



All-Ireland Species Action Plan

Corncrake
Crex crex



Corncrake

Crex crex

1. Current status

- 1.1. The comcrake *Crex crex* is the most terrestrial member of the Rallidae family. Secretive and rarely seen, their best-known characteristic is the song of the male – a distinctive rasping “crake crake”, which is heard only on the breeding grounds. These extend from Ireland to Asiatic Russia in the northern hemisphere. They winter in southern and eastern Africa, migrating northwards to arrive on their breeding grounds from early April onwards, departing again in August and September.
- 1.2. They require at all times the cover of tall vegetation and are strongly associated with meadows which are harvested annually, where they nest and feed. Annual cutting creates a sward with an open structure, which is easy for the birds to move through (Green *et al.*, 1997a), but harvesting means they must find alternative cover adjacent to meadows late in the season. Farming therefore plays a key role in the establishment, maintenance and conservation of comcrake habitat.
- 1.3. In Ireland and Britain, adults arrive on the breeding grounds usually before meadow grass is tall enough to conceal them and so they seek cover in stands of early growing tall vegetation, such as nettles, umbellifers and reed canary grass (Cadbury, 1980). Depending on the prevailing climate and grassland management regime of the area, first nests may be located in this vegetation, as meadow grass may still be too short by early May. Alternatively, as soon as meadow grass is tall enough (greater than about 20cm in height), they move into meadows to breed. Corncrakes are double brooded, with a peak of first hatching in early June and of second hatching in late July (Tyler, 1996). The young are led away from the nest within 24 hours and are independent after about 2 weeks, but do not fledge until they are five weeks old. (Cramp & Simmons, 1980). The consequence of this breeding schedule is that nests and females accompanying broods are present in meadows from early May until mid August and some flightless young are still present until mid September or later.
- 1.4. The global population is estimated at 1.7 – 3 million pairs (Schaffer & Green, 2001). (As females are generally silent, the singing male is taken to represent a pair). Over 1.5 million of these pairs are in Russia and the Ukraine. The European population is estimated at 92,000-233,000 (Crockford *et al.*, 1996). In eastern Europe, populations of more than 25,000 are found in Belarus, Latvia, and Poland whilst in western Europe, populations of more than 1,000 pairs are found in Germany and France (Schäffer & Green, 2001) and Scotland (Royal Society for the Protection of Birds (RSPB), unpublished data). In 2005, 164 singing males were recorded in Ireland (BirdWatch Ireland (BWI), unpublished data).
- 1.5. Corncrake is the only breeding bird in Ireland which is listed on the 2005 International Union for the Conservation of Nature (IUCN) Red List of Threatened Species (BirdLife International, 2005). This is due to population and range declines of more than 50% in the last 25 years across significant parts of its range. Despite the confirmation in the last 10 years of large populations in Russia, it remains listed as Near Threatened, due to the likelihood of further rapid declines in the event of changes in agriculture, particularly in Eastern Europe and Russia. It also appears on Annex 1 of the European Community (EC) Council Directive on the Conservation of Wild Birds (79/409/EEC), more commonly known as Birds Directive, and on Appendix II of the Bern Convention. It is protected under Schedule 1 of the Wildlife (Northern Ireland) Order 1985 and under the Wildlife Acts of 1976 and 2000 in the Republic of Ireland. It is listed in the Irish Red Data Book (Whilde, 1992) and appears in the Red List of both Birds of Conservation Concern in Ireland (Newton *et al.*, 2000) and

Birds of Conservation Concern in the UK, Channel Islands and Isle of Man (Gregory *et al.*, 2002).

- 1.6. It was once a widespread and familiar summer migrant in Ireland (Holloway, 1996), but by 1988 the population had fallen to just 903-930 singing males and was largely restricted to four areas, Co. Fermanagh in Northern Ireland and three core areas in the Republic of Ireland, north Donegal, west Connacht, particularly Co. Mayo, and the Shannon Callows (Mayes & Stowe, 1989). By 1994, they had disappeared as a regular breeding species from Fermanagh and records outside the three remaining core areas are sporadic, though 1 or 2 males have regularly been recorded on the Dingle peninsula and on Rathlin Island. By 2005, the Irish population stood at 162 in the core areas, with a further 2/3 in Northern Ireland and 2 in the Republic of Ireland.
- 1.7. On average, comcrake numbers fell by between 20 and 50% over the last 10 years in 22 European countries, though more severe declines were likely to have taken place before then. For example in France there was a population decline of around 40% between 1984–1992 and in the Netherlands of 75% since the early 1980s. In western Ukraine more than 60% of the population has disappeared since 1976 (Crockford *et al.*, 1996).

