

Northern Ireland Species Action Plan
Irish Hare
Lepus timidus hibernicus (Bell)
October 2000

1. Current status

- 1.1** The Irish hare is a sub species of *Lepus timidus* (L.) and is endemic to Ireland. It is found in many different habitats including unimproved and semi-improved pasture, expanding into adjacent improved pasture; upland habitats including heather dominated heath and bogs and in coastal habitats including dunes, coastal strips and sea shore. They also tend to occur on golf courses and airfields ^(1,2).
- 1.2** Historically, the Irish hare was widespread and common throughout Ireland, including Northern Ireland, though populations are thought to have undergone a substantial decline in the last 10-20 years. Estimates indicate that the present Northern Ireland population may be as low as 8250 ⁽¹⁾. Population levels may have fallen to critical levels in some areas. There are believed to be small populations of the introduced Brown hare *Lepus europaeus* (L.) in Northern Ireland. This species is known to have declined throughout Europe but there is little information on European *Lepus timidus* populations ⁽¹⁾.
- 1.3** The Irish hare is a quarry species and only enjoys limited protection under the Games Acts and Schedule 6 of the Wildlife (Northern Ireland) Order 1985. It is listed in Annex V (a) of the EU Directive 92/43/EEC (Habitats Directive), which determines that such species may be exploited provided that this is compatible with their maintenance at a favourable conservation status ⁽⁴⁾. In the Irish Red Data book it is listed as internationally important ⁽⁵⁾.

2. Current factors causing loss or decline

Threats to this species are generally poorly understood, but the following factors are thought to have a negative affect on hare populations.

- 2.1** Loss of refuge areas for daytime lie-up sites, particularly rushes and good quality hedgerows ^(1,6).
- 2.2** Conversion of species-rich grasslands to ryegrass *Lolium* spp. and clover mixes ⁽¹⁾.
- 2.3** Increased levels of disturbance due mainly to high livestock stocking densities on farms, increased use of farm machinery, peat cutting machines and disturbance by cats and dogs ^(1,7).
- 2.4** Increased mortality from mechanised harvesting ⁽¹⁾.
- 2.5** Increased levels of predation on leverets by foxes, crows and magpies ⁽¹⁾.

- 2.6 Habitat fragmentation ⁽¹⁾.
- 2.7 Illegal coursing, lamping and over-hunting ⁽¹⁾.
- 2.8 Direct grazing competition with sheep in upland areas ⁽¹⁾.

3. Current action

- 3.1 A survey was carried out from 1994 to 1997 by The Queen's University of Belfast, which examined the distribution of the Irish hare in Northern Ireland, as well as some aspects of the ecology of the species ⁽¹⁾. The results indicated that the Irish hare is widely distributed especially in areas with semi-natural grassland, heath or bog, although at generally low densities and there was evidence of a reduction in both population and range.
- 3.2 Research is currently being carried out at University College Dublin looking at the genetics of the species in Ireland.
- 3.3 Research is being carried out at Aberdeen University into aspects of the Scottish mountain hare *Lepus timidus scoticus*, and at Uppsala University, Sweden on the genetics of both *Lepus timidus* and *Lepus europaeus* ⁽⁸⁾.
- 3.4 Various aspects of Brown hare ecology are being studied at Bristol University and at the Game Conservancy Trust.
- 3.5 Agri-environment schemes, such as Environmental Sensitive Areas (ESAs) and the new Countryside Management Scheme (CMS) can make an important contribution to the maintenance and enhancement of suitable hare habitat.

4. Action plan objectives and targets

- 4.1 Maintain the existing range and demonstrate a population increase by 2005.
- 4.2 Double present population by 2010 over as much of the range as possible.
- 4.3 Maintain and increase the area and quality of suitable hare habitat.

5. Proposed action with lead agencies

The provision of refuge areas, adequate and varied food supply and freedom from disturbance are essential if Irish hare numbers are to be maintained at present levels. If hare numbers are to be increased then habitat improvements must also be a priority. Further research is required in order to improve the current understanding of threats to hares and habitat use by hares. Research is also required to determine whether numbers are still declining.

