

Mountain Hare Management Guidance

Through the Principles of Moorland Management project, Scotland's Moorland Forum is preparing a range of guidance that provides practitioners, working in upland and moorland areas, with a source of information that reflects good practice and establishes a standard for accepted management techniques.

Information that is available elsewhere has not been duplicated, but a reference to it is included.

All the documents should be seen as representing evolving guidance. The aim is to review the documents at least annually so that they reflect the latest information.

Practices in this guidance, which are backed up by legislation and/or regulation, contain the word '**MUST**' in bold, letters. Failure to adopt these practices could lead to prosecution.

Parts of the guidance contain the word '**should**' in bold, lowercase letters. The actions identified in this way are not covered by legislation but land managers are expected to follow these parts of the guidance, as they represent sound, acceptable practices, which aim to achieve sustainable management of the hare population.

This Mountain Hare Management guidance consists of:

- This Guidance - an overview of the issues that practitioners need to be aware of; and
- Supplementary Information (listed on page 8). This includes an example management plan – to guide the planning for mountain hare management.

This guidance is to help land managers make informed decisions about the mountain hare population on their land. It **should** not be assumed that any management is required, but if it is decided that some management of the mountain hare population is appropriate, this guidance **should** be followed so that the management is sustainable in the short and long term, and over large areas.

The guidance is complementary to, and underpins, the Joint Statement (December 2014), which calls for voluntary restraint on large hare culls and urges that any culling of hares **should** be localised, rather than at a landscape scale. See Further Information No. 1.

Acknowledgements

The guidance has been prepared for Scotland's Moorland Forum by representatives of: the Game & Wildlife Conservation Trust, the Scottish Gamekeepers' Association, the James Hutton Institute, Scottish Land & Estates and Scottish Natural Heritage; and it has been reviewed by the Project Steering Group.

The member organisations of Scotland's Moorland Forum are listed in Supplementary Information No. 1.

Revision Table

Date	Details
18/04/18	Links to Moredun links in Further Information para 10 updated.

1 The Law and Mountain Hare management

- 1.1 There is a close season: 1st March - 31st July
- 1.2 It is an offence to intentionally or recklessly kill, injure or take a mountain hare during the close season.
- 1.3 Outside this close season, (1st August – 28th / 29th February), mountain hares may be killed by shooting.
- 1.4 A licence **MUST** be held to:
 - 1.4.1 Take hares in the close season
 - 1.4.2 Take mountain hare in ways that are not permitted by law. These include the use of: snares, spotlight, thermal imaging, semi-automatic weapons¹, and non-selective traps.
- 1.5 Licences may only be issued by SNH in exceptional circumstances for specific purposes including: the prevention of the spread of disease, preventing serious damage or for social, economic or environmental purposes.
- 1.6 It is illegal to kill hares using “means capable of causing local disappearance of, or serious disturbance to, populations”.
- 1.7 For hare management in protected areas, such as Special Protection Areas, practitioners **should** check with SNH.
- 1.8 See Further Information No.2 for more detail about licensing.

¹ See Further Information No.11

INTRODUCTION

2 Aim of the Guidance

- 2.1 This guidance aims to provide the owners and managers of land with:
 - 2.1.1 Sufficient understanding of the issues to make an informed decision about how they wish to approach their mountain hare population. It seeks to make it clear that over-exploitation of mountain hare is to be avoided at all costs.
 - 2.1.2 Guidance about how to establish a sustainable management plan, including the techniques to employ to monitor the impact that their management plan is having.