2. Current factors causing loss or decline

- 2.1. There is conclusive evidence to show that declines in comcrake populations are primarily linked to changes in agricultural practice on the breeding grounds. (Green & Williams, 1994; Green & Rayment, 1996). As the grass harvest corresponds closely to the timing of breeding, nests are often destroyed and young killed during mowing. These losses have increased and gradually become unsustainable as a result of changes in grassland management.
- 2.2. Drainage of damp ground, increased fertiliser applications, reseeding with more productive grasses and the use of bigger, more efficient machinery, have all led to earlier average mowing dates and a shorter harvest period across much of the comcrake's range (Tyler *et al.*, 1998). In some areas, multiple cuts are a feature of grassland management. A mean first mowing date of 10th August, i.e., after the peak of hatching of second broods, is now known to be essential for their conservation (Green *et al.*, 1997a), together with an extended mowing season, which leaves at least some cover into September. In countries which have experienced rapid declines, these conditions are rare. For example, in Ireland, first cuts of silage usually take place in May or June and hay is normally harvested in June or July. As mowing machinery has become more advanced, the harvest is also now completed over a shorter period of time. Lack of suitable breeding habitat is sufficient to account for population declines across the range, the severity of which can be linked to the degree of agricultural intensification experienced within a particular country (Green & Rayment, 1996).
- 2.3. The conventional practice of mowing fields from the outer edge towards the middle traps birds in an ever-decreasing patch of grass, from which they are reluctant to attempt escape, as this would involve crossing open ground to the nearest cover. They are thus often killed when the last swards are cut (Tyler *et al.*, 1998)
- 2.4. More intensive grassland management has also led to habitat fragmentation. Corncrakes prefer species rich, unimproved or semi-improved meadows, as improved grasses become too dense for birds to penetrate easily. It has been suggested that 150ha of relatively contiguous suitable meadow in sympathetic management is ideally required to sustain a viable population. Such blocks of habitat are rare in Ireland outside the core corncrake areas.
- 2.5. In addition to lack of cover in meadows at the start of the season, corncrakes are also often faced with a similar lack of cover after harvesting. Second brood chicks and females, who

are the last to leave the breeding grounds in September, may therefore be vulnerable to predation at this time, if the cover available to them is inadequate or fragmented.

- 2.6. In some areas, other factors such as development pressure, abandonment of farmland or changes in grassland management regimes may have reduced the amount of suitable grassland available and this in turn may have affected corncrake populations.

3. Current action

- 3.1. The Corncrake Grant Scheme was first introduced in Northern Ireland by Environment and Heritage Service (EHS) in Co. Fermanagh in 1990. It provided farmers with an incentive to delay mowing and cut fields from the centre out. However, because of an already fragmented population and insufficient knowledge of the breeding ecology, the scheme was unable to prevent their disappearance by 1994 as a regular breeding species in Fermanagh. Further research led to a revised scheme in 1994 with a later mowing date and provision for early and late cover refuges. EHS continue to fund this scheme, which is available throughout Northern Ireland and is administered by RSPB. Since 1994, there have generally been one or two singing males confirmed at various locations each year, including Rathlin Island, where they have occurred in three years, with breeding confirmed in 1997.
- 3.2. In the Republic of Ireland, the Corncrake Grant Scheme was first introduced in Co. Donegal in 1992 and in the Shannon Callows in 1993, but the revised scheme was implemented in all three core areas (Co. Donegal, west Connacht and the Shannon Callows) from 1994 onwards, administered by BWI. Until 2001, Dúchas, (now National Parks and Wildlife Service (NPWS) of the Department of Environment, Heritage and Local Government) funded two thirds of the Scheme, the remainder being met by the RSPB. Since 2002, full costs have been met by NPWS.
- 3.3. In the Republic of Ireland, three corncrake fieldworkers and a Project Officer are deployed in the core areas to census the population annually and to administer and monitor compliance of the Corncrake Grant Scheme. RSPB funded these posts until 2001, when funding was taken over by NPWS.
- 3.4. In the Republic of Ireland, three sites have been designated as Special Protection Areas (SPAs) for corncrake under the Birds Directive - the Shannon Callows and the Donegal Islands of Tory and Inishbofin.
- 3.5. A further 4 sites in the Republic of Ireland (Malin Head, Fanad Head Peninsula, and Falcarragh to Min an Chladaigh in Co. Donegal and parts of the Mullet in Co. Mayo) are listed as Important Bird Areas (IBAs) by BirdLife International (Hunt *et al.*, 2000), as they regularly hold internationally important concentrations of corncrake.
- 3.6. Following a reform of the European Common Agricultural Policy (CAP), 2005 saw member states decoupling agricultural payments from production. The consequences of this for corncrake conservation are uncertain, but it may lead to changes in mowing and grazing regimes, which may in turn affect corncrake populations.
- 3.7. In the Republic of Ireland, there is a voluntary agri-environment scheme, the Rural Environment Protection Scheme (REPS). Since June 2004, a revised REPS, with a supplementary payment for the implementation of a corncrake friendly management prescription in the Shannon Callows SPA, has been implemented.
- 3.8. NPWS is presently launching a farm plan scheme for farmers who do not wish to join REPS. Like REPS, this will take the form of a 5-year contract. The NPWS scheme will be available in 2006. The Corncrake Grant Scheme will be available as an alternative in 2006 only, after

