Northern Ireland Species Action Plan
Yellowhammer
Emberiza citrinella
March 2005

1. Current status

1.1 The yellowhammer *Emberiza citrinella* is a member of the bunting family and a characteristic resident species of lowland arable and mixed farmland. It is most obvious in spring and summer when the male has a bright yellow head and breast and perches, singing, on the tops of tall bushes, trees and telegraph wires. The nest is close to ground level in dense grass, field margins, ditch vegetation, at the base of thick low hedgerows or in thick scrub (Donaghy, 1998). It can produce up to three broods in a year, nesting until the end of August (Harrison, 1975).

1.2 Yellowhammers feed on grain, weed seed and the seeds of large grasses in winter, foraging in cereals, cereal stubbles and crop margins (Donaghy, 1998). In spring and summer adults and chicks feed mainly on invertebrates. In Northern Ireland the range is largely dependant on the presence of cereal fields and the range is fragmented with a stronghold in eastern Co. Down. In the rest of Ireland, yellowhammers are concentrated in the east and south and are generally absent in the west (Coombes *et al.*, 2002). The yellowhammer is largely sedentary (annual range < 5 km) with some local movement in winter in search of food when it may visit farms and villages. In Ireland the annual dispersal range of individuals may be greater due to a shortage of ideal habitat (Lack, 1986).

1.3 The yellowhammer was considered to be one of the most common birds in Britain and Ireland in the 19th century (Holloway, 1996). The Atlas of Breeding Birds (Sharrock, 1976) showed that they were still well distributed in the British Isles but had shown some range contraction.

1.4 By 1991 the New Atlas of Breeding Birds (Gibbons *et al.*, 1993) showed declines in northwest Ireland and their absence from Co. Fermanagh. For Northern Ireland, the Atlas showed evidence of 66 occupied 10km squares and provided an estimated population of 32,512 pairs.

1.5 Further work in Northern Ireland in 1997 estimated 11,379 breeding pairs, a 65% decline in numbers since 1991 (11% per year) (Donaghy, 1998). A similar but not as pronounced pattern of decline exists across the UK, with a 52% decline in numbers between 1970 and 2001 (Eaton *et al.*, 2004).

1.6 The current estimated population in Northern Ireland is 5,000 pairs (RSPB, pers. comm.). However, extrapolation of winter counts in the late 1990s estimate that the population could be a low as 1,000 territories (G. Henderson, pers. comm.).

1.7 Although limited survey work carried out to date means that the population and range of yellowhammers in Northern Ireland is not accurately known, it strongly suggests that the population is already at a low level, with a patchy distribution and declining for reasons not fully understood. Two other species of lowland farmland bird once

widespread in Northern Ireland, namely the corn bunting and the grey partridge, became extinct around 30 years ago having previously suffered population declines and range contractions similar to those now being experienced by the yellowhammer (Hutchinson, 1989).

1.8 The *Northern Ireland Countryside Survey 2000* (NICS 2000) indicates a 30% decrease in cereal crops between 1988 and 1998. This decrease is due to agricultural intensification towards improved grassland. The current extent of cereal crop planting in Northern Ireland is 20,343 ha (Cooper & McCann, 2002).

1.9 The yellowhammer is protected under Article 4 of the Wildlife (Northern Ireland) Order 1985. It is not listed as 'specially protected' in Schedule 1 of the order. It is red listed in both the UK (Gregory *et al.*, 2002) and Irish 'Birds of Conservation Concern' (Newton *et al.*, 1999) on the grounds that there has been a decline greater than 50% in the last 25 years. Its European status is listed as 'non-SPEC, status secure'. (Burfield, I & van Bommel, F 2004). It is not listed in the Annexes of the EU Birds Directive (79/409/EEC). The UK government has chosen the population trends of a suite of farmland birds, including the yellowhammer, as a headline "Quality of Life" indicator.

2. Current factors causing loss or decline

2.1 The factors causing declines are not fully understood. However, as the yellowhammer is associated mainly with farmland, factors influencing its population and distribution are predominantly agricultural.

2.1.1 Food supply (Winter) - loss of winter food supply as a result of the decline in cereal crops and mixed agriculture and a switch to autumn sowing of cereals, which reduces the amount of stubble grain available. There may also be lack of feeding opportunity due to the sealing of grain storage barns and increased grain harvesting efficiency and use of herbicides (DARD, 2000).

2.1.2 Food supply (Summer) - loss of summer food supply due to intensification of agriculture, leading to the loss of foraging habitat, and food, through the increased use of pesticides, herbicides, fertilisers and slurry.

2.1.3 Habitat fragmentation - loss and fragmentation of breeding habitat as a result of inappropriate hedgerow management and the removal of scrub habitat.

2.1.4 Predation – a possible additional factor on an already vulnerable population by mammals and increased numbers of corvids, raptors and domestic cats. Predation may be increased by the loss and fragmentation of habitat (G. Henderson pers. comm.).

