

Ballydangan Bog Red Grouse Project

2017 Annual Report



Ministerial visit - October 2017

Report prepared by
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February 2018

BORD NA MÓNA 

**LOCAL
LAND OWNERS** 

Roscommon
Regional Game Council


MOORE
COMMUNITY COUNCIL

Moore
Game and
Conservation Club

An Chomhairle Oidhreachta
The Heritage Council 



An Roinn Coimíre Sóisialaí
Department of Social Protection
www.welfare.ie 



An Roinn
Ealaíon, Oidhreachta agus Gaeltachta
Department of
Arts, Heritage and the Gaeltacht

 Roscommon
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Contents

	Page
Contents	2
Summary	3
Acknowledgements	4
Introduction	5
Aims of Project: 2016-2020	5
Management Strategies	6
1. Population Assessment	7
2. Preservation of Habitat	8
3. Predator and Pest Control	9
4. Public Relations	10
5. Provision of Grit	12
6. Disturbance Control	13
7. Other Management Works	14

Summary

Established in 2009, the Ballydangan Bog Red Grouse Project aims to prevent the decline and, in the long-term, increase the numbers of red grouse and other birds of conservation concern on Ballydangan Bog, Co. Roscommon.

Building on the original project Management Plan (2010-2015), the project team is now working under a new Conservation Plan (2016-2020). This plan provides detailed guidance on how to improve the ecological conditions of the site in a manner that supports a diversity of wildlife species and existing conservation priorities. The management is achieved through a range of strategies, including habitat improvement, predator control, monitoring, disturbance control, public awareness and education.

An unintended consequence of the project has been a positive response from breeding Curlew on the project site. In 2017, Ballydangan Bog hosted 3-4 breeding pairs of Curlew (Bord na Móna survey). A separate survey (undertaken by Birdwatch Ireland) on the south section (i.e. the main management unit) of the project site found 2-3 pairs of breeding Curlew. With the Irish breeding Curlew population estimated at around 150 pairs, this highlights the importance of the project site for this threatened species.

As a community-based venture, the project also aims to engage the local community to create awareness about the importance of red grouse and raised bog conservation. Some of the public awareness activities include the development of educational material, hosting school and university visits and disseminating the project's outcomes through site visits and local press.

On Thursday, 19 October 2017, two Government Ministers – Heather Humphreys, Minister for Culture, Heritage and the Gaeltacht and Denis Naughten, Minister for Communications, Climate Action and Environment visited the project site. Minister Humphreys applauded how this small-scale community-based project has become one of Ireland's best-practice demonstration sites, which is now a leading example of how to manage raised bogs for Red Grouse and breeding Curlew – both highly threatened birds in Ireland.

This project is managed by Moore Gun Club, Moore Community Council and Roscommon Regional Game Council in conjunction with Bord na Móna, the National Association of Regional Game Councils, Department of Social Protection, the Heritage Council, the National Parks and Wildlife Service, and Roscommon County Council. The project has been also supported by the Local Agenda 21 (Environmental Partnership) Grant Scheme.

See www.ballydanganbog.com for more information

Acknowledgements

The project team would like to acknowledge the grant aid from the Heritage Council of €6,000 to the project in 2010, 2011, 2012; €5,000 in 2014, €4,000 in 2015, €8000 in 2016 and €5,500 in 2017. This significant financial support is greatly appreciated.

Through Moore Community Council, the Department of Social Protection (DSP) has annually allocated four personnel to work on the project site for the duration of the project. This contribution from FÁS/DSP is estimated to be in the region of €250,000 (2010-2020).

The project would like to acknowledge the financial support of €4,000 per year (from 2010-2015) from the National Association of Regional Game Councils through their Irish Habitat Trust Fund.

Bord na Móna has generously agreed to provide the use of Ballydangan Bog for the Red Grouse project. The project would not be possible without this support. Bord na Móna has also provided funding for several actions and ongoing technical support towards the project's management practices. In particular, the project would like to acknowledge the contribution from David Fallon, Dr. Catherine Farrell and Dr. Mark McCorry.

The project team would like to acknowledge the ongoing support and grant aid of €3,000 in 2011 and 1,500 in 2017, which was provided by the National Parks and Wildlife Service (NPWS). The project team would also like to acknowledge the assistance from NPWS during the translocation exercise (2014) and the donation of one tonne of grit supplied in December 2013.

Moore Gun Club and Roscommon Regional Game Council would like to acknowledge the grant of €500 provided by Roscommon County Council under the Community Heritage Bursary 2013.

