

# CASE STUDY: UPLAND LIVESTOCK FARMING AND BLACK GROUSE CONSERVATION

## An example of:

- **Integration of Black grouse conservation measures into a Welsh upland livestock farming system.**
- **Management of woodland to benefit black grouse and increasing grazing area.**
- **Forestry Commission Woodland Grants for forest edge management working to deliver Black Grouse habitat and other biodiversity.**
- **Countryside Council for Wales agri-environment scheme, Tir Gofal, assisting Black Grouse recovery and enhancing biodiversity.**

## Farm Details

Farm:	Cannon, Llanerfyl, Welshpool, Powys. SY21 0JJ
Tenure:	Farmed by Cannon Farm Partnership
Size:	450 ha, consisting of 109 ha of coniferous plantation and shelterbelts 215 ha of moorland/rough grazing and 125 ha of grassland

Altitude:	240-450m
Soil:	Acidic shale's on the slopes, Peat on the tops
Crops:	20 ha of silage, with one cut taken mid-July. 10 ha of hay cut after 17 <sup>th</sup> July.
Stock:	900 ewes; 40 Welsh Black cows plus followers

## Description

Cannon Farm lies on the eastern side of Llanbrynmair moors. Llanbrynmair was selected as one of the six key areas (collectively termed the 'Core Area') of the Welsh Black Grouse Recovery Project due to its importance for Black Grouse (represents 12% of core area population in 1997). The Llanbrynmair key area covers 106 km<sup>2</sup> with a varied landscape of forestry, blanket bog, upland heath and improved grassland. Cannon Farm lies on both sides of a small valley, the Nant Cannon, which drops down from blanket bog at the western end of the farm. The valley floor mainly consists of rough grassland, dominated by rushes and purple moor grass. The lower parts of the valley and adjacent slopes have been agriculturally improved.

One of the most important wildlife features of the farm is the 3 black grouse display sites (lek) within the farms forestry holdings.

## Background

Cannon Farm was bought in 1983 by John Aldington and farmed by Nigel Elgar as a conventional beef and sheep farm. After the collapse of the scheme promoting Conservation Grade Meat, the farm decided to run on a totally organic basis, obtaining full organic status in 1993. The switch from Conservation Grade to organic farming was achieved without too much difficulty. The farming partnership wished to continue to optimise their profits by maintaining the high levels of husbandry and developing the market for organic products through Graig Farm Organics whilst improving the habitats on the farm for wildlife.

## Black grouse habitat management project

Encouraging sympathetic management of Black Grouse at Cannon was challenging, since the owners have economic objectives to meet. Integral to the Black Grouse habitat management proposal at Cannon was targeting the existing grant aid schemes of Tir Gofal and Woodland Grant Scheme (WGS) and packaging this with funding

from the RSPB Welsh Black Grouse Recovery Project (WBGRP). The farming partnership, CCW and FC, accepted the proposal following a statement of justification and a successful Woodland Grant Scheme application. The objectives of the proposal were to reduce Sitka Spruce density to 10% cover within a 43ha coupe, manage 80ha of heather moorland and re-wet areas by blocking forest drains and ditches.

### **Tir Gofal (Countryside Council for Wales)**

Tir Gofal is the all Wales agri-environment scheme. Favourable prescriptions for Black Grouse available under this scheme include payments for reduced stocking, heather regeneration and blocking drains to wet-up areas. Where appropriate, farmers are encouraged to undertake special conservation projects such as blanket bog restoration.

### **Woodland Grant Scheme (WGS)**

This scheme approves grants of £1350 ha planting grants and £650 ha regeneration grants. The grant requires 50% match funding and is designed to satisfy a range of economic, social and environmental woodland management objectives. For example: producing wood and marketable timber, maintaining and creating new wildlife habitats by managing /regenerating forests and woodlands.

### **RSPB Welsh Black Grouse Recovery Project**

A three-year project funded by the RSPB, National Assembly Wales (Rural Development Grant) and European Union (EAGGF) to halt the long-running decline of black grouse in Wales and in the long term to increase their range and numbers.

