

Volunteer Mountain Hare Survey

Field Recording Sheet

Square Survey



| | | | |
|----------------|--|---------|--|
| Observer name: | | E-mail: | |
|----------------|--|---------|--|

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|---------------------------------|--|-------------|----------------|
| Grid reference (i.e. NS8096) | <div style="border: 1px solid black; width: 100%; height: 20px; margin-bottom: 5px;"></div> <div style="display: flex; justify-content: space-around; width: 100%;"> <div style="border: 1px solid black; width: 15%; height: 15px;"></div> <div style="border: 1px solid black; width: 15%; height: 15px;"></div> <div style="border: 1px solid black; width: 15%; height: 15px;"></div> <div style="border: 1px solid black; width: 15%; height: 15px;"></div> <div style="border: 1px solid black; width: 15%; height: 15px;"></div> </div> | Survey date | DD / MM / YYYY |
|---------------------------------|--|-------------|----------------|

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|-----------------------|-------|------|------|------------|---|
| Weather (1,2 or 3) | Cloud | Wind | Rain | Visibility | Cloud: 1 = clear, 2 = partial, 3 = full Wind: 1 = still, 2 = breezy, 3 = strong wind Rain: 1 = none, 2 = light rain, 3 = heavy rain Visibility: 1 = good, 2 = moderate, 3 = poor |
| | | | | | |

| Species recorded | Bird codes | Bird detection codes: Seen alive = A, Seen dead = X, Heard = H | | | |
|---|--|---|---|--|--|
| Tick if you recorded Mountain Hare only , and no other mammals <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> C. Carrion Crow <input checked="" type="checkbox"/> CS Common Sandpiper <input checked="" type="checkbox"/> CK Cuckoo <input checked="" type="checkbox"/> CU Curlew <input checked="" type="checkbox"/> DI Dipper <input checked="" type="checkbox"/> DO Dotterel | <input checked="" type="checkbox"/> DN Dunlin <input checked="" type="checkbox"/> GP Golden Plover <input checked="" type="checkbox"/> GK Greenshank <input checked="" type="checkbox"/> GL Grey Wagtail <input checked="" type="checkbox"/> HC Hooded Crow <input checked="" type="checkbox"/> JD Jackdaw | <input checked="" type="checkbox"/> MP Meadow Pipit <input checked="" type="checkbox"/> PM Ptarmigan <input checked="" type="checkbox"/> RN Raven <input checked="" type="checkbox"/> RG Red Grouse <input checked="" type="checkbox"/> RZ Ring Ouzel <input checked="" type="checkbox"/> S. Skylark | <input checked="" type="checkbox"/> SN Snipe <input checked="" type="checkbox"/> SB Snow Bunting <input checked="" type="checkbox"/> SC Stonechat <input checked="" type="checkbox"/> W. Wheatear <input checked="" type="checkbox"/> WC Whinchat <input checked="" type="checkbox"/> I did not record birds | Tick if you attempted to record all bird species encountered (if not tick individual species that you were confident of identifying) <input checked="" type="checkbox"/> |

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|---------------------|---|
| Mammal codes | Mammal detection codes: Seen alive = A, Seen dead = X, Print/Trail = P, Den/Burrow = D, Droppings = F |
|---------------------|---|

| | | | | | |
|--------------------------|---------------------------|--------------------------|------------------------|--------------------------|-------------------------|
| MHA Mountain Hare | CAT Cat (domestic) | FOX Fox | MOL Mole | RDE Red Deer | STO Stoat |
| BAD Badger | CSE Common Seal | GSE Grey Seal | MOU Mouse sp. | RSQ Red Squirrel | VOL Vole species |
| BAT Bat species | FDE Fallow Deer | GSQ Grey Squirrel | OTT Otter | ROE Roe Deer | WEA Weasel |
| BEA Beaver | FGO Feral Goat | HED Hedgehog | PMA Pine Marten | SHR Shrew species | WBO Wild Boar |
| BHA Brown Hare | FSE Feral Sheep | MIN Mink | RAB Rabbit | SDE Sika Deer | WCA Wildcat |

| Transect 1 | | | |
|-------------------------------|--|--------------|----------------|
| Start grid ref. or what3words | <div style="border: 1px solid black; width: 100%; height: 20px; margin-bottom: 5px;"></div> <div style="display: flex; justify-content: space-around; width: 100%;"> <div style="border: 1px solid black; width: 15%; height: 15px;"></div> <div style="border: 1px solid black; width: 15%; height: 15px;"></div> <div style="border: 1px solid black; width: 15%; height: 15px;"></div> <div style="border: 1px solid black; width: 15%; height: 15px;"></div> <div style="border: 1px solid black; width: 15%; height: 15px;"></div> </div> | | |
| Start time | HH : MM | | |
| Species | Count | Distance (m) | Detection code |
| | | | |

| Transect 2 (if relevant) | | | |
|-------------------------------|--|--------------|----------------|
| Start grid ref. or what3words | <div style="border: 1px solid black; width: 100%; height: 20px; margin-bottom: 5px;"></div> <div style="display: flex; justify-content: space-around; width: 100%;"> <div style="border: 1px solid black; width: 15%; height: 15px;"></div> <div style="border: 1px solid black; width: 15%; height: 15px;"></div> <div style="border: 1px solid black; width: 15%; height: 15px;"></div> <div style="border: 1px solid black; width: 15%; height: 15px;"></div> <div style="border: 1px solid black; width: 15%; height: 15px;"></div> </div> | | |
| Start time | HH : MM | | |
| Species | Count | Distance (m) | Detection code |
| | | | |

| | | | |
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| End time | HH : MM | | |

