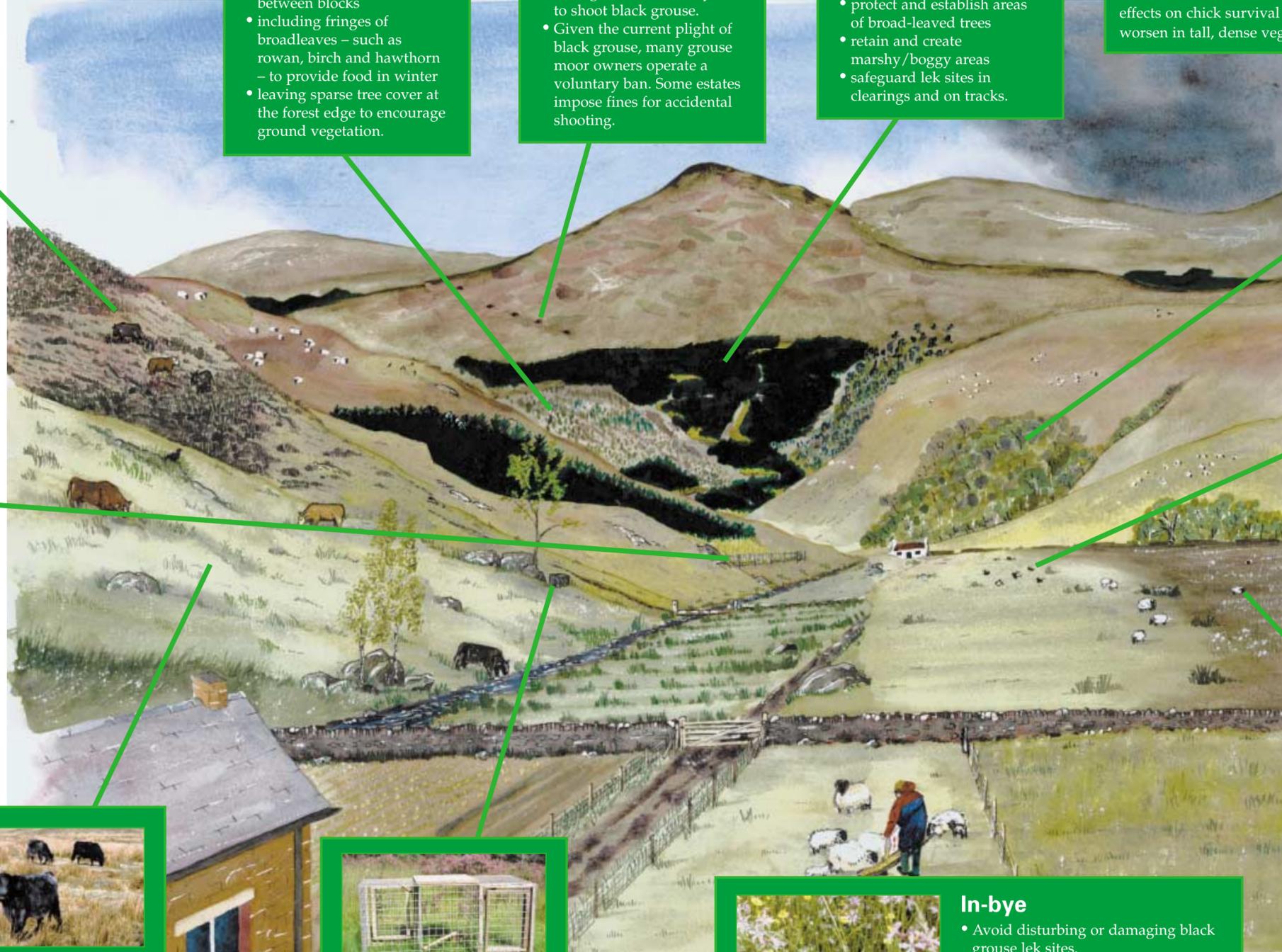




Black grouse conservation advice for land managers



A mix of heather types

Create a mosaic of heather age and structure by:

- controlling sheep, deer and cattle grazing
- siting foddering/winter feeding sites away from important black grouse habitat
- using muirburn/heather burning or swiping to create a patchwork of long and short heather.



