

After-LIFE Conservation Plan

Restoring Active Blanket Bog In Ireland

(PROJECT No: LIFE02 NAT/IRL/8490)

(1ST JULY 2002 – 31ST DECEMBER 2007)



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For the:-

**LIFE-Nature/Coillte co-funded project “Restoring Active Blanket Bog In Ireland”
(Project No: LIFE02 NAT/IRL/8490;1ST July 2002 – 31st December 2007)**

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Preface

This After-Life conservation plan represents the final deliverable of the project “Restoring Active Blanket Bog in Ireland” and was appended to the Final Technical Report on that project as Appendix 22. In addition to indicating how the project sites will be managed for conservation into the future, it outlines the historical context of how the sites came to need restoration and the main actions of the restoration project.

Introduction

Ireland began a reforestation programme in the early 1900s following centuries of exploitation of native woodlands and deforestation for agriculture. Successive governments supported a programme of plantation establishment but a strong farming lobby ensured that this was confined mainly to sites marginal, or unsuitable, for agriculture. Peatlands (both blanket and raised peats) were such site types and until their ecological value was fully appreciated they were regarded as wasteland to be converted to more productive uses. Forestry was one of these uses and, particularly in the western seaboard regions, following research trials, large scale annual afforestation programmes were undertaken and extensive areas of blanket bog were drained, fertilised and planted with conifers (mainly Sitka spruce and lodgepole pine), the only tree species that would provide an economic return on these sites. Farm and forest management systems were developed to meet the primary objective of production with little attention being paid to biodiversity or the impact of operations on environmental receptors. This work provided employment for local people as well as the prospect of income and a growing industry into the future. Overall, 150,000ha of western blanket peats were afforested, until the planting programme on these peats culminated in 1993. However, today, in a European or even global context, Ireland’s blanket peatlands constitute a vital resource which is acknowledged as:

- A museum of past civilisations, climates and environments

- A habitat for organisms adapted to extreme environments
- Areas of educational and amenity value
- Reserves of genetic resources
- An essential part of the biosphere.

These facts have resulted in new management options for afforested peatland areas. One such option is restoration where suitable of peatland habitat. Such was the focus of this LIFE-Nature project, the largest of its kind ever undertaken in Ireland, which was approved by the European Commission in 2002 and which is now at the end of its five and a half years of implementation.

The Peatlands of the West of Ireland are internationally among the most important intact areas of active blanket bog found in Europe. Since 1997 approximately 135,139 ha of active blanket bog have been proposed as candidate Special Areas of Conservation [SAC] under the Habitats Directive. These proposed SAC Blanket Bog sites are located mainly in the Atlantic Seaboard counties of Ireland, especially County Mayo.

The LIFE-Nature project aimed at bogland restoration on 20, unplanted, or partially or wholly afforested sites covering up to 1,989.0ha within candidate SACs on land owned and managed by Coillte. Special emphasis was placed on sites in North Mayo, where the full range of blanket bog types occur from lowland to mountain blanket bog (involving sensitive river catchments). Other project sites were representative of afforested peatlands around the country. Five of these sites (No. 3, 5, 7, 13 and 16) were selected as project demonstration sites, these were the focus of a public awareness Programme over the five and a half year period of project implementation..

In the past the blanket boglands of Ireland were extensively afforested, with unfenced open areas often heavily overgrazed. This had resulted in degradation and drying out of the habitat. These threats were the focus of this project. The problems, which needed to be addressed, were:

- Uncontrolled areas on the open bogs had been overgrazed
- Forestry drains on the open bogs had lowered the natural water-levels
- Afforestation, including drainage had reduced the area of blanket bog
- Forest plantations were regenerating onto the open bog SACs.

This project was to reverse these processes and over time create a high quality area of active blanket bog by:

- Fencing to gain control of 555.4 hectares of open bog areas

- Drain blocking to restore the integrity of the bog hydrological systems
- Tree removal on some 982.27 ha to enlarge the blanket bog area
- Removal of naturally regenerated trees from the open bogs
- Ecological and hydrological monitoring.

Bog restoration techniques on afforested peatland pioneered in the LIFE funded “The Border Mires Active Blanket Bog Rehabilitation Project” (UK) were to be developed on in this project. Links with other LIFE funded projects with an emphasis on tree clearance were also to be made. This LIFE funded restoration project was to build on conservation management plans for the sites, the development of which by Dúchas The Heritage Service was previously supported by EU LIFE funding.

At the end of this project it was expected that the proponent would have achieved a significant amount of blanket bog enhancement. Funding from LIFE-Nature would have demonstrated the restoration of suitable active blanket bog sites as one of the management options on afforested peatlands.