The project team would also like to acknowledge the grant of €1,500 from Roscommon County Council under biodiversity Action 1.16 of the County Roscommon Heritage Plan to: "Promote and encourage participation wildlife projects and surveys, which gather information on habitats and species throughout the county" (2013-2014).

Finally, the project team would like to acknowledge the Local Agenda 21 (Environmental Partnership) Grant Scheme (2013-2014) for a grant of €1,000; and in 2015 for a grant of €500 towards the development of environmental and awareness resources for primary and secondary schools.

Introduction

For a number of decades, members of Moore Gun Club and Roscommon Regional Game Council expressed concern about declining red grouse populations on raised bogs throughout County Roscommon. Many Gun Club members recall numerous populations of Red Grouse in the past, however, there has been a continuous decline with several local extinctions. This is primarily due to habitat loss via commercial peat extraction.

In late 2009, Moore Gun Club and Roscommon Regional Game Council undertook an effort to initiate a conservation project to address the declining red grouse population on Ballydangan bog, Co. Roscommon. The original project management plan (2010-2015) established a framework to achieve community-based conservation actions on Ballydangan Bog in a manner that supports red grouse, a healthy diversity and abundance of wildlife species and human uses.



Initial meeting between project team and Bord na Móna (2009)

That plan recommended actively consulting with relevant stakeholders and encouraged participation and involvement from the local community in the management programme. At the time, it was decided that the plan's working time-frame shall be five-year intervals. In 2015, a decision was taken to develop a new conservation plan from 2016-2020.

Aims of Project: 2016-2020

The main aim of this project is to limit the specific factors affecting Red Grouse and breeding Curlew on Ballydangan Bog while supporting existing conservation priorities for the site. More specifically, the Ballydangan Bog Red Grouse Conservation Project (2016-2020) aims to:

- provide best-practice management strategies aimed at increasing the Red Grouse and breeding Curlew population on Ballydangan Bog;
- implement management strategies in a manner that supports wider biodiversity goals, particularly for the conservation of raised bog habitat other red-listed bird species;
- promote community involvement in planning and decision-making;
- maintain an atmosphere of cooperation, participation and commitment among conservation rangers, landowners, land managers and other stakeholders in the development and implementation of site management strategies;

- encourage the long-term funding necessary to ensure the survival of Ballydangan’s Red Grouse population and to facilitate the collection and analysis of data during the course of the project.

Monitoring and evaluation are an important part of this plan, and adjustments to the goals, objectives and conservation actions will be made considering the best available data.



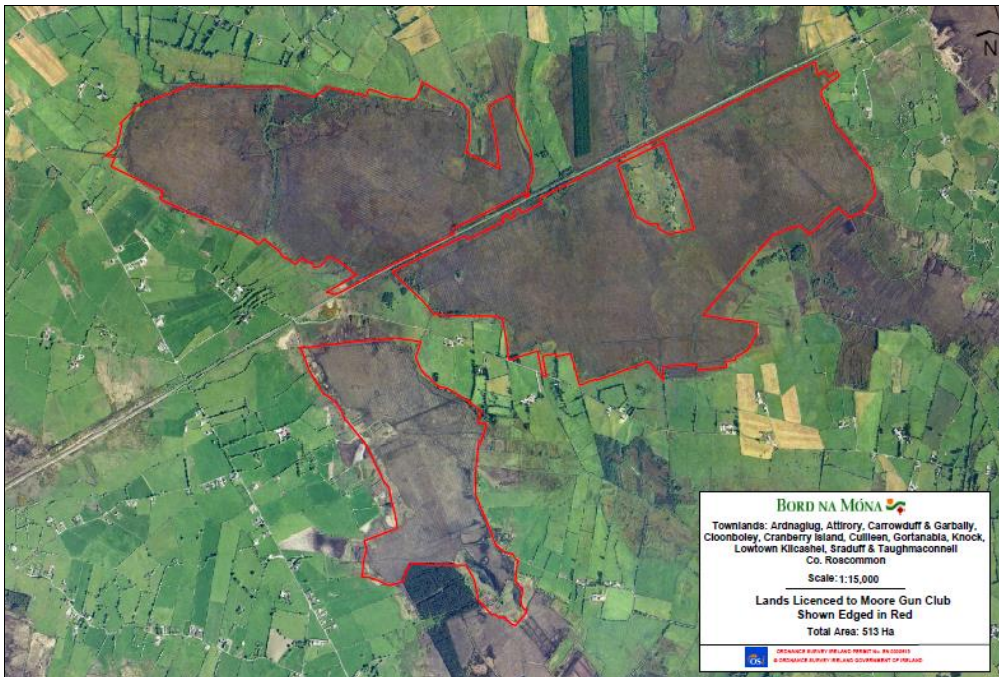
Red Grouse. Photo: Fiona Wheeldon



Red Grouse

Project Location

Ballydangan Bog is located approximately 8km north-east of Ballinasloe in the townlands of Thomastown, Clonbuila and Ballydangan. The entire bog is about 1,100 hectares and is divided in the centre by the main Dublin/Galway railway line.