## **Project rationale and aims**

The habitat requirements of black grouse are complex. They are a sedentary species requiring habitats between the interface of open moorland, grassland and forest (see Black Grouse Guidance Note). In Wales, during the 1950s to 1980s these semi-natural, transitional habitats have slowly disappeared as a consequence of changes in land-use policy. The majority of black grouse in Wales (over 90%) are now associated with upland conifer plantations that have a mosaic of vegetation communities along the forest edge with a well-developed ground layer of young heather and bilberry.

The aims of the Cannon Farm black grouse project were linked to the overall aims of the Welsh Black Grouse Recovery Project: to stabilise the black grouse population and in the long term increase their numbers within the Llanbrynmair key area (13 lekking males in 1997) by favourable habitat management.

## Prescriptions

The prescriptions implemented at Cannon are tabulated below and highlight the cost of implementation, the area managed and the funding source.

Prescription	Cost £	Area available	Area managed	Funding Mechanism (body)
Reduce livestock densities to 0.05 livestock units per ha to help reduce overgrazing on upland heath and moorland fringe	£40/ha/yr	292ha	292ha	Tir Gofal (CCW)
Conifer thinning (up to 90% removal)	£582/ha	133ha	41ha	50% WGS (FC) 50% WBGRP (RSPB, NAW & EU)
Remove conifer brushings by either chipping or manually inserting into forest drains and furrows	£582/ha	133ha	41ha	50% WGS (FC) 50% WBGRP (RSPB, NAW & EU)
Create a modified graded edge along existing forest rides			3000m	50% WGS (FC) 50% WBGRP (RSPB, NAW & EU)
Fencing and farm gate	£860		500m	WBGRP (RSPB, NAW & EU)
Clear fell all heather knolls and hillocks and remove all brushings	£582/ha	133ha	2ha	50% WGS (FC) 50% WBGRP (RSPB, NAW & EU)
Allow broadleaf re-generation	No cost	43ha	43ha	
Restore and enhance flushes and mires by blocking grip and forest drains	£582/ha	133ha	5km	WBGRP (RSPB, NAW & EU)
Mechanically cut heather within forestry and on open moorland using a tractor mounted flail	£80/ha	175ha	35ha	WBGRP (RSPB, NAW & EU)
Project planning and supervision	£1500	425ha	308ha	WBGRP (RSPB, NAW & EU)
Lightly graze managed forest with sheep or cattle at stocking rates of 0.05 livestock units per ha	£40/ha/yr	133ha	43ha	Tir Gofal (CCW)

The overall costs for the Cannon black grouse project was £55,212. Of this £21,000 was funded from the WGS and £34,212 from the WBGRP. Where possible local contractors were hired creating 3.1 man-years of work (1 man year = 220 man days).

- Note
1. The Tir Gofal costs are for livestock reductions on dry heath.
  2. The managed forest will be lightly grazed once the heath community shows signs of regeneration.

