PEMBROKESHIRE BIODIVERSITY PARTNERSHIP

PARTNERIAETH BIOAMRWYIAETH SIR BENFRO

Species Action Plan: Chough

Introduction

Scope

This species action plan includes:

Species Name	Common Name	UK Bap Spp	S42 list Welsh Spp	Locally Important Spp
Pyrrhocorax pyrrhocorax	Chough		\checkmark	\checkmark

It is recognised that factors such as prevailing weather conditions (which influence winter survival and productivity) and coastal erosion (which can result in the loss or physical deterioration of traditional nest sites) are outside the control or influence of the Partners. The Partners will seek to ameliorate the negative effects of these and other natural factors on the Chough population by maintaining and enhancing the foraging habitats on which choughs depend and by minimising human disturbance e.g. by managing the recreation/species conservation interface.

Vision Statement

The Partners will seek to maintain, enhance and where appropriate extend reliable feeding habitats e.g. coastal and lowland heathland habitats; cattlegrazed coastal fields and winter arable stubbles with which the Chough is most closely associated in the County.

Description of Species

The Chough is a medium sized red-legged, red-billed member of the crow family. The adults' plumage is entirely glossy-black; juveniles and 1st winter birds tend to have less glossy, slightly brownish plumage which can be seen in good light conditions. The chough is specialised feeder on soil invertebrates although it will also forage extensively on spilt grain and invertebrates in winter arable stubbles. It obtains its invertebrate food by probing the upper soil

levels and ant hills with its tough, down-curved bill. Choughs will also catch invertebrate prey such as spiders on the surface of bare soil, in cracks and crevices in rock faces or on the surface of vegetation. They require a mosaic of habitats with easy access and which support good populations of soil invertebrates to provide reliable, efficient feeding opportunities.

In Pembrokeshire, choughs are confined to the National Park and are rarely found more than 1-2 km inland. The Chough is a bird of exposed rocky cliffs and headlands on the open coast and offshore islands. It nests exclusively in deep cracks or crevices in sea cliffs and in sea caves. Territories and nest sites are distributed all around the coast from Poppit in the North of the National Park to Penally in the South. Its preferred foraging habitats include short, open grassy turf and bare soil with good levels of warmth such as sunny south or west facing cliffs and coastal slopes or sheltered sand dune systems.

Status

Annual surveillance of the breeding population of choughs in the National Park suggests that the species is currently declining.

At a European level, Chough in listed in Annex 1 of the EC Birds Directive 1979 and is a European protected species (meaning that the bird and its nests are fully protected at all times). In the UK, Chough appears on Schedules 1 and 4 of the Wildlife & Countryside Act 1981 (as amended) and is identified as a species of principal importance in Wales under S42 of the Natural Environment & Rural Communities Act, 2006. In Pembrokeshire, the Chough is a feature of three Natura 2000 sites: Castlemartin Cliffs Special Protection Area (SPA); Ramsey & St David's Peninsula Coast SPA and Skomer & Skokholm SPA.

Threats

There are many natural threats to Chough, such as inter-specific competition with other corvids (crows) or poor weather affecting the availability of prey. However, these natural threats are often exacerbated by anthropogenic influences such as land management regimes which result in loss or deterioration of high quality foraging habitat.

Threats to the chough population in Pembrokeshire include:

 Loss or deterioration of key foraging habitats/areas e.g. as a result of changes in agricultural practices resulting in a predominance of suboptimal foraging habitat where soil invertebrates may be few and far between, and may be out of reach of choughs. There is a general lack of knowledge/understanding of the health and variability of soil invertebrate populations and how these factors may affect choughs. However, the use of inappropriate worming regimes in grazing stock is thought to have a detrimental effect on this important food resource.