3. Current Action

3.1 The EU and UK Government are currently undergoing negotiations on Common Agricultural Policy reforms. This is an ongoing process, which will result in changes to the agricultural system and should bring benefits to wildlife and a change in focus for farmers.

3.2 DARD, through its Countryside Management Branch (CMB), has developed a series of agri-environment schemes including the Environmentally Sensitive Area (ESA) scheme (revised in 2003) and the Countryside Management Scheme (CMS). Their objective is to protect and enhance semi-natural habitats and species by encouraging more sensitive management practices including; planting wild bird cover, field boundary restoration and retention of winter stubble. Both these schemes have similar management provisions, are voluntary and apply to the whole farm. These schemes provide a mechanism for delivering some of the targets listed in action plans for many species and habitats, targeting areas of as little as 0.1 ha of semi-natural habitat in order to maintain or improve their present conservation value.

3.3 The Management of Sensitive Sites scheme (MOSS) was launched in 2002 by EHS. It is a voluntary scheme designed to ensure the positive management of the site features, such as lowland meadow within ASSIs. Under the scheme, landowners can receive payment for carrying out conservation work within the framework of a written agreement. MOSS covers issues such as agricultural improvement, grazing and control of invasive scrub species. One-off payments for works such as fencing and scrub clearance to assist grazing can be made.

3.4 DARD and the Royal Society for the Protection of Birds (RSPB) are jointly employing a project officer for three years, to contribute to the effective delivery of agri-environment prescriptions for a range of important or priority bird species, including yellowhammer.

3.5 A priority species co-ordinator has been appointed by the RSPB to support and advise the delivery of local action for priority bird species (and other species and habitats), particularly through the Local Biodiversity Action Plan (LBAP) process. The person has just been appointed for the 3 year period.

3.6 DARD operate an Organic Farming Scheme to encourage organic farming which is likely to benefit a range of farmland birds including yellowhammers.

3.7 Sacrificial seed plots for winter feeding of farmland birds have been established at Portmore Lough and at Belfast Lough. There is promotional work to encourage this winter feeding method with partner organisations.

3.8 The RSPB, the British Trust for Ornithology (BTO) and the Game Conservancy Trust (GCT) are conducting research based in Britain into the ecology and conservation of farmland birds including the yellowhammer. A PhD research project has also recently been completed investigating the general ecology of the Yellowhammer on Northern Ireland farmland at Queen's University Belfast.

3.9 In Northern Ireland the RSPB is currently undertaking research projects into yellowhammer ecology, emergency winter feeding and corvid predation.

3.10 The planting of wildflower meadows, which may be of assistance to farmland birds, is encouraged and facilitated by a number of local organisations.

3.11 The 'Voluntary Initiative', a partnership between farming and conservation organisations, aims to promote the safe and limited use of pesticides on farmland.

4 Action Plan Targets

4.1 Maintain population size at 5000 breeding pairs.

4.2 Maintain current breeding range in Northern Ireland.

4.3 By 2015, increase the population size to 11,400 breeding pairs (tbc).

4.4 By 2020 increase the breeding population range to 6610km^2 squares.

4. Proposed action with lead agencies

5.1 Policy and Legislation

5.1.1 By 2006, review *Planning Policy Statement 2 (PPS2) – Planning and Nature Conservation*, taking cognisance of the experiences gained in the rest of the UK, the Republic of Ireland and where appropriate, best practice in environmentally sensitive planning in other countries.
(ACTION: Planning Service, EHS)

5.1.2 By 2006, ensure that all grant-aided farms are adhering to Good Farming Practice and the Codes of Good Agricultural Practice for water, soil and air.
(ACTION: DARD, EHS)

5.1.3 By 2006, review and, if necessary, increase the level of protection given to the yellowhammer in the Wildlife (Northern Ireland) Order 1985.
(ACTION: EHS)

5.1.4 By 2006, target positive management through agri-environment schemes, MOSS the LBAP process and grant aid for biodiversity to secure favourable management for yellowhammers.
(ACTION: EHS, DARD)

5.1.5 By 2007, review the management of set-aside with regard to increasing the amount of seed available during winter.
(ACTION: DARD)

5.1.6 Encourage the growth of organic and integrated arable cropping where they can be shown to benefit the yellowhammer.
(ACTION: DARD)

5.2 Site Safeguard and Management

4.2.1 By 2007, establish an Arable Farmland Reserve to conserve a healthy yellowhammer population.
(ACTION: EHS, DARD)

5.3 Species Management and Protection

5.3.1 By 2006, establish a network of appropriately managed 'emergency winter feeding stations' for seed eating birds in target areas.
(ACTION: EHS)

5.3.2 By 2007, identify and if appropriate, manage hedges and verges on public roads to benefit nesting and feeding yellowhammers
(ACTION: EHS, Roads Service, DARD).

