



Project Ptarmigan

1st April – 31st August 2006



INSTRUCTIONS FOR PARTICIPANTS

BACKGROUND

The Ptarmigan is the only resident truly montane bird in Britain. It occurs in the Scottish Highlands and also on a few islands of the Hebrides and Clyde. In general, they are found at over 750 m above sea level (asl) but can be found at lower altitudes especially in exposed areas in the north-west. As a year-round resident of the high ground it makes an ideal indicator for environmental change in montane habitats. Ptarmigan are not currently monitored effectively across their range in Scotland. For more information on Ptarmigan, please refer to our *Ptarmigan Information Sheet*.

AIMS OF PROJECT PTARMIGAN

In 2006 we are inviting a broad range of hill users to contribute to the first extensive collection of information on Ptarmigan throughout Scotland. You do not need previous experience of bird surveys to help – anyone out in the montane areas of Scotland can provide useful information and we welcome your help. The long-term aim will be to measure any changes in Ptarmigan abundance and distribution as an indicator of the environmental condition, and the effects of management practices, of montane areas in Scotland.

PROJECT METHODS

There are three options to collect information for *Project Ptarmigan*:

- i) Simply record the number of Ptarmigan seen and the number of 'sites' with evidence of their presence along a recorded route or 'Ptarmigan Transect'.
- ii) As above but additionally include an element of stop-and-searching.
- iii) As i) but additionally record the numbers of all bird species seen along the recorded routes.

Where to Survey

We welcome information from anywhere in the range of Ptarmigan in Scotland (see the *Information Sheet*). Participants can choose which hills they wish to survey. If you are flexible, however, we would especially welcome information from (a) the Trossachs (the southern Highlands), (b) from Wester-Ross and Sutherland (the north-west Highlands) and (c) from the 'greater Cairngorms' area (that is between the hills above the Angus Glens in the east to those around Loch Laggan in the west). Birds in these different areas could show contrasting responses to environmental change.

When to Survey

The main survey period will run from 1st April to 31st August 2006. We welcome information from anytime within that period. We would also be interested in reports from the same 'Ptarmigan Transect' at different times or from different transects on the same hill.

Planning a Ptarmigan Transect

Participants should select and plan their own Ptarmigan Transects, or survey routes, but it is important to record the transect on the *Record Form*. Aim to include at least 4 km at altitudes greater than 750 m (or about 2,500 feet) above sea level, though this may not always be possible. In some areas, Ptarmigan will be found at lower altitudes, especially in the north-west Highlands. If you see any Ptarmigan on the 'walk in' to higher ground, please start recording at that lower level.

Transects should be planned, using minimum scale 1:50,000 topographical maps (1:25,000 maps, e.g. the Ordnance Survey Explorer Series, are probably the ideal option if you have them). Plan your routes to avoid crags or other dangerous topography. Within these constraints, try and make your Ptarmigan Transect a series of straight(-ish) lines. This will aim to sample representative areas of montane habitat and minimise potential biases by choosing the most used routes to the summits. Of course, when walking in the hills, with steep slopes to ascend and descend, and rocks, snow patches and other features to avoid, walking an ideal straight line will be impractical. In effect, you will zig-zag or meander either side. It is expected that many people will necessarily have to wander up to 50 m either side of their 'ideal' transect. In addition Ptarmigan Transects will often need to be convoluted in order to achieve 4 km on some hills or to avoid crags and also to achieve a practical, and enjoyable, circular route. Where this is the case, try to keep more than 50 m away other sections of the route. On narrow ridges, for example, this may not be possible. An example of route, and how it is recorded is given on this sheet.

Rather than planning a Ptarmigan Transect in advance, you may wish to simply record a route you have walked, but try to follow the above guidelines while on the hill.

WHAT TO RECORD

Please use the *Recording Forms*. Feel free to contact the BTO Scotland office for more forms if you need them or to photocopy one of those provided. As well as the birds, please ensure you record the date of each survey walk you undertake and also the route.

a) Your name and address.

b) Date and times of your Ptarmigan Transects - The start and end times are those when you reach and leave 750 m asl, or otherwise start recording if you find Ptarmigan below that height.

c) Details of your Ptarmigan Transect

This can be done in one of two ways, or if you wish, use both:

- i) Write a series of six figure grid references for the start, end and for each turning point of your Ptarmigan Transect (see the example).

OR

- ii) Send a photocopy of a map with your route drawn on it – please ensure the start point has a 6-figure reference in order for us to locate where it is.

Please try and calculate the length of your Ptarmigan transect.

d) Recording Birds and their Signs – Count all the Ptarmigan you see or hear along your Transect. Also count the number of '*Ptarmigan Sites*' you encounter along the route. If you encounter a brood of young Ptarmigans, please count each young bird as a separate individual. Additional information on how many birds were young, and brood sizes can be included in the *Additional Information Box* on the Recording Form (Part j).

A single *Ptarmigan Site* is either a single bird, a group of birds, one pile of droppings, many piles of droppings or any combination of these (see the *Information Sheet* for descriptions and photographs of birds and dropping piles). Piles of droppings can be found in clusters, and naturally can be close to birds. Where birds, or droppings, are scattered take a minimum gap of 20 m along your route where you do not see any as the separating distance between different *Ptarmigan Sites*. In the event such *sites* extend for more than 20 m please call each 20 m section a separate *Ptarmigan Site*.

Please record whether or not you saw any Ptarmigan feathers on your transect, but do not include just feathers as a counted *Ptarmigan Site*.

