

Ptarmigan newsletter 2011



© Wild Scotland

Scottish ptarmigan survey 2010

PTARMIGAN numbers may be influenced by predation, climate change, overgrazing, disturbance and over-harvesting but understanding how these factors affect the species will enable us to best conserve them.

Ptarmigan are a difficult species to monitor, with natural population cycles and remote breeding locations. To date there has been no national survey to accurately assess population size.

In 2010 the Game & Wildlife Conservation Trust, with part-financing from Cairngorm National Park Authority and Scottish Natural Heritage through the Cairngorms Local Action Group,

carried out a postal survey to determine whether ptarmigan abundance and distribution were thought to have changed in the last 25 years. The survey was sent to managers of montane habitats that could host ptarmigan. In addition to asking about trends in ptarmigan numbers, the survey asked about shooting policies to gauge the importance of ptarmigan as a quarry species.

We were delighted with the response (56% out of 116 surveys sent out). This newsletter outlines the main findings of the survey and our hopes for future studies on this species.

More upland gamebag data needed

NUMBERS of ptarmigan and other gamebirds shot are collected annually by the Game & Wildlife Conservation Trust's National Gamebag Census.

By looking at data from this long-running annual census we are able to look at longer-term trends in abundance. We are grateful to everyone who provides these valuable data.

We are keen to increase the number of contributors and would love to hear from anyone new. There is no fee, it is bag data that we seek, so please contact us if you can help.

Contact:

Gillian Gooderham, NGC Co-ordinator
Game & Wildlife Conservation Trust
Fordingbridge, Hampshire, SP6 1EF
Tel: 01425 651019; Email: ggooderham@gwct.org.uk
www.gwct.org.uk/ngc



The results

Abundance and distribution of ptarmigan

THE 65 respondents together manage nearly 6,000 km² of upland Scotland.

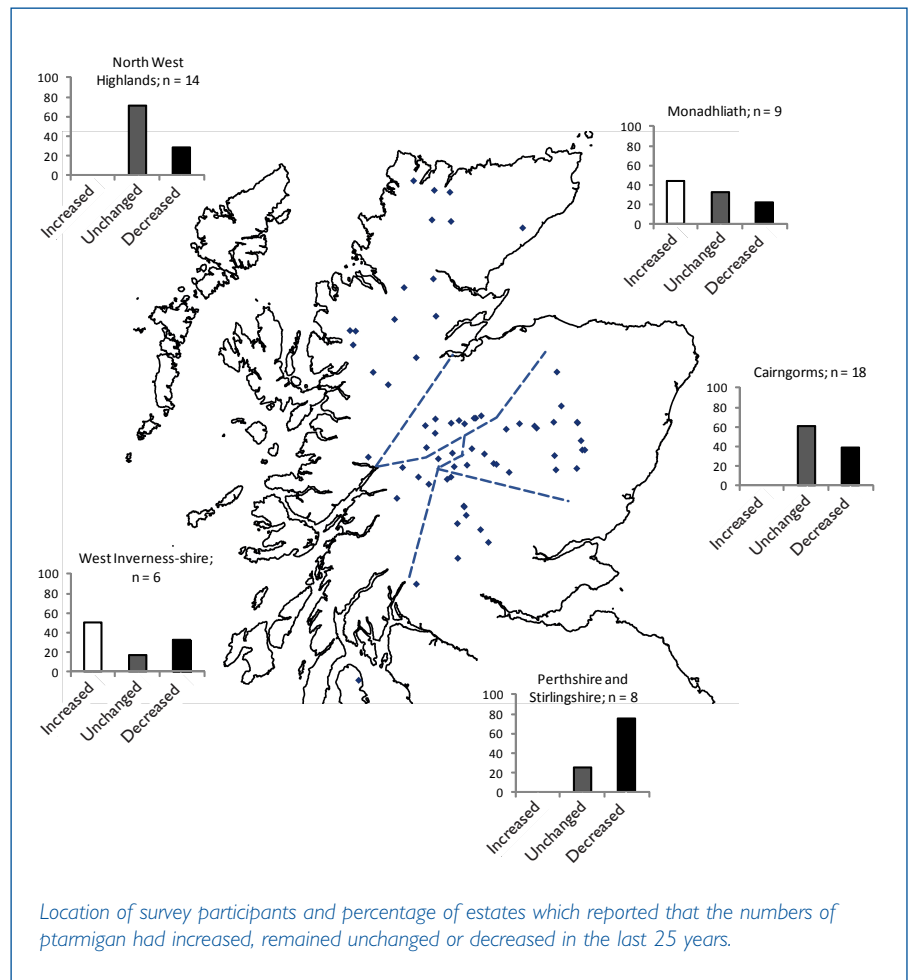
Of these, 48% reported that ptarmigan abundance had not changed, 39% thought numbers had declined and 13% that numbers had increased in the last 25 years. More respondents reported declines in ptarmigan abundance in Perthshire and Stirlingshire (75%) than in the other more northerly regions (31% North West Highlands, Monadhliath, Cairngorms, West Inverness-shire). Irrespective of reported changes in abundance, 84% of estates felt that the distribution of ptarmigan on their ground had not changed in the last 25 years.

The National Gamebag Census provided ptarmigan bag records from 70 estates. This allowed us to look at national trends, but there were not enough estates to look at each region. Across Scotland the bag records show declines (-80%) from 1901 to 2009, similar to those reported for red grouse. If numbers shot are used as indices of abundance then this suggests that the population has declined in the last century, although numbers shot may also be influenced by changes in hunting effort.

Many of you will be aware that this is the last year for the British Trust for Ornithology (BTO) Atlas project. We are grateful to all respondents who were happy to have their ptarmigan locations transferred to BTO as this will improve the accuracy of the breeding distribution maps for this species.

Ptarmigan as a quarry species:

Forty percent of estates reported shooting ptarmigan in the last ten years. Similar trends in abundance and distribution were found regardless of shooting policy, although as expected the abundance



indices reported were higher on estates which shoot. Ptarmigan shooting was primarily walked up and many estates decided how many days to shoot from numbers of birds seen earlier in the year. The most frequent reason for not shooting ptarmigan was that numbers were considered to be too low to allow a sustainable harvest. Like red grouse, ptarmigan carry the parasitic strongyle worm in their guts. Samples from old birds shot in 2009 and 2010 showed that ptarmigan worm burdens were lower (mean = 223 worms / bird, n = 6) than red grouse in neighbouring areas (mean = 2008 worms / bird, n = 30).

The future

MANY estates have kindly offered to host future work. We are keen to improve methods for counting ptarmigan, whether it be with dogs or using records of birds seen during shoot / stalking days. Should funds become available we are keen to look in more detail at ptarmigan breeding success, survival and movements to ensure conservation efforts are targeted where they are most needed.

Contact:

Game & Wildlife Conservation Trust, Drumochter Lodge,
Nr Dalwhinnie, Inverness-shire, tel: 01528 522300
Edited by: Dr Kathy Fletcher; design & layout: Katrina Candy.
Game & Wildlife Conservation Trust. Registered Charity No: 1112023.
Charity registered in Scotland: SC038868. www.gwct.org.uk

Clutch of ptarmigan eggs.

