

Case Study: Abbeyleix Bog

In 2009, restoration work began at Abbeyleix Bog in Co. Laois. This work was managed and co-funded by Bord na Móna and the National Parks and Wildlife Service. Initially drained in the 1980s, the margins of the 190 ha bog had been cut for domestic use. To restore the raised bog habitat, open drains were blocked across the high bog to raise water levels, rewetting the bog and aiding the development of *Sphagnum*-rich plant communities and peatland habitat function. Prior to restoration, consultation was carried out with the local community and other stakeholders, including local authorities and the Irish Peatland Conservation Council.

Work on Abbeyleix Bog (known locally as Killamuck Bog) was carried out by a specially modified excavator and over 3,500 dams were installed over a four month period. After the restoration work was completed in 2011, Bord na Móna leased Abbeyleix Bog to a local community group who continue to develop the nature conservation, amenity and education potential of the site. The local management group coordinates a wide range of projects on the bog, including butterfly monitoring, *Rhododendron* clearance, and the construction of a boardwalk. **The project is viewed nationally as a best practice case study for the future successful management of bog conservation and restoration sites in Ireland.**

Bord na Móna continues to support and advise this project. We also support other community projects such as the Ballydangan Red Grouse Project.

Blocked drain on restored Bord na Móna site.



Launch of Abbeyleix Bog boardwalk in 2014.



Further Information

Download our Biodiversity Action Plan from:
www.bordnamona.ie

BORD NA MÓNA 

Bord na Móna Raised Bog Restoration Project



*Restoring
Ireland's
Natural Capital*

BORD NA MÓNA 

Introduction

Since its establishment, Bord na Móna (the Irish Peat Company) has acquired extensive areas of Irish peatlands to develop for energy and horticultural use. In 2008 the company announced that no new bog areas (i.e. no previously un-drained bog areas) would be developed for peat production. This was followed by a baseline ecological/habitat classification of the full range of the Bord na Móna lands between 2009 and 2011. During the survey, a number of raised bogs partially drained for peat production in the 1980s were subsequently identified as being of high ecological and conservation value, as well as having significant restoration potential. **These bogs are essentially surplus to peat production requirements and lie outside the active industrial peat production areas.** These high ecological value sites now form the core of the Bord na Móna Raised Bog Restoration Project (2009 to present) which has been developed as one strand of the company's Biodiversity Action Plan (2010-2015).

Restoration Approach

The main objective of this project is to restore raised bog habitats at several sites. Raised bogs are threatened habitats as only a small proportion of active raised bog still exists in Ireland. They contain a wide range of different species, many of which are threatened or under pressure in the wider landscape and are dependant on habitats like raised bogs. **Restoration of ecosystem function at these sites will also help Ireland meet its biodiversity objectives including commitments to conserve raised bog habitats under the EU Habitats Directive.**

Monitoring

Changes in habitat quality of the restored sites are being monitored to assess the success of the work, both in the short and long term. This involves an initial baseline ecotope survey (www.NPWS.ie) to be repeated a number of years post-restoration to establish successes in rewetting, as well as monitoring of permanent quadrats. **Monitoring of greenhouse gases is also taking place on the restored bogs to assess the potential**

Sphagnum mosses are a key species of raised bogs. They require water-logged nutrient-poor conditions to thrive in this habitat. Peat-forming or 'active' bog habitat is rich in *Sphagnum* species.



Large Heath Butterfly (*Coenonympha tullia*)

- Current Red List status – vulnerable.
- Threatened in Europe.
- Found at Cuckoo Hill Bog.

"Bord na Móna is fully committed to progressing our bog restoration programme across our land holding and building on the successful initiatives taken to date. We expect to significantly increase our restoration activity in coming years as outlined in our Biodiversity Action Plan. The techniques and expertise used in the projects mentioned will be used to inform future projects so as to ensure continued success in this very important area."

Gerry Ryan, Head of Land and Property, Bord na Móna

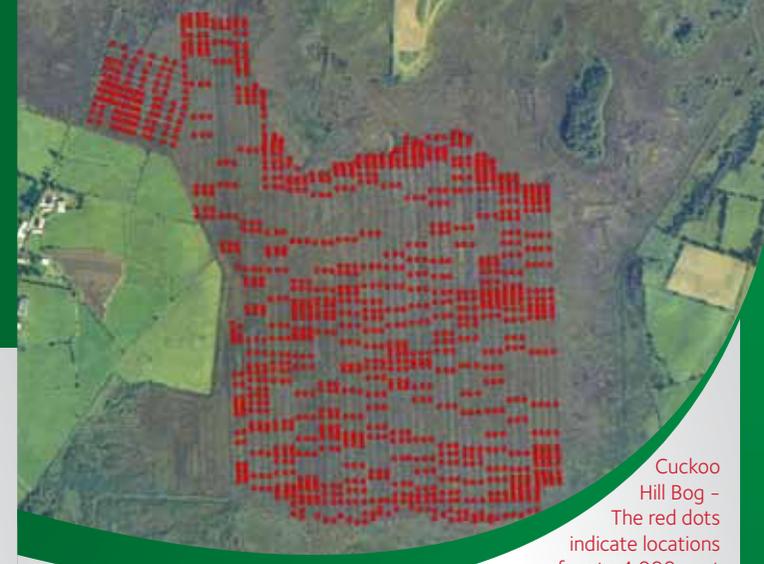
offset of carbon emissions. No definitive conclusions about the impacts of the restoration can be made yet. However, in general, **water levels have been responding quickly** and are being maintained close to the bog surface. Also, in a number of sites there has already been a **notable increase in *Sphagnum* cover.** In most instances the restoration work and resultant habitat improvement has also served to maintain populations of typical peatland species of national conservation interest, such as Curlew and Red Grouse.

Future Work

To date, up to 1,000 ha of raised bog have been restored using this methodology and Bord na Móna will continue the rewetting of other sites with a further 1,000 ha of bog targeted for future work. The work continues to be funded under the Bord na Móna Biodiversity Action Plan and the average cost is approximately €400/ha (includes all project planning, survey, supervision, machine, driver and overheads). **All of the sites restored so far are being considered for designation as part of the NATURA 2000 SAC network and/or as part of the national conservation network as NHAs (Natural Heritage Areas).** The Bord na Móna restored bogs will add considerably to the bog conservation and restoration network of peatland habitats in Ireland in coming years.



Peat dams are a very effective way of blocking drains to rewet raised bogs in Ireland. Rewetting the bog aids the development of *Sphagnum*-rich plant communities and restoration of the active raised bog habitat.



Cuckoo Hill Bog – The red dots indicate locations of up to 4,000 peat dams constructed across the bog.

Results to date

The table below outlines progress made. So far over 1,000 ha of high bog habitat has been rewetted. The work will continue on other selected bog sites.

Year of Restoration	Bog Name	Total Area ha	County
2009	Abbeyleix Bog	190	Laois
2011	Cuckoo Hill	124	Roscommon
2012	Moyarwood	188	Galway
2013	Ballydangan South	218	Roscommon
2014	Lenareagh	125	Galway
2014	Paul's Lough	120	Galway
2014	Cloonshannagh	38	Roscommon
Total restored 1/1/2015		1,003 ha	

Curlew is a particularly threatened breeding bird species found on several of the Bord na Móna raised bog project sites. Recent estimates from Birdwatch Ireland suggest there are less than 200 breeding pairs left in Ireland.