Deer fences and stock fences

Fence collisions are a significant cause of black grouse mortality. Deer fences should only be erected, maintained or renewed where there are no other viable means of deer control – and only after proper assessment of the risks. In addition:

- remove all redundant fences
- mark existing fences (where continued use is considered necessary) according to current best practice – see contact details on back page
- position stock fences clear of flight-lines to and from leks or important feeding areas.



'White hill'

In summer, manage grazing on white hill to:

- create a sward with some areas more than 30 cm high
- allow plants to flower and seed.



Young conifer plantations

Prolong the value of maturing plantations and second rotation woodlands by:

- planting at a low density, and/or leaving large gaps between blocks
- including fringes of broadleaves – such as rowan, birch and hawthorn – to provide food in winter
- leaving sparse tree cover at the forest edge to encourage ground vegetation.



Shooting

- Avoid shooting black grouse.
- Brief guns on drive days not to shoot black grouse.
- Given the current plight of black grouse, many grouse moor owners operate a voluntary ban. Some estates impose fines for accidental shooting.



Mature plantations

Look for opportunities to:

- widen rides and create open ground
- thin tree cover at compartment edges
- protect and establish areas of broad-leaved trees
- retain and create marshy/boggy areas
- safeguard lek sites in clearings and on tracks.



Weather

Provide a mosaic of open and dense vegetation to lessen the effects of wet and cold weather in late May and throughout June that can reduce black grouse chick survival. These adverse effects on chick survival may worsen in tall, dense vegetation.



Semi-natural woodlands

Look for opportunities to create and expand native woodlands. In winter, avoid using them for:

- wintering livestock as these woodlands provide sheltered feeding and roosting sites for black grouse, as tree damage and suppressed regeneration is detrimental
- pheasant coverts/shoots that will disturb black grouse.



Lek sites

Ideal leks have an open aspect and are often grazed short.

- Keep vegetation short at known lek sites.
- Avoid planting trees, supplementary stock feeding, or erecting stock or deer fences near to lek sites.



Wetland areas

- Retain existing boggy areas on the hill, in-bye and in forests – these are a rich source of invertebrates for chick rearing.
- Block ditches to create or enhance wet areas for black grouse.



Predator control

Predation by crows and foxes can cause chick mortality and breeding failures. Legal predator control can improve black grouse productivity.



In-bye

- Avoid disturbing or damaging black grouse lek sites.
- Retain upland meadows that are rich in wild flowers – meadows are a valuable food source.
- Retain or add arable areas in the uplands – particularly turnips with patches of weeds.
- Retain arable stubbles over winter.



Nesting and chick-rearing (left): Black grouse nest on the ground, concealed in long vegetation (40 cm or taller), usually heather. They lay eggs in mid-May/early June, and incubation takes around 4 weeks. The female leads the chicks to feed in areas of insect-rich cover, such as wet flushes.

Groups of male black grouse (right) take part in complex communal displays known as leks to attract a mate. They occur at traditional sites and take place in the early morning and at dusk.

Managing land for black grouse – further information and incentives

For further information and advice on black grouse, contact your local office of:

- The Farming and Wildlife Advisory Group (FWAG)
- The Scottish Agricultural College (SAC) Conservation Service.
- The Rural Development Service (England only)
- The RSPB
- The Game Conservancy Trust

You may qualify for black grouse conservation payments through schemes run by:

- The Scottish Executive Environment and Rural Affairs Department.
- The Department for the Environment, Food and Rural Affairs (England only)
- The Forestry Commission.