- Inter-specific competition with other crow species e.g. rooks; jackdaws and carrion crows for limited resources e.g. food (particularly in areas where there are large rookeries and where foraging habitat may already be sub-optimal in terms of availability of food).
- Adverse weather conditions e.g. prolonged periods of very cold weather characterised by penetrating frosts or drought (when soil invertebrates become scarce and difficult to find) which affect survival (particularly of young, inexperienced birds that do not have permanent territories) and productivity.
- Isolation from other chough populations resulting in genetic impoverishment and subsequent impacts on the long-term health and resilience of the population. There are observations of siblings forming breeding pairs in Pembrokeshire and anecdotal evidence of increases in birth defects and decreased fecundity.
- Poor post-fledging survival and recruitment of non-breeding choughs to the breeding population.
- Loss or physical deterioration of secure nest sites (e.g. as a result of coastal erosion) that are within reasonable commuting distances of reliable foraging areas.
- Human disturbance (e.g. of nest sites or communal roost sites) and persecution (robbing of nest sites; shooting of birds that are mistaken as "crows").
- Predation (very recently fledged young choughs are especially vulnerable to predation) and disease.
- Once a population falls below a critical (unknown) size, there is a breakdown of the complex social structure and consequently a loss of behavioural adaptions being passed between one generation and the next.

Further Resources

Other plans / policies / reference materials that are relevant to the conservation of the red-billed chough in Pembrokeshire include:

• A Chough Conservation Strategy for Pembrokeshire, J.E. Hodges, Pembrokeshire Coast National Park Authority (PCNPA) November 1994 (published by PCNPA on behalf of the Pembrokeshire Chough Study Group).

- Pembrokeshire Local Biodiversity Action Plan: Coastal Habitat Action Plan (HAP); Heathland HAP.
- Core Management Plans for the St David's SAC (which incorporates the Ramsey & St David's Peninsula Coast SPA), Limestone Cliffs of South-West Wales SAC (which incorporates the Castlemartin Cliffs SPA) and Skomer and Skokholm SPA published by the Countryside Council for Wales.
- Report of the Gwarchod y Godiroedd-Conserving the Coastal Slopes Project 1999-2002., published by PCNPA.
- Atlas of Breeding Birds in Pembrokeshire 2003-07 published by the Pembrokeshire Bird Group.
- Marius A. Wenzel; Lucy M. Webster; Guillermo Blanco; Malcolm D. Burgess; Christian Kerbiriou; Gernot Segelbacher; Stuart B. Piertney & J. M. Reid. Pronounced genetic structure and low genetic diversity in European red-billed chough, *Pyrrhocorax pyrrhocorax* populations in *Conservation Genetics* published on line by Springer on 15th June 2012.

Plan Aims

No	Aim/objective	Deadline	Comments
CH01	Population should be stable or increasing in Pembrokeshire – allowing for natural variability.	Ongoing	
CH02	Distribution should be maintained or increased in Pembrokeshire.	Ongoing	
CH03	There should be sufficient habitat and connectivity to support healthy populations in Pembrokeshire long-term.	Ongoing	
CH04	Anthropogenic factors (such as recreational disturbance) should be under control.	Ongoing	
CH05	Improve knowledge and understanding of Chough population dynamics in Pembrokeshire	Ongoing	
CH06	Keep under review factors such as genetic isolation on the long term viability of the Chough population.	Ongoing	

Suggested Action

Code	Action	Report By	Lead Role	Progress / Additional Information
CH03.01	Provide support for farmers and landowners to manage cliff tops and coastal slopes for the benefit of choughs e.g. through targeted management agreements, local niche schemes; agri-environment schemes		PCNPA & NRW	
CH03.02	Management of coastal slopes, cliff tops and headlands		NT/	

	owned/managed by partners to benefit choughs	WTSWW
CH05.01	Annual surveillance of and reporting on the Pembrokeshire chough population, including the conservation status of the species in the three SPA s for which it is a feature	PCNPA
CH05.02	Research into land and livestock management practices that benefit dung & soil invertebrate populations in chough foraging areas	NRW
CH05.03	Investigations into interactions/possible competition between choughs and other corvids in key areas e.g. in the SPA s for which the chough is a (or the) feature of European importance	
CH05.04	Support the continuation/development of a colour-ringing programme (in addition to the annual surveillance of the chough population)	
CH04.01	Management of coastal recreation to minimise disturbance/adverse impacts on choughs e.g. through the Outdoor Charter; agreed seasonal cliff climbing restrictions	PCNPA