

Environment & Heritage Service

# Northern Ireland Species Action Plan

## Skylark

*Alauda arvensis*

March 2006

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**1. Current Status**

- 1.1** The skylark is a small to medium sized bird of 18–19 cm. Males are slightly larger than female birds but both have similar streaked, brown plumage. The breast and underparts are more lightly coloured than the rest of the pale body. The tail has conspicuous white markings on the outer feathers and a crest on the head can often be raised prominently. A multi-purpose beak is used to pick vegetation from the ground, to probe and peck for insects, seeds and grain.
- 1.2** The skylark's song is the most striking characteristic of the bird and is delivered in the breeding season by the male, usually high in the sky above his territory. The song is a continuous melodious arrangement of notes that can last up to twenty minutes or more. Male skylarks defend their territories vigorously, using their song to mark out, defend and advertise to females and neighbouring birds. It may also be sung quietly from a post or from the ground.
- 1.3** A bird of the open countryside, skylarks occur in a wide range of habitats. They occur in high densities in marginal uplands and uplands where unimproved grasslands and blanket bog predominates. Salt marshes and sand dunes also hold high densities. Skylarks are found throughout lowland farmland, albeit in much lower densities. Here, they occur in cereals, other arable crops and a variety of grassland habitats. An open environment, devoid of vertical structures is preferred, where vegetation is usually between 15cm and 40cm for nesting, and short or sparse vegetation is nearby for foraging.
- 1.4** Skylarks breed from April until mid July, generally laying two clutches of between 3 and 5 eggs (Delius 1965, Hardman 1974, Cramp 1988). They are a ground nesting bird and to minimise predation, egg-laying to fledging takes only 25 days: 4 days egg laying, 11 days incubation and 10 days feeding (Wilson *et al.*, 1997). The nest is often underneath overhanging vegetation in a clump of grass or in a concealed depression in the ground.
- 1.5** Large populations of skylarks (up to 25 million) arrive in the UK from Scandinavia and northern Europe during the autumn and spend the winter mainly on lowland farmland (Gillings and Dougall, 2002). Here, they spend the majority of their time on arable land, especially weedy cereal stubble fields feeding on cereal grain and weeds (Lack, 1986; Gillings, 2001). British and Irish populations tend not to migrate in the winter months, however, they may move around the country searching for an abundant food supply. Upland populations move to join these birds on lowland farmland.
- 1.6** The European skylark population is still extremely large with over 40 million pairs (Burfield and van Bommel, 2004). However, it underwent large declines right across the western countries of Europe between 1970 and 1990. This decline continues in those

countries although Eastern countries maintain stable, large, populations. Russia has between 15 and 35 million pairs, Poland has 4-6 million pairs and Belarus has over 2 million pairs. As a result, however, skylark numbers now exist at a much lower level than forty years ago. The European range extends over 8 million square km which represents just under half of the species' global range.

- 1.7 The UK population of skylarks has been estimated at 2.1 million breeding birds (Tucker and Heath, 1994). However, this figure is thought to have dropped, 0.8 - 1 million (Browne *et al.* 2000), and is now 1 million (Eaton *et al.*, 2004). The Irish population is currently estimated between 250,000 and 500,000 birds (Burfield and van Bommel 2004). In Northern Ireland, the population is estimated at around 85,000 breeding pairs (Baker *et al.*, 2006).
- 1.8 The skylark has undergone a large decline in numbers throughout the UK up to 51% between the mid 1970s and 1998 (Siriwardena 1998). Latest indications suggest that across the UK, the long-term trend using data from Common Bird Census data from 1970 to 2001, is a decline of 54% and the short-term trend from 1994 to 2002 using Breeding Bird Survey results is a decline of 14% (Eaton *et al.*, 2004). The British range of the skylark is still relatively unaffected though there has been a reduction of 1.8%. In Ireland, the population is thought to be declining at a rate of up to 19% since 1988-1991 (Burfield and van Bommel, 2004). However, there has been a more serious range contraction than within the UK. The last atlases indicated a contraction of 6.4% between 1968-72 and 1988-1991 (Gibbons *et al.*, 1993). In Northern Ireland, the population has declined by 7% since 1994 (Ballie *et al.*, 2004).
- 1.9 The skylark is specially protected in Northern Ireland under the Wildlife (Northern Ireland) Order 1985. It is listed in Annex II –2 of the European Birds Directive, which allows hunting to be authorised only in Greece, Italy and France and is also listed in Appendix III of the Berne Convention. It is also listed as a Species of European Conservation Concern (SPEC 3) - species of unfavourable conservation status in Europe although its global population is not concentrated in Europe.
- 1.10 The skylark is a UK BAP species, red listed in UK Birds of Conservation Concern (Gregory *et al.* 2002) due to its historical decline and is amber listed in the Birds of Conservation Concern in Ireland (Newton *et al.*, 1999) due to its moderate decline and SPEC 3 status. It is a Northern Ireland Priority Species.

