

HEN HARRIER *Circus cyaneus* SPECIES ACTION PLAN

DESCRIPTION

The hen harrier is a bird of open country breeding in the UK on moorland generally below 500m and nesting in old, tall heather as well as young conifer plantations. The preferred habitat appears to be moorland managed for grouse shooting.

The male hen harrier is identified by the all grey plumage with black wing tips and a white rump whilst the slightly larger female is all brown, again with the characteristic white rump. The diet of the hen harrier includes meadow pipits *Anthus pratensis* and short-tailed field vole *Microtus agrestis* as well as both adult and young red grouse *Lagopus lagopus*.

Some male hen harriers may be polygamous and mate with more than one female, which is why breeding attempts are usually quoted as the number of breeding females rather than breeding pairs. The clutch size is normally 4-6 eggs with research by the RSPB in Scotland showing breeding productivity of 2.4 chicks per breeding female on moorland not managed for grouse.

LOCAL BIODIVERSITY IMPORTANCE

Although detailed monitoring of hen harriers has not been possible, members of the Yorkshire Dales Upland Bird Study Group have been observing hen harriers in the National Park and adjoining land in the Nidderdale Area of Outstanding Natural Beauty for a number of years. From the behaviour of adult birds it is known that there have been at least 17 nesting attempts in this area since 1991, although there may be others that have not been detected. Of these nesting attempts, 11 attempts failed and the outcome of one nesting attempt was unknown, with five successful females fledging a total of 20 young. This includes a pair that fledged six young in 2002. A single immature male and a single female were also present during the 2002 breeding season in the National Park.

It is extremely difficult to attempt to estimate how many breeding hen harriers the moorland areas of the Yorkshire Dales could theoretically support. There is a wide range of different hen harrier breeding densities that have been derived from a number of other hen harrier study sites. Hen harrier breeding densities will vary from area to area depending on the habitat quality, prey availability, habitat management regimes and presumably levels of persecution (if present).

There are approximately 12,700 hectares (127 km²) of upland heath in the Yorkshire Dales National Park. An area of this size should support a healthy breeding population of hen harriers, regardless of any specific densities.

NATIONAL & INTERNATIONAL BIODIVERSITY IMPORTANCE

The hen harrier is on the Red List of Birds of Conservation Concern. It is a Category 3 Species of Conservation Concern as there has been a large decline in its numbers across Europe and its status is described as vulnerable. It is also on Schedule 1 of the Wildlife and Countryside Act 1981, Annex 1 of EU Birds Directive and Appendix II of Bern Convention. The hen harrier is one of the species for which moorland areas are

designated as Special Protection Area (SPA) with a number of sites in the Yorkshire Dales National Park included in the North Pennine Moors SPA.

CURRENT ISSUES, OPPORTUNITIES & THREATS

National Perspective

Persecution in the 19th Century and the loss of suitable areas of habitat in many lowland areas of the UK resulted in widespread population declines with a small population surviving in western Scotland. A reduction in the number of game keepers and consequently the level of persecution after the Second World War, along with newly planted conifer plantations providing temporary suitable breeding habitat, resulted in the re-colonisation of birds into northern England in the 1960s. By the 1980s a population of around 25 nesting birds had become established, but since then the number of breeding attempts has declined.

It is the potential threat from hen harriers on the autumn surplus of red grouse that makes the hen harrier unpopular with some moorland owners and gamekeepers leading to persecution in some areas of the country. Published scientific reports by a number of different organisations suggest that illegal persecution is the main factor limiting hen harrier populations in northern England. The Game Conservancy Trust have estimated that there is enough suitable habitat in England for 232 territorial hen harriers, although in 2000 there may have been as few as three successful nests. However it needs to be noted that management for grouse shooting has made a considerable contribution to the conservation of heather moorland, the hen harrier's preferred habitat. Grouse shooting has safeguarded these areas from agricultural intensification and afforestation that has resulted in the loss of suitable habitat in some areas. The sustainable management of grouse moors protects a range of habitats and species as well as providing the breeding grounds which hen harriers favour. When successful, hen harriers also rear larger broods on managed than un-managed grouse moors, which may be due to the reduced number of predators (mainly foxes *Vulpes vulpes* and crows *Corvid sp*) that are controlled as part of the moorland management regime.

One of the most contentious issues relating to the uplands is the relationship between birds of prey, in this instance the hen harrier, and red grouse and the potential affect that they can have on the autumn surplus of red grouse available for shooting. There are many complex issues associated with hen harriers and red grouse populations, which cannot be covered within this action plan. Reference should be made to the following publications for further information:

The UK Raptor Working Group's Report to Ministers was published by the Department of the Environment in 2000. The Raptor Working Group was established by the Department of the Environment in 1995 to bring together a wide range of organisations to examine a wide range of issues related to birds of prey. The Group's terms of reference included determining the impact of birds of prey on game birds and moorland management.

Research was also carried out at Langholm in southern Scotland and is detailed in *Birds of Prey and Red Grouse* (Redpath and Thirgood, 1997). The following more recently published papers are also relevant:

Thirgood, S.J., Redpath, S.M., Newtin, I & Hudson, P. 2000. Raptors and red grouse: Conservation Conflicts and Management Solutions. *Conservation Biology* 14: 95-104.

Thirgood, S.J., Redpath, S.M., S.M. Rothery, P & Aebischer, N.J. 2000. Raptor predation and population limitation in red grouse. *Journal of animal ecology* 69: 504 – 516.

Redpath, S.M., Thirgood, S.J. & Leckie, F.M. 2001. Does supplementary feeding reduce predation of red grouse by harriers? *Journal of Applied Ecology* 38: 1157 – 1168.