5.3.3 By 2007, identify and appropriately manage hedges on farmland through agri-environment schemes to benefit nesting and feeding yellowhammers.
(ACTION: DARD, EHS)

5.3.4 By 2007, identify a selection of appropriate areas of scrub where suitable management would benefit nesting and feeding yellowhammers.
(ACTION: EHS)

5.3.5 Encourage the creation of habitat suitable for yellowhammers on lands in both private and public ownership.
(ACTION: EHS, DARD, DRD, Roads Service, District Councils, Forest Service)

5.4 Advisory

5.4.1 By 2005, produce management guidelines and optimum habitat requirements for yellowhammer.
(ACTION: EHS)

5.4.2 By 2006, provide advice to land owners with yellowhammers on their land about suitable management requirements of the species.
(ACTION: EHS, DARD)

5.4.3 By 2006, ensure that information on the distribution of yellowhammers in Northern Ireland is available to all those who could play a role in their conservation and recovery.
(ACTION: EHS, DARD, Forest Service)

5.4.4 By 2007, through LBAPs and agri-environment schemes promote positive management on suitable sites to bring habitat into optimum condition for yellowhammers.
(ACTION: EHS, DARD)

5.5 International

5.5.1 Further develop links with the Republic of Ireland and other European and international organisations and programmes such as the European Environment Agency and the European Centre for Nature Conservation, to promote the exchange of information and experience in research, management techniques, education and conservation strategies.
(ACTION: EHS)

5.6 Future Research and Monitoring

5.6.1 By 2005, undertake appropriate surveys to establish the population, core areas, range and annual movements of the yellowhammer in Northern Ireland.
(ACTION: EHS, DARD)

5.6.2 By 2008, carry out research into factors influencing the dynamics of the yellowhammer population.
(ACTION: EHS, DARD)

5.6.3 By 2007, monitor and review the effectiveness of agri-environment schemes, MOSS and GFP with regard to farmland birds.
(ACTION: DARD,EHS)

5.6.4 By 2007, develop seed mixes to include perennial and annual local provenance wildflowers for use as wild bird cover suitable for the yellowhammer, Northern Ireland climate and soil types.
(ACTION: DARD, EHS)

5.6.5 By 2006, initiate research into the use of intensive grassland by yellowhammers and possible beneficial management regime changes.
(ACTION: EHS, DARD)

5.7 Communications and Publicity

5.7.1 By 2008, produce information for the public and schools which explains the conservation importance of farmland birds in Northern Ireland.
(ACTION: EHS, DENI, DARD)

5.7.2 Use the Arable Farmland Reserve established at 5.2.1 as a demonstration site for conservation and agricultural best practice for yellowhammers.
(ACTION: EHS, DARD)

5.8 Links With Other Action Plans

5.8.1 The implementation of this plan will increase farmland biodiversity in general and also benefit the Northern Ireland populations of the following UK priority species:

- skylark *Alauda arvensis*
- linnet *Carduelis cannabina*
- reed bunting *Emberiza schoeniclus*
- tree sparrow *Passer montanus*
- bullfinch *Pyrrhula pyrrhula*
- song thrush *Turdus philomelos*.

5.8.2 This plan should be considered in conjunction with the following UK and Northern Ireland Habitat Action Plans :-

- Ancient and/or species rich hedgerows.
- Cereal field margins.
- Lowland meadows.

5.8.3 This plan should be considered in conjunction with the following Northern Ireland and all-Ireland Species Action Plans :-

- Irish hare

6 Costings

6.1 A table showing the global costs for this and other SAPs is available on the EHS web page. (www.ehsni.gov.uk)

7 References

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List of Useful Acronyms

ASSI	Area of Special Scientific Interest
BAP	Biodiversity Action Plan
CEDaR	Centre for Environmental Data and Recording
CMD	Countryside Management Division
CMS	Countryside Management Scheme
DARD	Department of Agricultural and Rural Development
DCAL	Department of Culture, Arts and Leisure
DETI	Department of Enterprise, Trade and Industry
DOE	Department of the Environment
DRD	Department for Regional Development
EHS	Environment and Heritage Service
ESA	Environmentally Sensitive Area
ESCRs	Earth Science Conservation Review Site
HAP	Habitat Action Plan
JNCC	Joint Nature Conservation Committee
MAGNI	The National Museums and Galleries of Northern Ireland
NESA	New Environmentally Sensitive Area
NIBG	Northern Ireland Biodiversity Group
NICS	Northern Ireland Countryside Survey
NNR	National Nature Reserve
PPS	Planning Policy Statement
RA	Rivers Agency
RSPB	Royal Society for the Protection of Birds
SAC	Special Area of Conservation
SLNCI	Sites of Local Nature Conservation Importance
SoCC	Species of Conservation Concern
SPA	Special Protection Area
WFD	Water Framework Directive
WWT	Wildfowl and Wetlands Trust
UWT	Ulster Wildlife Trust