Ballydangan Bog, Co. Roscommon

Management Strategies

Moore Gun Club and Roscommon RGC have been developing their conservation project for the past five years. The involvement of Moore Community Council through the DSP staff was a major boost for the project. This agreement between Moore Gun Club, Roscommon Regional Game Council and Moore Community Council (via the Department of Social Protection, DSP) has provided four

Community Employment (CE) staff to work on the project. The CE scheme is managed by Mr. Pat Feehily of Moore Community Council. An initial Health and Safety assessment was carried out by Mr. John Henson of HB Safety Services Ltd. Moore Gun Club and Roscommon RGC assist DSP staff with the management activities.

The following sections set out the specific management actions required for this project.

1. Population Assessment

Annual monitoring of Red Grouse and breeding Curlew on the project site will be essential to assess the impact of the proposed management practices. Spring counts establish the number of breeding pairs in the area and autumn counts establish how well (or not) the same pairs have produced. The autumn counts will therefore establish a ratio of young–old birds for that year. Early morning (i.e. dawn chorus) surveys are also useful to monitor (i.e. by listening to) the Red Grouse population.



Spring grouse count 2017



Breeding curlew on Ballydangan

Red Grouse:

Although the project is succeeding in preventing a local extinction of red grouse, the monitoring indicates that Red Grouse are present on the site at a very low density. During the 2017 spring dog count (March), two adult Red Grouse (one pair) were flushed on Ballydangan. In September 2017, the autumn count produced 3 birds indicating some breeding success. The low population of red grouse is likely due to weak genetic diversity within the remaining population, an issue which is discussed further in the Conservation Plan (2016-2020).

Red Grouse on adjacent/nearby bogs:

Increasing evidence suggests that Red Grouse have been observed on adjacent bogs. For example, reports from Bord na Móna and NPWS indicate that Red Grouse are present on Goats Lough bog and Lough Gore bog. Red Grouse were also observed on Cuckoo Hill bog in recent years also. It is probable that birds from Ballydangan Bog are dispersing to adjacent bogs. Additional survey work (using pointing/setting dogs) is required to get a better understanding of the situation.

Breeding Curlew:

The Eurasian Curlew has recently been added to the IUCN Red List of globally threatened species, and is on the Red List of Birds of Conservation Concern in Ireland, due to significant population and range contractions over the last 50 years. During summer 2017, 3 pairs of breeding Curlew were observed on Ballydangan south (see Birdwatch Ireland survey report); one pair was observed on Cranberry. No breeding productivity was observed.

Monitoring of Red Grouse and breeding Curlew (2010-2017)

Year	Grouse – Spring	Grouse - Autumn	Breeding curlew
2009	No survey	3	0
2010	No survey	1	0
2011	2	3	0
2012	1 (tape-luresurvey)	2	2 pairs
2013	0	0	2 pairs
2014	0	1	1 pair
2015	2	1	3 pairs
2016	1-2	2	7 pairs
2017	2 (i.e. 1 pair)	3	3-4 pairs*

* A breeding productivity survey was conducted in 2017 on Ballydangan south.

The presence of breeding curlew on Ballydangan bog may support existing evidence, which recognises that Red Grouse management can help to maintain the numbers and range of some breeding waders. This evidence should be used to form an even stronger argument for funding and support to be directed into Red Grouse projects being managed by local community groups in Ireland.

Other species:

The site supports a large population of breeding and wintering Common Snipe. Hare are also now very common throughout the project site. Mallard use the site annually for breeding. Lapwing (potentially breeding) were observed adjacent to the site in May/June during 2014, 2015 and 2016. There is a need for a dedicated survey of breeding Lapwing on the site. Other important bird species that use the site include a Barn Owl, wintering Golden Plover, Whimbrel and wintering Lapwing. The site is also used by Grey Heron, Kestrel, Cuckoo, Magpie, Raven, Sedge Warbler, Hooded Crow, Magpie and Reed Bunting. Since 2012, the project site has been occasionally used in winter by a male Hen Harrier.