## **2. Current Factors Affecting the Population**

- 2.1 Switch from hay to silage – Northern Ireland has seen a dramatic switch from hay to silage production in the last 30 years. Instead of the traditional single annual cut of grass for hay, now, usually, at least two cuts are taken throughout the breeding season for silage, destroying the nests of ground nesting birds. The gap between successive cuts is often too short to allow another successful nesting attempt.

- 2.2** Intensification of grassland management –with the majority of cropped grassland in Northern Ireland being taken for silage in preference to hay, the high demand for good quality silage, has led to increased fertiliser use, ensuring rapid, uniform sward development. Grass grows quickly with no structural diversity and lacking in areas of poor growth. This is unsuitable nesting and foraging habitat for skylarks. With heavy fertiliser use, dairy cattle herds can now be rotated around several fields in a few weeks, thus preventing fields becoming suitable for skylarks.
- 2.3** Loss of mixed farming – skylarks prefer a mosaic of field types where they can nest and feed all in one area. Monocultures of grass or crops on farms rarely fulfil this requirement of the birds and make large areas of farmland unattractive as a breeding habitat. Northern Ireland has only around 4% of its land cropped in cereals.
- 2.4** Reduction in winter food supply – skylarks depend largely on stubble fields in the winter to feed from weed seeds and spilt cereal grain. The number of stubble fields in the winter are decreasing, primarily due to less cereals being grown in Northern Ireland, but to a lesser extent a switch to autumn sown cereals in preference to spring sown varieties, reseeding into grass after harvesting, autumn ploughing and leaving as bare till over winter. Stubble fields are increasingly treated with herbicide to kill the weeds that skylarks feed on.
- 2.5** Reduction in summer food supply – skylarks feed on invertebrates during the summer season. The use of pesticides to kill insect pest species reduces the available food resource of skylarks. Herbicides are used to remove broad-leaf weed species, host plants to insect species that depend on the weeds as important food and breeding sites. In addition, the cultivation of monocultures, especially of low structural diversity and with few weeds, drastically reduces the number of insect species associated with an area, again reducing the food supply for the skylarks.
- 2.6** Poor management practices – inappropriate moorland management such as a lack of cutting and burning of heather can lead to large areas of upland areas becoming unsuitable for the skylark. Grazing densities at too high or too low levels can allow heather to become overgrown or removed, both circumstances leading to a reduced number of skylarks in the area as habitat becomes degraded and unsuitable.
- 2.7** Intensification of upland and marginal upland areas - drainage, reseeding over grazing and general intensification can lead to reduced habitat quality and hence reduce skylark and other bird populations. Reduced species diversity in vegetation in these areas will mean fewer invertebrates for skylarks to feed on.

### **3. Current Action**

- 3.1** The Northern Ireland skylark population is currently monitored through the Breeding Bird Survey (BBS) but further declines may mean in future, the threshold number of squares required to provide a satisfactory estimate of the trend, may not be reached.

