

SNH-GWCT-SL&E POSITION ON LARGE-SCALE CULLS OF MOUNTAIN HARES TO REDUCE LOUPING ILL

The mountain hare is the only native species of hare or rabbit in Britain. In Scotland, heather moorland actively managed for red grouse, provides very good habitat for this species.

The mountain hare is listed under Annex V of the EC Habitats Directive (1992) as a species '*of community interest whose taking in the wild and exploitation may be subject to management measures*'. Under Article 14, Scotland is required to ensure that the exploitation of such a species '*is compatible with their being maintained at a favourable conservation status*' (FCS). This requires active monitoring of the population, and as a first step towards maintaining FCS, Scotland introduced closed seasons under the Wildlife & Natural Environment (Scotland) Act 2011.

Favourable Conservation Status (FCS)

FCS uses trends in population numbers, range and habitat availability to draw conclusions about the conservation status of a species and its future prospects. For mountain hares we believe that management of the species at FCS means maintaining the population across its range, and maintaining a range which is comparable to the one which was assessed when the Directive came into force in the 1990s. Habitats associated with the high densities of hares in Scotland also need to be maintained.

The Issue

The mountain hare is a quarry species in Scotland and has been for hundreds of years. The impact of harvesting or culling on its population is, however, poorly understood. We do know that population sizes can fluctuate widely (up to ten fold) but that habitat fragmentation can affect their dispersal ability, and the likelihood of losing populations increases where they cannot re-colonize from elsewhere. SNH has received reports of heavy culls leading to local declines, and there is evidence that populations have been lost where former grouse moors have reduced management, been afforested, or heather has declined due to heavy grazing by other animals. Heather moorland habitats actively managed for red grouse can have unusually high densities of mountain hares when compared with where they occur in Scandinavia, the Boreal/Arctic zone and the Alps in continental Europe.

Given these concerns, a sub-group of experts from SNH's Scientific Advisory Committee (chaired by Professor Alan Werritty) is reviewing the management of mountain hares as one of a number of issues connected with sustainable moorland management practices. This review is due to be completed by March 2015.

SNH, GWCT and SL&E interim-position

We recognise there are genuine concerns being expressed about the status of mountain hares in Scotland, and we need to ensure that current hare management

measures are not damaging their long-term prospects. As well as sustainable game shooting, we recognize that controlling mountain hares is a legitimate practice in certain circumstances: for example, to protect young trees or as a quarry species. Large-scale culls of mountain hares to reduce tick loads, in order to benefit grouse and other bird survival, will only be effective when other hosts are absent, or their ability to host ticks are similarly reduced. This will not be the case for many estates in Scotland.

On the basis of the available evidence, there is no compelling field evidence for undertaking large-scale mountain hare culls to control LIV in areas of Scotland where there are high densities of other tick-bearing mammals. Culls should therefore not be undertaken for this purpose in these circumstances.

We recognise that there are concerns about the potential negative impacts of culling on the resilience of mountain hare populations and other protected species. To this end we:

- Will work with estates to put in place effective and sustainable management of mountain hares;
- Recommend that this management should aim to maintain mountain hares as part of the moorland wildlife assemblage, and not eliminate them;
- Ask estates to adhere to a voluntary restraint on large culls which could jeopardise the conservation status of mountain hares (SNH and GWCT can advise on this);
- Recommend that if the objective of hare culling is to support grouse shooting or to allow woodland regeneration, there needs to be evidence of sufficient management of deer and sheep to sustain these objectives; and
- Urge that any hare culling undertaken should be localized, rather than at a landscape scale.

This position may change as a result of new research and the outcome of the SNH SAC review of sustainable moorland management.

New research

SNH is working with scientists from the James Hutton Institute and the Game & Wildlife Conservation Trust to trial methods of measuring mountain hare numbers to underpin better monitoring and to improve the quality of the information used to assess population status and the sustainability of hare management measures. The work will be carried out across three years to ensure a robust evidence-base, and is due to be completed in 2017.

ANNEX

The mountain hare is listed under Annex V of the EC Habitats Directive (1992) as a species '*of community interest whose taking in the wild and exploitation may be subject to management measures*'. Moreover, Article 14 of the Directive requires

Member States to ensure that the exploitation of such species 'is compatible with their being maintained at a favourable conservation status'.¹

Evidence on culling mountain hares

Laurenson *et al.*, 2003 presented evidence indicating that culling hares to low densities (thereby reducing host tick burdens) could reduce the prevalence of Louping Ill Virus (LIV) in young, shot red grouse on managed grouse moors. Importantly, the study took place on an estate where, there were naturally very few deer (and the sheep present were treated with an acaricide and vaccinated against LIV). Red deer provide an alternative host for ticks, but they do not display symptoms of LIV. Therefore, reducing mountain hare density in areas with high densities of red deer will not reduce LIV, because the virus is maintained in the grouse population with the tick population maintained by deer (Gilbert *et al.*, 2001).

References

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¹ Further restrictions on the control of both hare species exist in the form of Closed Seasons, introduced by the 2011 Wildlife & Natural Environment (Scotland) Act.