The implementation of all project actions had been successfully concluded by December 2007, when the project officially ended. Notwithstanding the successful implementation of these actions, there is a need for ongoing conservation management on the project sites into the future, hence the production of this After-LIFE Conservation Plan.

Future Management Plan for Blanket Bog Restoration Sites

The ultimate aim of the restoration work which has taken place during the LIFE-Nature/Coillte co-funded project “Restoring Active Blanket Bog In Ireland” is to restore sites to active blanket bog, i.e. have a high watertable and support a peat-forming vegetation. In areas where the shallow peat depth will not allow the development of wet blanket bog, the closely related habitat wet heath will be promoted as it has a vegetation composition very similar to that of blanket bog and is also an Annex 1 habitat. Whilst it is clear, even at this early stage in the restoration process, that some sites will take much longer to achieve favourable status than others it is essential that all sites are managed in a sensitive way into the future. As all of the sites within the project are dominated by blanket bog habitat the same management prescriptions will, by and large, apply to all.

Upon completion of the restoration works carried out as part of the of the LIFE project at the end of 2007, the project sites will be handed back to be managed under Coillte’s general forest management

structure of Regions, Districts and Forests. These sites will form part of the commitment to manage 15% of the Coillte estate area for nature conservation. The sites will also meet Coillte's commitment under FSC certification to restore valuable habitats that have been damaged as a result of afforestation activities in the past.

As part of Coillte's Forest Management Plans (FMPs) within the relevant Districts, the sites will be monitored and managed into the future in order to promote the further recovery of blanket bog and wet heath habitat and this will be achieved in a number of ways.

- (1) Each site will be checked every year for regeneration of seedlings of pine and other unwanted tree/shrub species. Any naturally regenerating seedlings/saplings will be removed manually. This process will be carried out until the site is free of naturally regenerating shrubs/trees. As conifer seed does not survive on bog conditions for more than a few years, it is not expected that this will be a long term requirement .
- (2) In the case of the project sites Garrane, Drumalohurt and Eskeragh the regeneration of native shrubs such as downy birch and willow is occurring repeatedly within small areas where the peat cover is thin. In view of the repeated regeneration occurring in these areas a decision will be taken in 2008 as to what areas of these sites will be managed for the development of bog woodland into the future. The priority Annex I habitat bog woodland is itself a very valuable wildlife habitat and the spontaneous establishment of the habitat at some of these sites should be viewed as an opportunity to increase the area and range of the habitat in Ireland.
- (3) The perimeter fence of each site will be checked and repaired, in order to prevent stock trespass and grazing. Trespassing stock will be removed when necessary. It should be noted however that a low level of livestock grazing is beneficial to the development of a diverse blanket bog flora as it opens up the sward and allows the establishment of a more species-rich blanket bog flora.
- (4) Vegetation recovery will be monitored within sites. Permanent vegetation monitoring quadrats have been established as part of the restoration project and will be resurveyed every 5 years in order to document changes in the vegetation. This vegetation monitoring will provide important data regarding the recovery of the blanket bog habitat. Monitoring the return and spread of indicator plant species of wet bog habitat such as *Rhynchospora alba*, *Schoenus nigricans* and *Sphagnum cuspidatum* will provide a good indication of the return of active bog conditions.
- (5) Dams will be checked in 2008 and during site inspections every three years to ensure that drains do not become active again.
- (6) It is the intention of Coillte to investigate the use of aerial photography as a potential

management tool for planning various forest operations such as commercial felling. These aerial photographs will be available for the entire Coillte estate, including the blanket bog restoration sites and will provide another important way in which to monitor future site recovery.

- (7) As five of the sites have been designated as LIFE project demonstration sites, with information signage and boardwalk access, any interested groups or individuals will be welcome to visit restoration sites and discuss their recovery. Already in 2008, after the project has ended, there have been visits by the RSPB Blanket Bog project from Wales and by the International Peat Congress which was held in Ireland this year.
- (8) As the restoration sites lie within Special Areas of Conservation regular consultation with the National Parks and Wildlife Service (NPWS) will also form an important part of the future management of each site. The management plans for these sites will be discussed and agreed with appropriate ecologist and regional management staff within NPWS.

How the Longer-Term Management of the Sites will be assured

Coillte is a private limited company in which all the shares are held by the State, so the long-term ownership of the project sites is assured. Coillte secured FSC certification for well managed forests in 2001, and has maintained this status since. In this context, ecology surveys took place to identify 15% of the estate to be managed primarily for biodiversity. All of the LIFE blanket bog project sites will be managed within this 15% of the company's estate into the future. Measures are also being taken to maximise the academic value of the project sites by facilitating their use by third level educational institutions for research purposes. Coillte is also interested in carrying out further blanket bog restoration works on its estate if funding can be secured through the Rural Development Programme or LIFE+.