- 3.2** In 2000, the Northern Ireland Biodiversity Group (NIBG) produced its recommendations to Government (NIBG, 2000). These recommendations were accepted by the Northern Ireland Executive in 2002, with the publication of the *Northern Ireland Biodiversity Strategy* (DOE, 2002). As part of this process, a revised list of Northern Ireland priority species was published in March 2004. This list includes skylark.
- 3.3** Department of Agriculture and Rural Development, 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), revised in 1999. Their objective is to create habitats, protect and enhance semi-natural habitats and species by encouraging more sensitive management practices. 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. Both contain a range of prescriptions which have the potential to maintain a range of semi-natural habitats that would benefit skylark. The original ESA prescriptions have now been replaced by the new CMS prescriptions. Around 230,000 ha of farmland is currently in agri-environment schemes in Northern Ireland, approaching a quarter of the total agricultural land in the Province.
- 3.4** Agri-environment prescriptions which would have direct benefits for skylarks, include those for species-rich grassland (especially when taken for hay), heather moorland, rough moorland grazing and breeding wader habitats. Arable options include retention of winter stubble, conservation cereal (especially whole field), wild bird cover planted in large fields, undersown cereals and lapwing fallow plots. These habitats provide habitat and food sources for skylarks throughout the year
- 3.5** DARD and RSPB Northern Ireland jointly employ an Agri-Environment Officer, whose main role is to contribute to the effective delivery of agri-environment prescriptions for biodiversity priorities, including skylark.
- 3.6** RSPB Northern Ireland currently employs a Priority Bird Species Officer, whose main role is to contribute to the effective delivery of the conservation of priority species which includes skylark. This is undertaken through close working with council-employed biodiversity officers and the implementation of conservation actions, carried out at a local scale through a Local Biodiversity Action Plan (LBAP).
- 3.7** Site protection policies are included in Development Plans. These include the identification of Sites of Local Nature Conservation Importance (SLNCIs). Planning Service is currently considering which SLNCIs will be formally identified in Development Plans. Where such sites are confirmed in adopted plans, specific planning policies will be applied to development proposals on those sites.
- 3.8** Council-employed biodiversity officers across Northern Ireland are writing and implementing an LBAP within their council boundaries. Those areas in which the skylark

is a prominent bird may select it as a flagship species and carry out some additional awareness raising, publicity or practical conservation work for it.

- 3.9** Extensive research has been carried out on skylark ecology in a wide range of agricultural habitats, many of which are highly relevant to the situation in Northern Ireland landscape. A PhD study into the ecology of the skylark in grassland dominated farmland has also recently been completed at Queen's University, Belfast and contains some recommendations for Northern Ireland agriculture.
- 3.10** Other relevant information is gathered through specialist biological recording groups, Non-Governmental Organisations (NGOs), universities and other government bodies. Biological records are currently stored in the Museum and Galleries of Northern Ireland (MAGNI) at the Centre for Environmental Data and Recording (CEDaR). CEDaR was established in 1995 in partnership with EHS, MAGNI and the biological recording community. There are currently over 1.4 million records held by CEDaR and there are plans underway to make these records more accessible through the Internet. This will be achieved through the National Biodiversity Network, a union of organisations throughout the UK working together to create an information network of accessible biological data for biodiversity information.

#### **4. Action Plan Targets**

- 4.1** Maintain the Northern Ireland breeding skylark population at 85,000 pairs (Baker *et al.*, 2006).
- 4.2** By 2010, increase the Northern Ireland breeding skylark population to 100,000 pairs.
- 4.3** By 2015, increase the Northern Ireland breeding skylark population to 125,000 pairs.
- 4.4** By 2010, maintain the breeding range of the skylark in Northern Ireland.
- 4.5** By 2015, restore the breeding range of the skylark in Northern Ireland to 155 x 10km squares (Gibbons *et al.*, 1993).
- 4.6** Maintain the wintering number and range of skylarks in Northern Ireland at 96 x 10km squares (Lack, 1986).

#### **5. Proposed Actions with Lead Agencies**

##### **5.1 Policy and Legislation**

- 5.1.1** By 2008, target positive management through MOSS, agri-environment schemes, the LBAP process and grant aid for biodiversity to secure favourable management on suitable skylark sites.  
(ACTION: EHS, DARD, District councils)

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- 5.1.2 By 2006, ensure that all farmers receiving agri-environment scheme payments and LFA Compensatory Allowance Payments are complying with GFP.  
(ACTION: DARD, EHS)
- 5.1.3 Ensure implementation of Good Agriculture and Environmental Condition (GAEC), to preserve the suitability and good condition of certain sites for skylark.  
(ACTION: DARD)
- 5.1.4 By 2006, ensure that important skylark habitats and their conservation management requirements are recognised and site protection policies are included in statutory and non-statutory plans e.g. Development Plans, Local Biodiversity Action Plans (LBAPs) and appropriate management strategies.  
(ACTION: Planning Service, EHS, DARD, Forest Service, District Councils)

