

National Parks and Wildlife Service

Conservation Objectives Series

Fanad Head SPA 004148



NPWS

An tSeirbhís Páirceanna
Náisiúnta agus Fiadhúlra
National Parks and Wildlife
Service

**National Parks and Wildlife Service,
Department of Housing, Local Government and Heritage,
90 King Street North, Dublin 7, D07 N7CV, Ireland.
Web: www.npws.ie
E-mail: natureconservation@npws.gov.ie**

Citation:

**NPWS (2024) Conservation Objectives: Fanad Head SPA 004148. Version 1.
National Parks and Wildlife Service, Department of Housing, Local Government
and Heritage.**

**Series Editors: Maria Long and Colin Heaslip
ISSN 2009-4086**

Introduction

The overall aim of the Habitats Directive is to maintain or restore the favourable conservation status of habitats and species of community interest. These habitats and species are listed in the Habitats and Birds Directives and Special Areas of Conservation and Special Protection Areas are designated to afford protection to the most vulnerable of them. These two designations are collectively known as the Natura 2000 network.

European and national legislation places a collective obligation on Ireland and its citizens to maintain habitats and species in the Natura 2000 network at favourable conservation condition. The Government and its agencies are responsible for the implementation and enforcement of regulations that will ensure the ecological integrity of these sites.

A site-specific conservation objective aims to define favourable conservation condition for a particular habitat or species at that site.

The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

Favourable conservation status of a habitat is achieved when:

- its natural range, and area it covers within that range, are stable or increasing, and
- the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
- the conservation status of its typical species is favourable.

The favourable conservation status of a species is achieved when:

- population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

Notes/Guidelines:

1. The targets given in these conservation objectives are based on best available information at the time of writing. As more information becomes available, targets for attributes may change. These will be updated periodically, as necessary.
2. An appropriate assessment based on these conservation objectives will remain valid even if the targets are subsequently updated, providing they were the most recent objectives available when the assessment was carried out. It is essential that the date and version are included when objectives are cited.
3. Assessments cannot consider an attribute in isolation from the others listed for that habitat or species, or for other habitats and species listed for that site. A plan or project with an apparently small impact on one attribute may have a significant impact on another.
4. Please note that the maps included in this document do not necessarily show the entire extent of the habitats and species for which the site is listed. This should be borne in mind when appropriate assessments are being carried out.
5. When using these objectives, it is essential that the relevant backing/supporting documents are consulted, particularly where instructed in the targets or notes for a particular attribute.

Qualifying Interests

** indicates a priority habitat under the Habitats Directive*

004148	Fanad Head SPA
--------	----------------

A122	Corncrake <i>Crex crex</i>
------	----------------------------

Please note that this SPA overlaps with Ballyhoorisky Point to Fanad Head SAC (001975) and is adjacent to Horn Head to Fanad Head SPA (004194). See map 2. The conservation objectives for this site should be used in conjunction with those for the overlapping and adjacent sites as appropriate.

Supporting documents, relevant reports & publications

Supporting documents, NPWS reports and publications are available for download from: www.npws.ie/Publications

NPWS Documents

Year : 2013
Title : A review of the SPA network of sites in the Republic of Ireland
Author : NPWS
Series : Published Report

Other References

Year : 1996
Title : The ecology of the Corncrake, with special reference to the effect of mowing on breeding production
Author : Tyler, G.
Series : PhD thesis, University College Cork

Year : 1997
Title : Populations, ecology and threats to the Corncrake *Crex crex* in Europe
Author : Green, R. E.; Rocamora, G.; Schäffer, N.
Series : Vogelwelt, 118, 117-134

Year : 1999
Title : The Corncrake (*Crex Crex*) in Ireland
Author : Mc Devitt, A. M.; Casey, C.
Series : Proceedings International Corncrake Workshop 1998, Hilpoltstein/Germany. Eds. Schaffer & Mamme, U. (eds.)

Year : 2001
Title : The effects of flooding lowland wet grassland on soil macroinvertebrate prey of breeding wading birds
Author : Ausden, M.; Sutherland, W.; James R.
Series : Journal of Applied Ecology 38: 320–338

Year : 2019
Title : Use of microsatellite-based paternity assignment to establish where Corn Crane *Crex crex* chicks are at risk from mechanized mowing
Author : Green, R. E.; Brekke, P.; Ward, H.; Slaymaker, M.; van der Velde, M.; Komdeur, J.; Dugdale, H. L.
Series : Ibis, 161 (4), 890-894

Year : 2020
Title : Diet of corncrakes *Crex crex* and prey availability in relation to meadow management
Author : Arbeiter, S.; Flinks, H.; Grünwald, J.; Tanneberger, F.
Series : Ardea, 108 (1), 55-64

Conservation Objectives for : Fanad Head SPA [004148]