3 Mountain Hare in Scotland

- 3.1 The mountain hare is the only native hare species in the British Isles. In Scotland, it is a widespread and sometimes locally numerous species.
- 3.2 Mountain hare is a valued quarry species and a locally important grazer/browser. Hares can be an important prey species for predators, such as golden eagles, and are enjoyed as a wildlife spectacle.
- 3.3 Land managers value the hare population in its own right and as a source of food for top predators. Some land managers, while wishing to see a healthy population of mountain hare, are also concerned about the size of the population due to the competition with domestic livestock and deer for grazing, as well as browsing on woodlands. There is a secondary concern that mountain hare can carry sheep ticks that spread Louping Ill to grouse.
- 3.4 The management of mountain hare by killing a proportion of the population is legal in Scotland. The methods used are controlled through legislation (see Section 1) and should not cause local disappearance or serious disturbance (see paragraph 1.6). In protected areas, consultation **should** take place with SNH before implementing any management. The killing or exclusion of hares **should** be considered in advance of any action, as it may have an impact on the availability of prey for the species that are part of the qualifying features for the protected area (for example, golden eagle in a Special Protection Area).
- 3.5 The development of a management plan is key to ensuring that, if it is decided management of mountain hare is required, that it is carried out sustainably. All land managers, whose management will have an impact on mountain hare, **should** prepare a management plan. See Supplementary Information No. 2 for the management plan guidance.

PLANNING FOR SUSTAINABLE MANAGEMENT

4 Planning Process

- 4.1 Managers choosing to actively manage mountain hare numbers **should** follow a four-stage planning process:
 - 4.1.1 Identify land use objectives for the area;
 - 4.1.2 Identify targets for the hare population that will achieve the land use objectives;
 - 4.1.3 Identify hare management actions; and
 - 4.1.4 Share the plan with neighbours to account for objectives on adjacent land-holdings.
- 4.2 Achieving favourable conservation status for a mountain hare population is a good indicator of sustainable management of that population.

5 Management Plan

- 5.1 Management plans **should** include objectives, counting methods, targets and details of Management Activity required by the Plan. The Plan **should** include the dates of the last review and the next review.
- 5.2 See Supplementary Information No. 2.

6 Management Objectives

- 6.1 A statement of the main land uses in the management area will help identify whether management of the hare population is necessary and what other management may be necessary.
- 6.2 Mountain hare management objectives may include:
 - Conservation of hares
 - Sporting
 - Disease management
 - Habitat protection

7 Management Targets

- 7.1 Managers **should** identify whether they seek to maintain, increase or reduce the hare population, on identified areas, over given times depending on the objectives.
- 7.2 In setting targets managers **should**:
 - 7.2.1 Describe the distribution and current size of their population and where known, levels in the previous five years.
 - This will provide a baseline against which to assess management effects and describe whether the population is stable, growing or declining.

- 7.2.2 Understand where the population sits on the population cycle.
- Hare populations cycle from high to low abundance, with the frequency and timing of the cycle varying between different areas.
 - This knowledge will determine to what extent or whether a cull can be taken.
 - See the information in Section 11 for more detail about count methods.

8 Management Actions.

- 8.1 The plan **should** identify what actions are to be carried out to meet identified targets and how these are to be achieved.
- 8.1.1 The plan may include mitigation measures such as predator control or cull methods.
- 8.1.2 The additional information that will be collected to inform future management will be set out. This might include: parasite burdens or grazing pressures.

9 Management Review:

- 9.1 An element of caution **should** be built into any actions arising from plans, with the results of management being reviewed regularly.
- 9.2 Hare populations are influenced by a range of environmental and ecological factors and prone to unpredictable changes in abundance. The management of hare populations **should** be reactive and adaptive to these many factors.

10 Sharing Management Information

- 10.1 Managers **should** be able to demonstrate that their sustainable management planning is well reasoned and based on the best current understanding of the hare population.
- 10.2 As mountain hare do not recognise artificial boundaries, land managers **should** co-ordinate management activity across as large an area as possible, including counting efforts, conservation (predator control and habitat) and culls. Information gathered **should** be shared.
- 10.3 The sharing of survey and bag data is essential to demonstrate and promote sustainable management. Groups of land managers **should** make their amalgamated count and cull information available through the National Game Bag Census (GWCT), Wildlife Estates Scotland (SLE), Green Shoots (BASC) or their own dedicated web pages. This information **should** be made available to SNH.