Please note that nil returns, that is, the reporting of a survey route on which you did not see any Ptarmigan or any other evidence of their presence, are just as important as positive reports. We are expecting quite a lot of nil returns. Even if you walked several Ptarmigan Transects and found no evidence of birds on any of them, this information is very important.

e) Snow Cover and Weather – As the recording of Ptarmigan droppings are a key part of the surveying procedures, it is important to estimate the proportion of each survey route that was covered with snow and potentially obscuring any signs of their presence.

f) Red Grouse – Where these two species overlap, there is a real risk of confusing droppings of the two species (as far as we are aware, they are inseparable by sight). Therefore we ask that the number of Red Grouse seen along a survey route is also recorded – this will give some idea of the proportion of droppings and Sites that may actually refer to Red Grouse. How to identify Red Grouse is described in the *Information Sheet*.

g) Other species – The *Recording Form* lists an additional six species that you may encounter on a Ptarmigan Transect. Please tick these if you saw or heard any of these species **or leave blank** if you are not certain whether or not you saw any.

ADDITIONAL INFORMATION YOU MAY WISH TO RECORD

Sections (a) to (g), above, list the minimum and simplest information we would like to collect. If you are inclined, and have a broader knowledge of birds, please consider recording the following:

h) Stop and search recording – For each 1 km of survey route walked, choose a point where you can comfortably stand, or sit, with a reasonable view of your surroundings. For 10 minutes carefully scan the surrounding area with binoculars for Ptarmigan and listen for calling birds. Please record any birds that are *additional* to those seen while walking separately on the relevant part of the *Recording Form*.

i) Recording species other than Ptarmigan and Red Grouse – This is **not** an essential part of the project, but if you know your birds, we would welcome counts of all species seen during your survey walk(s). Please include birds seen only in flight, as well as those on the ground, and at any distance from the transect.

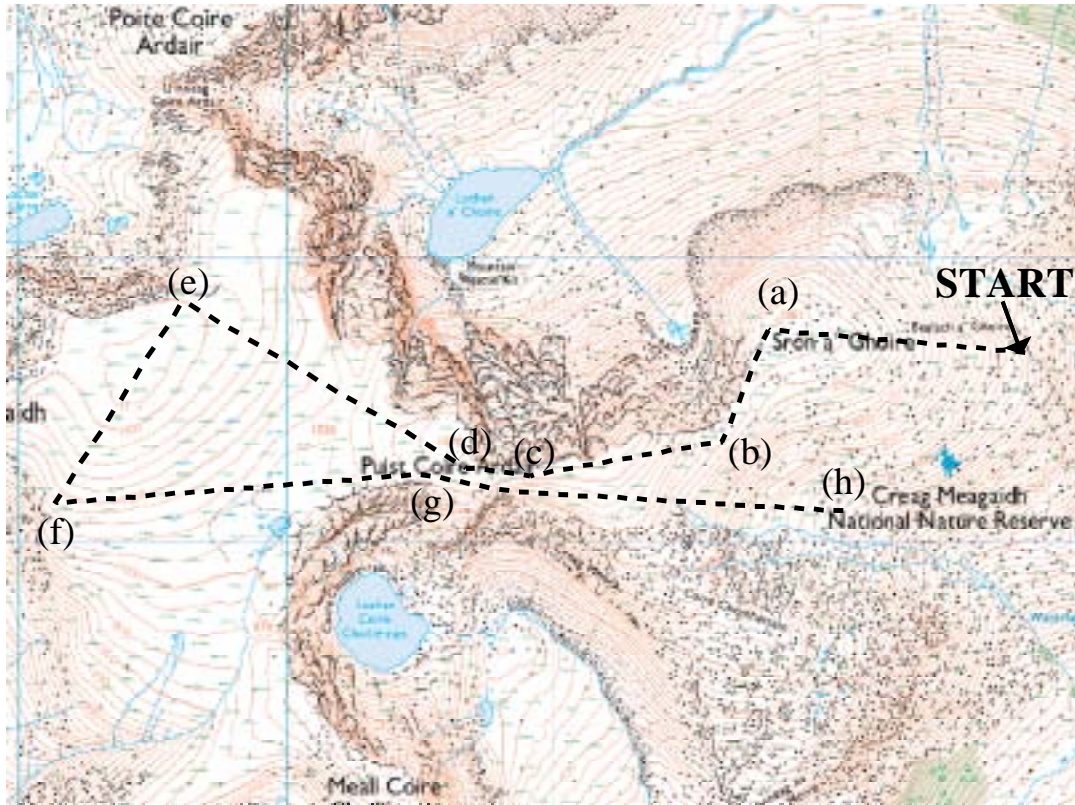
j) Other people – If possible, could you report a count, or estimate of the number of people you saw within 100 m of your Ptarmigan Transect.

k) Locations of birds and details of any nests and broods encountered – Please use the **Additional Information Box** to record any additional details of the birds you encounter. This can include their precise locations (6-figure grid references), the composition of flocks (e.g. the numbers of either sex and of young birds), brood sizes or nest contents where these are encountered.

SAFETY and COURTESY

For general advice, please refer to the BTO's '*General health and safety advice to volunteer fieldworkers*' leaflet. Volunteer surveyors are also reminded to follow the Scottish Outdoor Access Code (www.outdooraccess-scotland.com).

EXAMPLE OF A SURVEY ROUTE:



c) PTARMIGAN TRANSECT DETAILS

Starting point of the Ptarmigan Transect (6-figure grid reference): *NN458876*

Length of survey route: ...6.8... km

List the grid references at all turning points* of your Ptarmigan Transect:

a) <i>NN448877</i>	h) <i>NN451871</i> (Finish)	o)
b) <i>NN447874</i>	i)	p)
c) <i>NN439873</i>	j)	q)
d) <i>NN437873</i>	k)	r)
e) <i>NN426879</i>	l)	s)
f) <i>NN421872</i>	m)	t)
g) <i>NN435872</i>	n)	u)



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