## **5.2 Site safeguard and management**

- 5.2.1 By 2007, produce conservation objectives for all statutory sites including cSACs, ASSIs and NNRs ensuring where possible, objectives support the targets of this plan.  
(ACTION: EHS)
- 5.2.2 By 2007, establish agreements with landowners for the positive management of areas important for breeding skylarks and the suite of farmland birds within ASSIs through the MOSS scheme.  
(ACTION: EHS)
- 5.2.3 By 2007, where appropriate, enhance management of relevant Nature Reserves/National Nature Reserves for breeding skylarks.  
(ACTION: EHS, District Councils)
- 5.2.4 By 2007, ensure that agri-environment scheme measures relevant to skylarks are carefully targeted where large areas of open farmland occur in the wider countryside.  
(ACTION: DARD)
- 5.2.5 Consider a review of Countryside Management Scheme and Environmentally Sensitive Areas Scheme to include measures for breeding skylarks such as the reversion of unimproved pasture to species-rich grassland if there is to be a review of agri-environment schemes under the new Rural Development Programme (2007 – 2013)  
(ACTION: DARD)
- 5.2.6 By 2010, increase the area of arable land in Northern Ireland through agri-environment schemes and a cereal national envelope to benefit skylarks and other farmland birds.  
(ACTION: DARD)

## **5.3 Species management and protection**

No actions

#### **5.4 Advisory**

- 5.4.1 By 2007, ensure that those responsible for implementing and supporting agri-environment schemes and MOSS agreements and those involved in the delivery of forestry schemes continue to receive effective training and up-to-date advice on appropriate land management practices which benefit skylark.  
(ACTION: EHS, DARD, Forest Service)
- 5.4.2 By 2007, ensure that farmers and landowners are aware of the presence of skylark on their land and mechanisms available to instigate appropriate management.  
(ACTION: EHS, DARD)
- 5.4.3 By 2007, ensure that information on skylark in Northern Ireland is available to all those who could play a role in their conservation and recovery.  
(ACTION: EHS, DARD, Forest Service, District councils)

#### **5.5 International**

- 5.5.1 Continue to promote the exchange of information and experience in research, management techniques, education and conservation strategies across the UK and beyond.  
(ACTION: EHS)

#### **5.6 Future research and monitoring**

- 5.6.1 By 2007, review information on the population size and range of skylarks in Northern Ireland and identify possible requirements for further survey work.  
(ACTION: EHS)
- 5.6.2 By 2008, undertake research to further investigate how to overcome those factors limiting to the skylark population in Northern Ireland.  
(ACTION: EHS)
- 5.6.3 By 2007, monitor and review the effectiveness of agri-environment schemes, in maintaining and enhancing habitats and populations across Northern Ireland for lowland farmland bird, including the skylark.  
(ACTION: DARD, EHS)
- 5.6.4 Continue to support BBS and encourage its growth and expansion in Northern Ireland to ensure that skylarks and other key species are adequately monitored for ongoing trends.  
(ACTION: EHS)

#### **5.7 Communications and publicity**

- 5.7.1 By 2008, raise awareness of the reasons for skylark declines throughout Northern Ireland.  
(ACTION: EHS, DARD)



- 5.7.2 Continue to provide high quality advisory materials to landowners and seek opportunities to promote and publicise mechanisms for delivering positive management.  
(ACTION EHS, DARD)

## 5.8 Links with other action plans

- 5.8.1 It is likely that the implementation of this plan will also benefit the Northern Ireland populations of the following UK and Northern Ireland priority species:-

- linnet *Carduelis cannabina* (UK & NI)
- twite *Carduelis flavirostris* (UK & NI)
- hen harrier *Circus cyaneus* (NI)
- yellowhammer *Emberiza citronella* (NI)
- red grouse *Lagopus lagopus scoticus* (NI)
- curlew *Numenius arquata* (NI)
- lapwing *Vanellus vanellus* (NI)
- Irish lady's tresses *Spiranthes romanzoffiana* (UK & NI)
- Irish hare *Lepus timidus hibernicus* (NI)