which farmers will have to choose between REPS and the NPWS scheme. Discussions are ongoing between the Department of Agriculture and Food, (DAF), NPWS, the Irish Farmers Association (IFA) and the Irish Creamery and Milk Suppliers Association (ICMSA) and BWI on agreed prescriptions and remuneration for corncrake management on farms.

- 3.9. In the Republic of Ireland, almost 25 ha of land on the Shannon Callows is in conservation ownership, 21.5 ha of which was purchased by BWI with funding from NPWS. BWI, in partnership with Teagasc, with support funding from the EU LIFE Nature programme, has been managing a project centred on the Termoncarragh Lake SPA on the Mullet peninsula for the restoration of land for four species listed on Annex I of the Birds Directive, these being corncrake, rednecked phalarope, barnacle goose and Greenland white-fronted goose. To date 10.64 ha of land has been purchased as a corncrake reserve and pro-active management agreements with local farmers for the duration of the project (until November 2005) on a further 46 ha have been administered. In 2003, three singing male corncrakes were recorded on the Shannon Callows reserve and one at the Termoncarragh project on the Mullet. In 2004, three singing male territories were recorded within the Termoncarragh project area, with one in 2005.
- 3.10. The UK Biodiversity Action Plan for Corncrake includes a target of re-establishing populations in parts of the bird's former range. This has led to a pilot re-introduction programme in England, which if successful, may provide opportunities in the future. It has also led to the establishment of Recovery Areas, which are areas close to existing centres of population or where small numbers still regularly occur and which are regarded as priorities for restorative management. In these areas, suitable land is purchased or leased and managed for corncrakes. In Northern Ireland, the RSPB, with funding from EHS, is establishing a Recovery Area on Rathlin Island, with at present 13ha under sympathetic management. Singing males have been confirmed on the island in 1997, 1998 and 2004, with breeding confirmed in 1997.
- 3.11. In Northern Ireland, the potential for the two agri-environment schemes, Environmentally Sensitive Areas (ESAs) and the Countryside Management Scheme (CMS), to contribute to positive management in present and possible future Recovery Areas is being explored.
- 3.12. Annual monitoring of the populations has been carried out in Donegal and the Shannon Callows since 1992 and in West Connacht since 1994. The Fermanagh population was monitored annually between 1990 and 1994, the year in which corncrake ceased to occur as a regular breeding species.
- 3.13. Since 1988, a National Corncrake Census has been carried out by RSPB and BWI every five years in Britain and Ireland respectively, with assistance from Government. The exception has been 2003 when there was no national census in Ireland outside the core areas.
- 3.14. NPWS funded a 3 year research programme to investigate the continued decline of the corncrake population in the Shannon Callows, despite the operation and high uptake of the Corncrake Grant Scheme there since 1994. As this Scheme has led to population increases elsewhere in Ireland and in Scotland, further study of the Shannon Callows population was considered necessary. The results showed that the specific nature of land ownership and mowing patterns, together with changes in mowing regimes had reduced the effectiveness of the existing conservation measures. Revised measures for the Corncrake Grant Scheme specific to the Shannon Callows were therefore devised and incorporated into conservation land management schemes.
- 3.15. In 2001, BWI and RSPB jointly produced "A Strategy for Corncrake Conservation in Ireland 2001-2010" (Copland & Donaghy, 2001). It proposed the establishment of Recovery Areas and set out 2010 population targets for the three core areas in the Republic of Ireland (a total of 310 singing males) and Rathlin Island in Northern Ireland (10 calling males). With some modification, these provide the basis for the biological targets set out in the current Plan.