Nationally there are a number of issues that need to be clarified as well as a need for further research that are detailed in the recommendations in the Report of the Raptor Working Group. This includes a requirement for further research into legal management practices that may help to reduce any impact that bird of prey populations may have on red grouse.

The continued decline of hen harriers in England and the concern that this might lead to the extinction of this species as an English breeding bird has resulted in the establishment of the English Nature Hen harrier Recovery Project. The objectives of this national project are to monitor the population and breeding success identify the factors restricting the number of hen harriers and to take subsequent measures to increase the population. Although it is not possible for this action plan to provide detail of all the national issues or recommendations, it is essential that any relevant changes in national policy, habitat or management recommendations are implemented in the Yorkshire Dales National Park.

Whilst the issues surrounding hen harriers are controversial and there are wide ranging views and opinions it is essential that conservationists, moorland owners and managers work together to ensure the successful breeding of hen harriers and the continuation of grouse shooting. The signing of the Memorandum of Understanding between the Moorland Association and English Nature in June 2002 will lead to both organisations working together to “secure the sustainable future of the remaining heather moorland in England”.

Local Perspective

The maintenance and enhancement of the moorland habitats in the Yorkshire Dales that support important upland bird communities, as well as being of special interest in their own right, will ensure sufficient habitat for hen harriers. This can be implemented through conservation actions detailed in the Moorland and Moorland Fringe Habitat Action Plan, which recognises that the management of heather moorland for the purposes of grouse shooting is a major contribution to the conservation of these important upland habitats and species.

As a number of hen harrier breeding attempts have occurred on the boundary of the National Park and Nidderdale Area of Outstanding Natural Beauty, there will need to be a close link between this Plan and the Hen Harrier Species Action Plan in the Nidderdale Biodiversity Action Plan.

One of the most important issues is to locate birds in areas of potentially suitable habitat in early spring. The Yorkshire Dales Upland Bird Study Group undertakes an annual hen harrier survey from public rights of way and roads to locate any hen harriers that are

present. Due to the large area of potentially suitable habitat for hen harriers in the Dales there is a need to increase the number of observers looking for and reporting hen harrier sightings including experienced bird watchers and more casual observers. All sightings including those considered relating to passage birds should be reported to the Hen Harrier Recovery Project.

If signs of potential breeding activity are recorded, then landowners should be approached with a view to gaining access permissions to enable monitoring work to be undertaken. Where possible this should include officers from other conservation organisations and volunteers so that a structured monitoring rota can be arranged. Monitoring work will need to continue until there is an outcome to the breeding attempt. If young birds reach fledging stage, consideration should be given to ringing, wing tagging and/or attaching radio transmitters by licensed individuals to allow post-juvenile dispersal to be monitored.

It is hoped that these measures will help to increase the breeding population of hen harriers. If this is not the case then there will be the need to determine the feasibility of additional conservation measures such as 24-hour nest wardening. If there is any evidence that nest failures may be due to deliberate disturbance or human interference then this information should be passed onto the local Police Wildlife Liaison Officer for further investigation.

AIMS OF THE SPECIES ACTION PLAN

- To ensure the successful breeding of any hen harriers attempting to nest in the Yorkshire Dales National Park.
- In the short term (5 years) to see an increase in the number of breeding birds to five breeding females.
- In the longer term (10+ years) to ensure that hen harriers are breeding at a natural density on the moorlands in the Yorkshire Dales National Park.

OBJECTIVES

To achieve these aims we need to:

- Raise public awareness of the issues surrounding hen harriers where suitable media opportunities occur. This should include encourage the reporting of hen harrier sightings in early spring to the Hen Harrier Recovery Project.
- Increase the number of people taking part in the annual hen harrier survey.
- Determine the outcome of any breeding attempts through monitoring of nest sites by approaching landowners and initially requesting voluntary access.
- Identify and determine the feasibility of other conservation measures (for example 24 hour nest watches) if the above actions do not work.

- Increase liaison with Police Wildlife Liaison Officers to ensure that any suspected interference to nests, eggs or young is fully investigated.
- Ensure that any changes in national policy and/or management best practice guidelines (e.g. supplementary feeding) are implemented in the Yorkshire Dales.

ACTIONS & TARGETS

To achieve these objectives the following actions should be carried out and the targets achieved within the time-scale given:

Actions	Target date	3 year cost £
Raise public awareness of hen harrier conservation through appropriate media opportunities	Annual	Officer Time
Continue to co-ordinate the annual hen harrier survey but encourage more individuals to submit records.	2003 then annual	Officer and Volunteer Time
Monitor all hen harrier nesting attempts to determine the outcome of each breeding attempt by initially seeking voluntary access permissions.	2003 then annual	Hen Harrier Recovery Project Officer Time, Other Officer Time +Volunteers
Depending on the outcome of the above, determine the feasibility of other options (for example 24 hour nest protection).	2005	Officer Time
Increase contacts with Police Wildlife Liaison Officers to ensure any suspicious incidents are fully investigated.	2003	Officer Time
Ensure that any changes in national policy and/or management are put into practice in the Yorkshire Dales National Park.	Annual	Officer Time

WHO WILL BE RESPONSIBLE FOR THE ACTION PLAN?

Lead Agency	Key Partners
English Nature Hen Harrier Recovery Project	Landowners and managers Moorland Association Moorland Gamekeepers Association Yorkshire Dales National Park Authority Royal Society For The Protection Of Birds Yorkshire Dales Upland Bird Study Group Volunteers Police Wildlife Liaison Officers