of the sites? Does management for chough conflict with management for other priority habitats and species (for example, coastal heath). These apparent conflicts can usually be addressed by carefully planned and targeted management, but considerable discussion and agreement with other parties is required in order to achieve an appropriate balance. This issue is particularly important if an inclusive approach is taken to boundary selection, and the SPA includes habitat that may actually be managed for species/habitats other than chough – for example, an 'Eryri SPA' would be partially coincident with the Eryri SAC.

2002 National Chough Survey and its implications for the SPA process (Ian Johnstone / Gwyn Williams, RSPB)

As part of the SCARABBS programme of UK bird surveys, the next breeding chough survey is scheduled to take place in 2002. Previous comparable surveys were undertaken in 1982 and 1992. Simultaneous surveys are planned for Ireland and Brittany using the same methods (but outwith the RSPB/CCW funding of the UK survey).

There will be full coverage of all historic (occupied at any time since 1960) and current breeding sites, along with searches of suitable breeding habitat within the existing range as identified by country and regional organisers. In the UK, survey work will be concentrated on Islay and neighbouring islands, and coastal and inland Wales. The isolated sites in Scotland, probably former sites in Northern Ireland and the potential new site in Cornwall will also receive coverage.

Survey methods will be as described in *Bird Monitoring Methods* (Gilbert, Gibbons & Evans 1998), with the addition of codes for some characteristic breeding behaviours identified since the 1992 survey. All behaviours will be recorded on survey forms, so that the sensitivity of population estimates to the inclusion and categorisation of breeding behaviours can be assessed. Breeding sites will be identified on survey forms to 1km

square level. Choughs normally first breed in their 3rd summer. It is possible that the proportion of immature non-breeding birds in flocks is an indicator of the demographic state of that population (loss of flocks being a precursor to breeding population decline). Flocks of non-breeding choughs will be recorded where encountered during surveys of breeding habitat. However, because flocks may a) be very mobile leading to double counting and b) feed away from breeding sites and not be counted, these data are unlikely to be accurate. Coordinated roost counts where roost locations are well known are likely to generate data that are more accurate, but there are H&S issues over and above those for the survey of breeding choughs.

In summary, the survey will result in:

Population estimates for breeding choughs in each country and the UK as a whole

The data to generate breeding population estimates within specified site boundaries

Estimates of numbers of non-breeding birds in each country and the UK, although these may lack accuracy