- 3.16. Further to the Strategy, BWI, with funding from NPWS, carried out the “Islands Feasibility Study” (Barron, 2001), which aimed to identify suitable Recovery Areas on the islands off the west coast. On the basis of a review of a range of agricultural, economic and biological factors, four islands were identified as potential Recovery Areas in the Republic of Ireland: Inishmeane and Gola in Donegal, and Inishbofin and Omey in Galway. As discussed above, in Northern Ireland, efforts are currently focused on Rathlin Island.

4. Action plan targets

- 4.1. Maintain the existing number and range of corncrakes in Ireland.
- 4.2. Maintain corncrake population in the three core areas in the Republic of Ireland at or above 2003 levels (133 singing males).
- 4.3. By 2010, increase the populations of the three core areas to 150 in Donegal, 50 in West Connacht and 60 in the Shannon Callows.
- 4.4. By 2010 establish a population of 7 singing males on Rathlin Island.
- 4.5. By 2015, re-establish breeding populations in other parts of its former range, in suitable areas in both Northern Ireland and the Republic of Ireland.

5. Proposed action with lead agencies

A range of Government Departments are likely to be involved in the delivery of the above objectives. Along with EHS and NPWS, the Department of Agriculture and Rural Development in Northern Ireland (DARD) and the Department of Agriculture and Food (DAF) in the Republic of Ireland will have a key role through agri-environment measures. Also in the Republic of Ireland, the Department of Community, Rural and Gaeltacht Affairs, (DCRGA) which promotes sustainable development of Gaeltacht and island communities, is a potential contributor to corncrake conservation through its policies and funding.

5.1. Policy and legislation

- 5.1.1. Continue funding of BWI to deploy a Project Officer and corncrake fieldworkers in the core areas, to census populations, administer schemes as agreed and carry out other conservation measures for as long as necessary.
(ACTION: NPWS, DAF)
- 5.1.2. By 2006, put in place the NPWS scheme, with the Corncrake Grant Scheme for one year as a back-up.
(ACTION: NPWS)
- 5.1.3. Ensure that a mechanism exists to pay for corncrake friendly management outside the three core areas in the Republic of Ireland.
(ACTION: NPWS)
- 5.1.4. By 2006 update the management prescriptions of the Corncrake Grant Scheme, REPS and the NPWS Scheme as they operate on the Shannon Callows, based on the findings of the Research Project (Section 3.4.2). Revised prescriptions should be applied to other areas where applicable or necessary.
(ACTION: NPWS, DAF, EHS, DARD).

- 5.1.5. Periodically review the rates of payment of schemes in the Republic of Ireland to ensure optimal uptake.
(ACTION: NPWS)
- 5.1.6. Continue the operation of the RSPB-administered Corncrake Grant Scheme throughout Northern Ireland.
(ACTION: EHS)
- 5.1.7. By 2008, initiate the establishment of Recovery Areas on the four most suitable west coast islands as identified in the Islands Feasibility Study, namely Inishmeane and Gola in Donegal, and Inishbofin and Omey in Galway.
(ACTION: NPWS (consult DCRGA))
- 5.1.8. By 2008, carry out similar Feasibility Studies throughout Ireland to identify other Recovery Areas. This could include existing areas of grassland outside the core areas, and/or suitable areas of publicly owned land, where mechanisms to carry out suitable management already exist or could easily be introduced.
(ACTION: NPWS, EHS)
- 5.1.9. By 2008, undertake an analysis of agricultural, social and economic factors influencing the management of agricultural land in corncrake areas as the impacts of the CAP reform begin to emerge. Make recommendations as required.
(ACTION: NPWS, DAF, EHS, DARD)
- 5.1.10. By 2006 agree comcrake prescriptions for REPS farms in the Republic of Ireland.
(ACTION: NPWS, DAF)
- 5.1.11. By 2006, agree and implement a mechanism for compliance monitoring of all corncrake schemes in the Republic of Ireland.
(ACTION: NPWS, DAF)
- 5.1.12. By 2007, if there is to be a review of agri-environment schemes under the new Rural Development Programme (2007 – 2013) in Northern Ireland, consider the introduction of a Corncrake Option to the Antrim Coast and Glens and Rathlin ESA, targeted at areas on Rathlin.
(ACTION: DARD)
- 5.1.13. By 2010, consider other ways in which agri-environment schemes may contribute to the establishment of other Recovery Areas throughout Ireland.
(ACTION: NPWS, DAF, EHS, DARD)