Red Grouse Translocation:

During spring 2014 and autumn/winter 2015, the project team attempted (but failed to capture birds) to undertake a red grouse translocation from a 'healthy' population (i.e. Boleybrack Mountain SAC, Co. Leitrim) into Ballydangan Bog to improve the genetic vigour of the Ballydangan Bog red grouse population. The project team may try a translocation again in the future.

2. Preservation of Habitat

Red Grouse require a broad age-range of heather to allow for cover, shelter, nesting and feeding. Hens usually nest in mature heather adjacent to freshly cut/burnt or second year cut/burnt heather, where fresh shoots will be available for chicks. This improved micro-climate is beneficial to the reproduction of invertebrates which are a vital food source for chicks. A patchwork of old and new heather is widely considered as the best management practise for red grouse.

Progress:

- An estimated 50 acres of heather have been cut in the past five years, which is substantial.
- Bord na Móna recently undertook bog restoration works on the site, which should improve the conditions for breeding Curlew and Red Grouse. The initial draining (ditching) of the site in the 1970s (likely) negatively affected chick survival.



Heather strimming

Additional heather management work was carried out in September 2017 under the appropriate legal framework (i.e. the Wildlife Acts 1976 and 2012).

3. Predator and Pest Control

Research has shown that predation is, and has always been, a major cause of Red Grouse and breeding Curlew mortality. Predation during nesting and early brood-rearing has the greatest influence on red grouse populations. Nest predators on Ballydangan include fox, Grey Crow, Magpie, rat and mink. Reducing predation rates can lead to increases in Red Grouse productivity. The following predator management actions are put in place on Ballydangan Bog:

<p><u>FEBRUARY TO SEPTEMBER</u> Set/Check Large Crow Traps:</p> <ul style="list-style-type: none"> • Feed\water call birds • Remove captured birds • Maintain traps as required 	<p><u>FEBRUARY TO SEPTEMBER</u> Set/Check Larsen Traps:</p> <ul style="list-style-type: none"> • Feed\water call birds • Remove captured birds • Maintain traps as required 	<p><u>ALL YEAR</u> Set/Check Mink Traps:</p> <ul style="list-style-type: none"> • Remove captured mink • Bait traps as required • Maintain trap as required
<p><u>ONLY COLD WINTER WEATHER</u> Set/Check Fox Traps:</p> <ul style="list-style-type: none"> • Remove captured foxes • Bait traps as required • Maintain traps as required 	<p><u>ALL YEAR</u> Fox control - Lamping; Set/Check Snare Lines:</p> <ul style="list-style-type: none"> • Remove captured foxes • Reset snares as required 	<p><u>ONLY COLD WINTER WEATHER</u> Set/Check fox middens:</p> <ul style="list-style-type: none"> • Use only in cold weather • Check snares daily • Refresh bait frequently



Larsen traps are used for grey crows



North American Mink are trapped on the site

Numbers of predators removed from the Ballydangan project site (2017)

Month	Fox	Mink	Grey Crow	Magpie	Rat
Jan-17	16	0	0	0	1
Feb-17	15	1	0	1	1
Mar-17	10	0	0	13	0
Apr-17	5	0	7	34	0
May-17	4	1	15	16	2
Jun-17	9	0	24	19	3
Jul-17	6	0	5	2	2
Aug-17	7	1	0	3	2
Sep-17	6	0	0	0	3
Oct-17	9	1	0	0	2
Nov-17	7	1	0	0	3
Dec-17	6	0	0	0	3

Numbers of predators removed from the Ballydangan wider area (Moore Gun Club) 2017

Fox	Mink	Grey Crow	Magpie	Rat
117	17	39	84	4

4. Public Relations

As Red Grouse are mostly threatened by human influences, education is an important accompanying measure in conservation programmes. Public awareness and education can greatly improve the success of conservation efforts. In general, farmers, the general public and decision-makers require better education on habitat requirements, threats and ecology of the species on their land and under their responsibility.

As a community-based venture, the Ballydangan Red Grouse Project should aim to engage with the local community and create awareness within the wider general public about the importance of red grouse conservation. Some of the educational and public awareness activities could include the development of educational material, hosting school visits and disseminating the project's outcomes through local media. Increased community awareness about this project has already been put in place via the erection of several signs.