A122 Corncrake *Crex crex*

To restore the Favourable conservation condition of Corncrake in Fanad Head SPA, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Population size	Number of calling males	Restore the numbers of calling males to an average of at least 3 per year in any consecutive 5-year period	The breeding season of this migratory bird is mid-April to mid-September. The measure of 'calling males' is as per previous (Green et al., 1997) and recently adapted Corncrake census methods (NPWS internal files). Determination of the SPA population size involves recording calling males within suitable/known areas between 20 May to 10 July (BST 11:00 to 03:00hrs), though calling males outside this period/time are also recorded as potential breeding sites. Where multiple birds occur in close proximity, survey visits are increased to keep track of movements of individuals and refine records. For the period 2019-23, the SPA supported an average of one calling male. Agricultural practices incompatible with their breeding ecology is considered the main cause of sub-optimal breeding habitats in this SPA (NPWS internal files). Figures for the baseline period 2003-07 indicate that numbers of calling males ranged from 2-5, with an average of ≥ 3 for that period (NPWS, 2013; NPWS internal files)
Population trend	Percentage change in number of calling males	Long-term population trend is stable or increasing	The national population of breeding Corncrake for the period 2003-07 ranged from 131-162 calling males, with an average of 150 for that period, fewer than the Republic of Ireland total of 165 calling males in 1993 (McDevitt and Casey, 1999) and lower than all-Ireland figures presented in Green et al. (1997) of 174. More recent figures for the period 2019-23 indicate that the population has risen to an average of c.182 calling males (151-218). Though the national population trend can be considered increasing since 2003-07, for the SPA, the average of 1 calling male for the period 2019-23 is of concern and indicates a decrease of 66.7% from the baseline period. SPA totals include any calling males located outside the SPA but $\leq 250m$ from the boundary. For the Corncrake SPA network overall, the population trend is considered broadly stable, with an average of 102 calling males for the period (2019-23), on par with an average of 99 calling males for the network for the period (2003-07)
Spatial utilisation by breeding pairs	Percentage	Restore the spatial utilisation of the SPA by breeding pairs to at least 25-40%	Core areas used by breeding Corncrake can be broadly defined by calculating the portion that lies within 250m of all confirmed calling males, albeit independent flightless chicks will range further (Green et al., 2019). Optimal resilience for the population relies on birds utilising suitable habitat to the maximum extent, with the population well dispersed across the SPA and not confined to isolated locations. The target range is informed by 2016-23 census data for the SPA, and includes estimated usage figures for the SPA where numbers of calling males in any given year were \geq the SPA baseline figures presented in NPWS (2013). The target area is informed by typical home ranges (Tyler, 1996) and baseline population density. The mean estimated spatial distribution of Corncrake for this SPA was only 9% for the period 2016-23. Meeting other targets, including that for the 'extent and condition of nesting and foraging habitat', should help achieve the spatial utilisation target

Extent and condition of nesting and foraging habitat	Hectares; condition assessment	Restore the extent and quality of this resource to support the targets relating to population size, population trend and spatial utilisation	Given its extended breeding season, the provision of tall-herb species via the creation of early and late cover areas (ELCs) in spring/autumn is beneficial to Corncrake. A ground-nesting rail, it prefers tall, well structured grass vegetation ($\geq 20\text{cm}$) in hay, arable or silage fields, rough pastures, and in stands of herbaceous species such as Yellow Iris (<i>Iris pseudacorus</i>) and Nettle (<i>Urtica dioica</i>) (e.g. Green et al., 1997; Tyler, 1996; NPWS internal files). ELCs support adults by providing invertebrate prey species (NPWS internal files) and nesting habitat when meadows are unsuitable, thereby improving breeding success (e.g. via nest concealment allowing better protection from predators) and by allowing breeding to start earlier or end later. Wildlife-friendly mowing provides Corncrake with continuous cover by maintaining low-mowing speeds to allow adults/young chicks escape to edges of fields rather than centres i.e. into safety of field margins/neighbouring fields
Forage spatial distribution, extent, abundance and availability	Location and hectares, and forage biomass	Sufficient number of locations, area of suitable habitat and available prey biomass to support the population targets	Nesting Corncrake are most at risk to habitat loss due to activities related to grass/crop harvesting and continuous grazing, particularly by sheep. Omnivorous in its diet, it feeds mainly on arthropods, molluscs, worms and seeds (Tyler, 1996; Arbeiter et al., 2020). The availability of earthworms and molluscs in moist habitats may explain why moist unfertilised grassland is good Corncrake habitat, as well as the suitability of the vegetation structure of some marsh vegetation (Green et al., 1997). Insects and molluscs may be vital for Corncrake in floodplain habitats, as areas with long winter floods have a lower abundance of earthworms (Ausden et al., 2001). Suitable and well-connected forage areas, with an open sward structure, $\geq 20\text{cm}$ in height, offer optimum concealment and cover to adults and young birds, which are flightless for up to 40 days post-hatching. Restoring/maintaining inter-connected mosaics of forage/refuge areas across the SPA and wider hinterland is fundamental
Disturbance to breeding sites	Level of impact	Disturbance occurs at levels that do not significantly impact upon breeding Corncrake	The impact of any significant disturbance on the SPA's breeding population will ultimately be manifested in the targets which relate to population demographics (i.e. population size, population trend) and the spatial utilisation of the SPA by breeding pairs. Factors such as intensity, frequency, timing and duration of a potentially disturbing activity (e.g. grass/crop harvesting; recreational activities; summer grazing; development requiring planning permission) need to be taken into account to determine its significance on breeding Corncrake in the SPA. Agricultural activities and associated land-use in/adjacent to the SPA may cause disturbance to breeding sites and may directly impact breeding success, by confining Corncrake to limited locations; thereby increasing mortality risk and resource competition. Late summer harvesting of grass (post 15 Aug) using wildlife-friendly mowing and the retention of refuge areas significantly lowers risk to flightless chicks/moulting adults