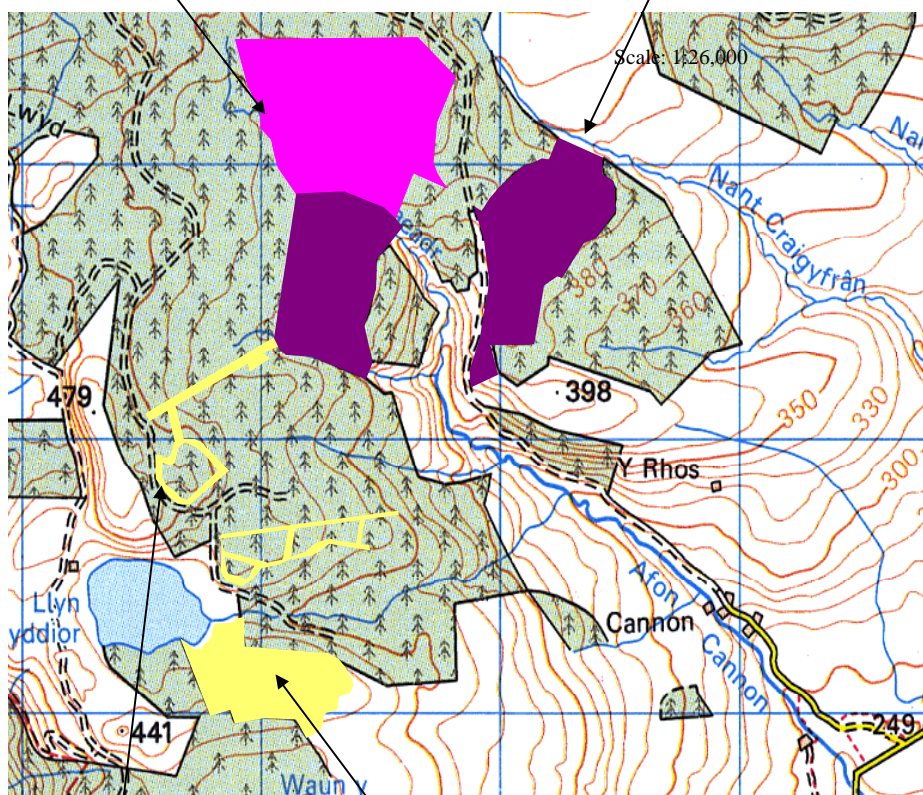
# CANNON FARM BLACK GROUSE HABITAT MANAGEMENT PROJECT

## Forest management area Size: 43ha

- Remove 90% of conifers by chainsaw
- Remove all brashing's either by chipping or manually inserting into forest ditches and furrows
- Retain and create wet areas by blocking ditches.
- Protect and establish areas of broad-leaves tress.
- Grade all forest edges
- Create a mosaic of heather by strip-cutting rides and cutting 10mx10m blocks within the coupe.

## Heather restoration Size: 60ha

- Tir Gofal agreement
- 0.05 livestock units per ha
- No supplementary feeding
- Grazing period May -October



## Heather ride management

- Create a mosaic of heather age and structure by strip-cutting forest rides using a tractor mounted flail.
- Cut on a 5 year rotation.

## Heather management Size 28ha

- Create a mosaic of heather age and structure by strip mowing 40mx30m blocks or block cutting 20mx20m blocks using a tractor mounted flail.
- Cut on a 5 year rotation.

## Recommendations

The black grouse habitat management project at Cannon recognised that the bulk of the proposed management could not be funded by one grant source. To meet the project aims and objectives the project required careful planning, tailored to existing grant schemes.

The project developed a step wise approach which:

- Identified the potential for habitat restoration and enhancement;
- Identified the aims and objectives of the project;
- Identified the eligibility to the project to available funding source/s and then applied;
- Adopted a strong partnership between the owners, RSPB, CCW and FC;
- Assessed the provision of vehicular access required for machinery e.g. tractors, chippers;
- Identified the management methods and machines required;
- Hired contractors to undertake several management options in 1ha blocks to assess the best approach;
- Provided regular progress checks to the owners and funding agencies.

## Future management

The owners are being encouraged to apply for Annual Woodland Management Grants to create favourable black grouse habitat in a further 88 hectares of forestry. The farm will continue agreed environmental management with payments under Tir Gofal. When the ground layer within the managed forest has regenerated they will be eligible to enter Tir Gofal with a payment of £40/ha/annum to lightly graze with livestock at a stocking rate of 0.05 livestock units per hectare. The light summer grazing of the forest ground layer will create a mosaic of vegetation heights favourable for black grouse.

## Summary

- The Cannon black grouse project is an example of how existing grant schemes can be blended together to deliver benefits for black grouse, biodiversity and maintain the owners economic objectives.
- The need to target incentive schemes to undertake habitat management are an integral factor to conservation projects.
- News at the time of print (November 2001) - black grouse have been recorded feeding within the management areas, previous to management there were no records of black grouse using the site, except for lekking.
- The farm won the prestigious National Sheep Association/Farmers Weekly, Sheep Farming and Conservation Award 1997, and the Soil Association/You magazine, Organic Producer of the Year Award 2001.

## Managing land for black grouse - further information and incentives

For further information and advice on black grouse requirements and management please contact RSPB Cymru (Tel: 01248 363800)

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

Countryside Council for Wales (Tir Gofal). Tel: 01248 385791

The Forestry Commission (Woodland Grant Scheme, Annual Woodland Management Grant): Tel: 01970 625866