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

- Coastal and floodplain grazing marsh
- Coastal saltmarsh
- Lowland meadows

## 6 References

- Baillie, S.R., Marchant, J.H., Crick, H.Q.P., Noble, D.G., Balmer, D.E., Beaven, L.P., Coombes, R.H., Downie, I.S., Freeman, S.N., Joys, A.C., Leech, D.I., Raven, M.J., Robinson, R.A. and Thewlis, R.M. (2005) *Breeding Birds in the Wider Countryside: their conservation status 2004*. BTO Research Report No. 385. BTO, Thetford. (<http://www.bto.org/birdtrends>)
- Baker H., Stroud D.A., Aebischer N.J., Cranswick P.A., Gregory R.D., McSorley C.A., Noble D.G. and Rehfisch M.M. (2006) *Population estimates of birds in Great Britain and the United Kingdom*. British Birds 99: 25–44
- Browne, S.J., Vickery, J.A. & Chamberlain, D.E. (2000). Densities and population estimates of breeding Skylarks *Alauda arvensis* in Britain in 1997. *Bird Study*, 47: 52-65.
- Burfield, I & van Bommel, F (2004). *Birds in Europe, Population estimates, trends and conservation status*. BirdLife International.

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- Cramp, S. (1988). *Handbook of the birds of Europe, the middle East and North Africa. The Birds of the Western Palearctic. Volume VIII.* Oxford, UK: Oxford University Press
- Delius, J. D. (1965). A population study of Skylarks *Alauda arvensis*. *Ibis* **167**: 466–492.
- Donaghy, A. & Mellon, C. (1998). *Fields for the Future.* RSPB Belfast.
- Eaton M.A., Noble D.G., Cranswick P.A., Carter N., Wotton S., Ratcliffe N., Wilson A., Hilton G.M. and Gregory R.D. (2004). *The state of the UK's birds 2003.* BTO, the RSPB and WWT, Sandy.
- Gibbons, D.W., Chapman, R. & Reid, J. (1993). *The New Atlas of Breeding Birds in Britain and Ireland: 1988-1991.* Poyser Ltd.
- Gillings, S. 2001. Factors affecting the distribution of Skylarks *Alauda arvensis* wintering in Britain and Ireland during the early 1980s. Donald, P.F. and Vickery, J.A. (eds). In *The ecology and conservation of skylarks Alauda arvensis* pp 115-128. RSPB, Sandy.
- Gillings, S. & Dougall, T.W. 2002. Sky Lark (Skylark) *Alauda arvensis*. In: *The Migration Atlas: movements of the birds of Britain and Ireland* (eds C.V. Wernham, M.P. Toms, J.H. Marchant, J.A. Clark, G.M. Siriwardena & S.R. Baillie), pp 455-457. T. & A.D. Poyser, London.
- Gregory RD, Wilkinson NI, Noble DG, Robinson JA, Brown AF, Hughes J, Procter DA, Gibbons DW and Galbraith CA (2002). The population status of birds in the United Kingdom, Channel Islands and Isle of Man: an analysis of conservation concern 2002–2007. *British Birds* **95**: 410–450.
- Hardman, J.A., 1974. *Biology of the Skylark.* Ann. Appl. Biol. **76**, pp 337-341
- Lack, P. 1986. *The Atlas of Wintering Birds in Britain and Ireland.* Poyser, Calton
- Newton. S., Donaghy, A., Allen, D. & Gibbons, D. (1999). *Birds of Conservation Concern in Ireland.* Irish Birds **6**:3 333-344.
- QUB, 2004b. Baseline monitoring of the countryside management scheme in Northern Ireland. Report to DARD.
- Tucker, G.M. & Heath, M.F. (1994). *Birds in Europe: their conservation status.* Cambridge, UK: BirdLife International. (BirdLife Conservation Series no.3).
- Siriwardena, G.M., Baillie, S.R., Buckland, S.T., Fewster, R.M., Marchant, J.H. & Wilson, J.D. (1998). Trends in the abundance of farmland birds: a qualitative comparison of smoothed Common Bird Census indices. *Journal of Applied Ecology* **35**:24-43.

**List of Useful Acronyms**

ASSI	Area of Special Scientific Interest
BAP	Biodiversity Action Plan
CEDaR	Centre for Environmental Data and Recording
CMB	Countryside Management Branch
CMS	Countryside Management Scheme
DARD	Department of Agricultural and Rural Development
DCAL	Department of Culture, Arts and Leisure
DETI	Department of Enterprise, Trade and Investment
DOE	Department of the Environment
DRD	Department for Rural 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 Action Group
NICS	Northern Ireland Countryside Survey
NNR	National Nature Reserves
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