5.1 Policy and legislation

- 5.1.1** Take account of the requirements of Irish hares when reviewing or developing agri-environment schemes. A specific clause could be considered for present ESA and new CMS schemes for Irish hares. Particular consideration should be given to reducing stocking levels and encouraging good hedgerow management.
(ACTION: DARD)
- 5.1.2** Consider the requirements of this species in the implementation of the 2000-2006 agri-environment programme.
(ACTION: DARD)
- 5.1.3** Review and if necessary, increase the level of protection given to the Irish hare in the Wildlife (Northern Ireland) Order 1985.
(ACTION: EHS, DOE)

5.2 Site safeguard and management

- 5.2.1** Ensure that state owned lands are managed, where possible, with a view to conservation of Irish hares.
(All government departments)
- 5.2.2** Establish hare sanctuaries or hare reserves at suitable locations by acquisition of shooting rights.
(ACTION: EHS, Water Service, DARD, MOD, Prison Service)

5.3 Species management and protection

- 5.3.1** Seek to develop a strategy for the conservation and monitoring of the Irish hare (possibly as part of a wider UK mammal strategy or on an all-Ireland basis).
(ACTION: EHS, JNCC)

5.4 Advisory

- 5.4.1** Prepare and distribute a publication containing management advice about hares. Distribute to landowners / land managers, farmers, golf courses, airports and other known hare localities.
(ACTION: EHS, DARD)
- 5.4.2** Ensure that relevant staff in DARD are sufficiently trained and informed to advise on management for the Irish hare.
(ACTION: DARD)

5.5 Future research and monitoring

- 5.5.1** Promote general research into the biology, ecology and population dynamics of the Irish hare.
(ACTION: EHS, DARD)

- 5.5.2** Establish the status of the Brown hare in Northern Ireland and investigate its impact on Irish hare populations.
(ACTION: EHS)
- 5.5.3** Investigate the relative importance of hares as game species or pests, to assist farmers and foresters to make informed choices in hare management.
(ACTION: DARD, Forest Service).
- 5.5.4** Repeat surveys similar to the Northern Ireland Hare Survey at intervals of 3-5 years until 2010 to measure the success of this BAP.
(ACTION: EHS)
- 5.5.5** Co-ordinate results of on-going Northern Ireland hare surveys with compatible surveys in the Republic of Ireland.
(ACTION: EHS)
- 5.5.6** Ensure that distribution information gathered in surveys is passed to CEDaR and other relevant centres.
(ACTION: EHS)

5.6 Communication and publicity

- 5.6.1** Ensure that the decline of the Irish hare is publicised and use salient points as examples of how land management practices can benefit hare populations.
(ACTION: EHS, DARD)
- 5.6.2** Use publicity leaflets to highlight the conservation issues surrounding the Irish hare.
(ACTION: EHS)
- 5.6.3** Encourage public participation in survey work and encourage the reporting of incidental sightings to CEDaR. Produce leaflets so that the public can easily tell the difference between Irish and brown hares and rabbits.
(ACTION: EHS)

5.7 Links with other action plans

- 5.7.1** It is likely that the implementation of this plan will also benefit the Northern Ireland populations of the following UK BAP priority species: Skylark *Alauda arvensis*, Corncrake *Crex crex*, Marsh Fritillary *Eurodryas aurinia*, Reed bunting *Emberiza schoeniclus* as well as the Curlew *Numenius arquata* (a Northern Ireland action plan species).
- 5.7.2** This plan should be considered in conjunction with the following UK Habitat Action Plans:-
- Purple moor grass and rush pastures
 - Coastal and floodplain grazing marsh
 - Lowland meadows
 - Lowland dry acid grassland
 - Upland calcareous grassland
 - Lowland raised bog
 - Blanket bog

- Upland heathland

5.7.3 There may be additional links with species and habitats listed in the Northern Ireland Biodiversity Strategy which will be added later.

6. References

- (1) Dingerkus, S. K. (1997). The distribution and ecology of the Irish hare *Lepus timidus hibernicus* in Northern Ireland. Unpublished PhD thesis. The Queen's University of Belfast.
- (2) Dingerkus, S. K. & Montgomery W. I. (1997). The distribution of the Irish hare (*Lepus timidus hibernicus*) in Northern Ireland and its relationship to land classification. *Gibier Faune Sauvage* **14** 325-334.
- (3) EU Directive 92/43/EEC (Habitats Directive)
- (4) Fairley, J. (1984). The Irish Beast Book. Blackstaff Press
- (5) Pielowski, Z. (1976). Cats and dogs in the European hare hunting ground. In *Ecology & Management of European hare populations* (ed. Z. Pielowski and Z. Pucek), pp. 153-156.
- (6) Tapper, S. C. & Barnes, R. F. W. (1986). Influence of farming practice on the ecology of the Brown hare (*Lepus europaeus*). *Journal of Applied Ecology* **23** 39-52
- (7) Thulin, C.-G., Jaarola, M. & Tegelstrom, H. (1997). The occurrence of mountain hare mitochondrial DNA in wild brown hares. *Molecular Ecology* **6** 463-467.
- (8) Whilde, A. (1993). Irish Red Data Book 2: Vertebrates Threatened mammals, birds, amphibians and fish in Ireland. HMSO, Belfast