5.2. Site safeguard

- 5.2.1. By the end of 2006, produce Conservation Plans for SPAs with corncrakes.
(ACTION: NPWS)
- 5.2.2. By 2008, secure favourable management of all suitable land in corncrake SPAs.
(ACTION: NPWS, consult DCRGA)
- 5.2.3. By 2006, publish Management Plans for the four IBAs in Donegal and Mayo, which regularly hold internationally important numbers of singing male corncrakes.
(ACTION: NPWS)
- 5.2.4. By 2006, in SPAs and the above four IBAs, consult with County Councils and DCRGA in the Republic of Ireland on how to protect comcrake habitat from the affects of cumulative development.
(ACTION: NPWS)

5.2.5. Continue to pursue opportunities for land purchase/leasing at key sites to extend existing reserves and Recovery Areas and establish new ones.
(ACTION: NPWS, EHS)

5.3. Species management and protection

5.3.1. From 2006, trial mammalian predator control programmes where such predation is considered a problem and where action is likely to be effective.
(ACTION: NPWS)

5.4. Advisory

5.4.1. By 2006, revise and update advisory leaflets for farmers participating in the Comcrake Grant Scheme in all key areas.
(ACTION: NPWS, EHS)

5.4.2. Use corncrake sites to trial grassland management techniques and use as demonstration sites where feasible.
(ACTION: NPWS, EHS)

5.4.3. By 2007, provide advice on corncrake-friendly management techniques to agricultural colleges to aid their inclusion in land management courses.
(ACTION: NPWS, DAF, EHS, DARD)

5.4.4. Advise landowners of risks to corncrake from predation by domestic cats.
(ACTION: NPWS, EHS)

5.5. Future research and monitoring

5.5.1. Continue to monitor populations in the core areas each year, following standard methodology.
(ACTION: NPWS, EHS)

5.5.2. Monitor habitat condition and management at key sites on a periodic basis. Implement habitat restoration programmes if required.
(ACTION: NPWS, EHS)

5.5.3. On the basis of census results, consider further research into breeding success at key sites such as Inishbofin, Co Donegal, where the population is fluctuating.
(ACTION: NPWS)

5.5.4. By 2009, review the effectiveness of any predator control programmes and undertake further action where necessary.
(ACTION: NPWS, EHS)

5.5.5. Continue to assess economic, technical and agronomic aspects of modifying grassland management in corncrake areas where appropriate.
(ACTION: NPWS, DAF, EHS, DARD)

5.5.6. By 2010, pending the results of an RSPB re-introduction programme in England, consider the potential for a re-introduction programme on Rathlin in Northern Ireland, and other suitable recovery areas in the Republic of Ireland, should natural re-colonisation not occur.
(ACTION: EHS, NPWS)

5.5.7. Provide information annually to BirdLife International on the status of the corncrake in Ireland to contribute to maintenance of an up-to-date global red list.
(ACTION: NPWS, EHS)

5.6. Communications and publicity

- 5.6.1. Inform local authorities and statutory agencies of the presence of corncrake in their areas of responsibility and ensure that they are aware of the potential risks to corncrake that could be caused through inappropriate land management or development.
(ACTION: EHS, NPWS)
- 5.6.2. By 2006, establish an All Ireland Steering Group to facilitate the implementation of the policy and land management proposals outlined in this plan.
(ACTION: NPWS, EHS)
- 5.6.3. Continue with regular media articles in key areas, providing information to local communities on the occurrence and importance of corncrakes in the area.
(ACTION: NPWS, EHS)
- 5.6.4. By 2006, provide information for visitors on the occurrence and importance of comcrake populations and how disturbance to nesting birds can be avoided.
(ACTION: NPWS, EHS)
- 5.6.5. By 2007, provide information to Local Authorities in Northern Ireland and County Councils in the Republic of Ireland and local communities on the potential benefits for the local economy of “green tourism” projects based on the occurrence of comcrakes in the area.
(ACTION: NPWS, EHS)
- 5.6.6. By 2006 establish the production of a regular (annual or bi-annual) All Ireland Comcrake Newsletter for dissemination to landowners and the general public, with information on census results, progress on conservation projects and reserve management etc.
(ACTION: NPWS, EHS).

6. Links with other action plans

Northern Ireland Habitat Action Plans

- Purple moor-grass and rush pasture
- Coastal and floodplain grazing marsh
- Lowland meadow

Northern Ireland Species Action Plans

- Irish hare

7. References

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