Activity:

- Primary and Secondary School Educational Resource Packs distributed to local schools
- Site visit: NUIG (May and November 2017)
- Site visit: UCD (May 2017)
- Site visit: NPWS (August 2017)
- Site visit: Heritage week open day (August 2017)
- Project promotion at [FACE](#) exhibition in European Parliament (September 2017)
- Project Steering Group meeting (September 2017)
- Ministerial visit (October 2017)
- Site visit: Athlone IT (January 2018)
- Site visit: Camcloon National School (planned for March 2018).

Media/promotion:

- New website launched (October 2017): www.ballydanganbog.com
- Article in Irish Shooters' Digest (October 2017)
- Article in Irish Shooters' Digest (November 2017)

- Promotion on FACE website (November 2017): <http://www.face.eu/about-us/resources/news/ballydangan-bog-red-grouse-project-the-finest-hour>
- Coverage in Roscommon papers (October/November 2017) on Ministerial visit.
- Moore news article (December 2017).



Heritage Week event 2017



Athlone IT visit 2018



NUIG visit 2017



NUIG visit 2017

Local schools:

Schools see the Red Grouse Restoration Project as a useful way to learn more about wildlife management and community-based conservation. The project was previously awarded funding from Local Agenda 21 (Roscommon County Council) towards the development of resource material for primary schools. Last year, the project team engaged Ecoenvolve (Environmental Training and Consultancy) to develop educational materials for primary schools based on the Ballydangan Bog Red Grouse Project.



Minister Humphreys and Minister Naughten



Visit from individuals from Co. Cork 2017



Exhibition in Brussels with project poster 2017



2nd NUIG visit 2017

Project educational poster

The poster is titled "Flora and Fauna of Ballydangan Bog" and includes the following elements:

- Logos:** BORD NA MÓNA, MOORE & GLEBE CLUB, FAS, and other project partners.
- Text:**
 - Ballydangan Bog Habitat:** A description of the bog as a raised bog, its location, and its importance as a habitat for various species.
 - Active bogland system:** A description of the bog's structure, including the peat layers and the various plant species that grow there.
 - Risk Free and Safe:** A statement that the bog is a safe place for visitors to enjoy nature.
 - The Bog:** A general description of the bog's environment and the types of plants and animals that live there.
- Illustrations:** Numerous detailed drawings of birds (e.g., Curlew, Golden Plover, Wren, Redwing, Pheasant, Magpie) and mammals (e.g., Fox, Rabbit, American Mink).
- Map:** A map of Ballydangan Bog showing different sections: North Ballydangan Bog, Ballydangan Bog, and Cranberry Lough Bog. A legend identifies features like raised bog, cut-over bog, fen and flush, sedge, and raised bog edge swamp.

Project educational poster designed Wildlife Artist, Michael O’Cleary

5. Provision of Grit

Coarse/angular grit is placed in multiple locations on the project site to allow easy access to an essential dietary requirement as well as offering suitable high points. Each grit station is recorded by GPS to allow the project team to regularly monitor their use. In summary:

- Grouse require grit in their diet and will travel considerable distances to source it;
- The angular grit or small stone is eaten and acts as a pestle and mortar in the birds’ gizzard to help digest the fibrous, low nutrient value heather that forms almost 90% of their diet;
- Natural grit is often found on road sides or where exposed stone is found;
- Providing grit for red grouse may encourage birds to establish territories. It should be placed on a high point that can be used as a vantage point for red grouse to look out for predators and for the cock bird to survey his territory.



Maintaining the network of grit stations

Actions:

- Additional grit stations have been erected throughout the project site (August – November 2017).
- Grit stations have been maintained.

6. Disturbance Control

The project team has maintained a rigorous system of territory management on the site in 2017. Members of the project team kept a close eye out for fires on the project site over the summer months. Having a constant monitoring system in place is crucial to the success of the project.

Increased awareness about the project is also obtained by placing signs at access points to inform people about the project. In addition to erecting small project signs, two large information signs for the project were developed to provide information about the various stakeholders involved in the project. Other signs were erected to satisfy public liability/insurance concerns relating to the project site. Public liability insurance for the project site is organised annually through the NARGC Compensation Fund Scheme. Two large project signs (purchased in 2014) have been erected along the Galway-Dublin rail line to promote the project to rail passengers.



Project Signs used to highlight the project work



Signs used to highlight/promote the project



Educational sign

Sign for dog walkers

7. Other Site Management Works

The project team has put in place (and maintains) new access bridges on the site to facilitate site visits, public safety and better management access. The site access road was regularly maintained with strimming and several gaps in fencing were repaired.



Access bridges built – June/July and Sept. 2016

Some scrub removal works has taken place in accordance with the legal framework. Scrub areas were identified in the recent (2017) report by Dr. Alex Copland.