RSPB Offices in black grouse areas

Scotland Headquarters	0131 311 6500
North Scotland Regional Office	01463 715000
East Scotland Regional Office	01224 624824
South & West Scotland Regional Office	0141 576 4100
North England Regional Office	0191 212 0353
North West England Regional Office	01484 861148

Images

Cover: *Black grouse lekking at RSPB Abernethy Forest nature reserve* by D Dugan (RSPB)

Food types chart: D Dugan (RSPB Images), N Beavie (RSPB Images), Jeremy Roberts (RSPB)

Poster: D Dugan, N Beavie, John Adair, Jeremy Roberts (RSPB)

Illustrations: *Black grouse* by Norman Arlott (AA Image Library).

Centre spread artwork by Jeremy Roberts, Advisory Manager, The RSPB.

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Black grouse Habitats and land management

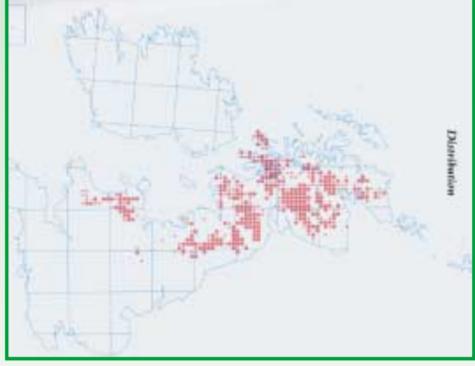


Black grouse distribution and population

Black grouse live on moorland, in conifer plantations and in native woodlands – mostly in upland areas of Britain, from Wales to Northern Scotland. Arable fields (stubbles) and in-bye grasslands at the moorland edge are also used.

The range of black grouse in Britain contracted by 28% between two major bird distribution surveys (1968–72 and 1988–91). This is a big contraction, undoubtedly associated with a big decline in their population. Accurate national population trends are not yet available because there has, so far, only been one national black grouse population survey – in 1995/6. However, black grouse counts in several study areas across Britain have declined steadily.

The national survey estimated the British population at around 6,500 displaying males. About 150 of these birds were in Wales, 1,700 in Northern England and 5,000 in Scotland. Within Scotland, north-east and south-west Scotland held the largest numbers, each region holding an estimated 1,500 displaying males. The British population figure was well below previous estimates of the national population.



From: *The New Atlas of Breeding Birds in Britain and Ireland: 1989–1991*, D W. Gibbons, J B Reid & R A Chapman) BTO, SOC, IWC. Published in 1993 by T & A D Poyser, London. Black grouse distribution has changed further since the Atlas was produced – for example black grouse are now extinct in Staffordshire.

Black grouse need a mosaic of habitats

In any one year, black grouse will use a wide range of habitats for feeding, lekking (displaying), nesting, chick-rearing, cover and shelter. Black grouse need this combination of different habitats. Farmers, foresters, moorland managers and keepers all play a vital role in safeguarding these habitats in the parts of Britain where black grouse remain.

Where they are and why

- Black grouse use in-bye habitats on hill farms, often lekking on permanent pasture at the moorland edge. Herb-rich meadows provide a good source of year-round food, particularly in autumn/winter and potentially for chick-rearing in spring. Hill arable fields may provide shelter plus grain and/or weed seeds in autumn and winter. Spring cereals and turnips with weeds may be particularly good.
- Young conifer plantations (pre-thicket stage) suit black grouse – the absence of grazing animals allows good ground cover to develop for nesting and chick-rearing. As plantations mature, the canopies close, reducing ground vegetation and the plantation's value to black grouse.
- Mature plantations can provide shelter and food for black grouse. Where patches of well-spaced native broadleaves are included, they are important sources of food throughout the year; black grouse also eat larch buds in spring. However, plantations can also be hazardous for

Black grouse – diversity of food types

FOOD TYPE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Heather						→						→
Blaeberry shoots						→						→
Blaeberry berries							↔					
Larch buds							↔					
Birch buds							→					→
Cotton grass							↔					
Rush and sedge seeds								↔				
Scots pine pollen							↔					
Insects & spiders							↔					
Rowan / hawthorn berries									↔			

Chick rearing (invertebrates only)