Mountain Hare

Survey Instructions

Square Survey



MOUNTAIN HARE, SARAH KELMAN / BTO

This project aims to gather much-needed information about Mountain Hares in Scotland. You can also record all UK mammals and, optionally, up to 23 upland bird species. You can take part year-round and at any time of day.

Square Surveys involve structured visits to 1 km squares of your choosing, and they provide us with particularly valuable information. Please select your square/s using the [interactive map on the BTO website](#) before doing a Square Survey. The map indicates which areas and squares we are particularly keen to be surveyed, though all data are useful. You only need to visit each square once. You may find a clipboard with a plastic cover or a weatherwriter useful for filling in the recording sheet in the field.

Once you've signed up for a square, you'll receive an email with a printable Ordnance Survey map. Please use this to plan your survey route. The 'ideal' arrangement consists of a two transect lines which are:

- roughly straight;
- 1 km long;
- parallel to the edges of the square (i.e., aligned north-south or east-west);
- separated from the other transect by 400–500 m; and
- separated from the parallel edges of the square by about 250 m

You can choose to only do only one transect within your square if it is more convenient, for example if the terrain is challenging, or you are continuing your walk elsewhere. You're unlikely to see Mountain Hares in dense woodland or built-up areas so it's fine to avoid these areas. Similarly, avoid major paths/tracks if you can, as you're more likely to see Mountain Hares in less disturbed areas. An example of acceptable transect routes can be found on the [VMHS website](#).

Starting the survey

At the start of your survey, fill in the top-level information on the field recording sheet, including your name, contact details, the 4-figure (1km square) grid reference for the survey square, the date of survey and the weather information. At the start of your first transect in the square, record the starting point 10-figure (1m) grid reference or the [what3words](#) location, and the start time. If you don't have a smartphone, GPS device or paper map to work out the location, you can add this later by using [Grid Reference Finder](#) online.

During the survey

Please walk at a steady pace along your survey transect line. Record all individuals and groups of birds and mammals on the field recording sheet. Enter the species code (found in the table at the bottom of the field recording sheet) in the **Species column**, how many you saw in the **Count column**, and the distance the individual or group is from the transect line in metres in the **Distance column**. In the **Detection column** record the way in which you saw or heard the mammal or bird; the codes are in the table at the bottom of the form. Please try to avoid double-counting and be conservative in your estimates of numbers. When you get to the end of your first transect, enter the 10-figure grid reference or [what3words](#) location, and the time below your bird and mammal records for Transect 1. If you are doing a second transect, walk to its start (taking a break if

needed) and start a new survey, following the same procedure as for the first, and recording birds and mammals in the section for Transect 2. **Please remember** to indicate whether you attempted to record all mammals rather than just mountain hare, and whether you attempted to record all bird species listed, in the tick box in the bottom left of the field recording sheet. If you are only confident in identifying some, but not all, bird species, please tick the individual species as indicated in the table of bird species. If you made no attempt to record birds, please tick "I did not record birds". If you wish, you may record other bird species seen that are not on the list. If you require more space to add more records in any of your transects, please use the Overflow sheet provided. Fill in the top-level details of the Overflow sheet with your name, the survey date, survey location (4-figure grid reference) and the page number so that the sheets can be linked.

After the survey

Please send your completed field recording sheets or scanned/photographed sheets to: **Volunteer Mountain Hare Survey, BTO Scotland, Unit 15 Beta Centre, Stirling University Innovation Park, Stirling, FK9 4NF** or to vmhs@bto.org

Extra background and information on methods are provided on the survey page on BTO's website, which also has a useful FAQ section. You can also email vmhs@bto.org with any additional questions.

The Volunteer Mountain Hare Survey is a partnership involving BTO along with NatureScot, the Mammal Society, and the Game & Wildlife Conservation Trust



Saving
Britain's
Wildlife



Volunteer Mountain Hare Survey

Field Recording Sheet

Square Survey – Overflow Sheet



| | | | | | | | | | | | | | |
|------------------------------|---|-------------|----------------|--|--|--|--|--|--|--|--|-------------|----|
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| | | | | | | | | | | | | | |

| Species recorded | Bird codes | Bird detection codes: Seen alive = A, Seen dead = X, Heard = H | | | |
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| Transect 1 | | | |
|------------|-------|--------------|----------------|
| Species | Count | Distance (m) | Detection code |
| | | | |

| Transect 2 (if relevant) | | | |
|--------------------------|-------|--------------|----------------|
| Species | Count | Distance (m) | Detection code |
| | | | |

| | | | | | | | | | | | |
|-----------------------------|---|--|--|--|--|--|--|--|--|--|--|
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