COUNTING MOUNTAIN HARE

11 Count Methods

- 11.1 SNH, GWCT and JHI have tested different count methods. See Further Information No. 3 for the report that summarises this work.
- 11.2 A repeatable estimate of mountain hare abundance **should** be carried out, and can be achieved by:
 - 11.2.1 Direct counts (the preferred method), using equipment such as spotting using lamps or thermal imaging equipment. These methods are affected by day-to-day changes in hare behaviour and distribution, and site selection.
 - 11.2.2 Indirect counts, by clearing accumulated dung from plots has been shown to provide an index where enough time is allowed for dung to accumulate on sufficient plots.
 - 11.2.3 Sharing the count method used and being consistent in area, time of day, time of year and survey effort will help to demonstrate that count data are a reliable reflection of population trend.
- 11.3 A key point is that the same counting method **should** be used each year so that a population trend can be established.
- 11.4 The method used **should** be agreed in advance with neighbouring land managers, and the collated results shared so that the population and distribution from the whole area can be assessed on the same basis.
- 11.5 For efficiency, mountain hares could be recorded when undertaking other duties.

SUPPLEMENTARY INFORMATION

- 1 Members of the Moorland Forum
- 2 Mountain Hare Management Plan – download separately
(versions of a template for completing on a computer & for printing and completing by hand are provided)

FURTHER INFORMATION

1. Joint Statement - voluntary restraint on large scale hare culls
<https://goo.gl/qC7qYy>
2. Licensing:
<https://www.snh.scot/professional-advice/safeguarding-protected-areas-and-species/licensing/species-licensing-z-guide/hares-and-licensing>
3. SNH Commissioned Report 1022 - Developing a counting methodology for mountain hares (*Lepus timidus*) in Scotland
<https://www.nature.scot/snh-commissioned-report-1022-developing-counting-methodology-mountain-hares-lepus-timidus-scotland>
4. Hare populations:
<http://www.gwct.org.uk/research/species/mammals/mountain-hare/>
5. BTO mammal population monitoring:
<https://www.bto.org/volunteer-surveys/bbs/latest-results/mammal-monitoring>
6. James Hutton Institute Mountain Hares:
<http://www.hutton.ac.uk/research/groups/ecological-sciences/landscape-and-spatial-ecology/mountain-hares>
7. The latest information on the distribution of mountain hares can be found in a report to SNH in 2008 ‘The distribution of Mountain Hare (*Lepus timidus*) in Scotland (2006/07)’ (Commissioned Report No. 278):
http://www.snh.org.uk/pdfs/publications/commissioned_reports/Report%20No278.pdf
8. Mountain Hare Management:
<http://www.gwct.org.uk/policy/position-statements/mountain-hare-management/>
9. Mountain Hare Trends:
<https://www.gwct.org.uk/research/long-term-monitoring/national-gamebag-census/mammal-bags-comprehensive-overviews/mountain-hare/>
10. Tick and Louping-ill information can be found at:
<https://www.moredun.org.uk/research/diseases/ticks-tickborne-diseases>
https://www.moredun.org.uk/sites/default/files/documents/diseases/louping_ill_best_practice_booklet.pdf
11. Semi-automatic Weapons – defined
<http://moorlandforum.sites.schooljotter2.com/downloadfile/10556174?open=true>

Mountain Hare Guidance - Supplementary Information No. 1
Members of Scotland's Moorland Forum

Association of Deer Management Groups	Royal Institution of Chartered Surveyors in Scotland
British Association for Shooting and Conservation	Royal Society for the Protection of Birds Scotland
British Deer Society	Scottish Association for Country Sports
British Trust for Ornithology (Scotland)	Scottish Countryside Alliance
Cairngorms National Park Authority	Scottish Environment Protection Agency
Confor	Scottish Gamekeepers' Association
Crofting Commission	Scottish Government
Forestry Commission Scotland	Scottish Land & Estates
Game and Wildlife Conservation Trust	Scottish Natural Heritage
Heather Trust	Scottish Raptor Study Groups
James Hutton Institute	Scottish Renewables
Loch Lomond & The Trossachs National Park Authority	Scotland's Rural College (SRUC)
National Farmers Union Scotland	Scottish Water
National Trust for Scotland	Scottish Wildlife Trust