Atlantic Oakwoods - Restoration of Atlantic Oakwoods
LIFE97 NAT/UK/004244

Project description

Background

Moss and lichen-rich old oak woodlands are an Annex I habitat type restricted to Britain and Ireland where this is the climax 'temperate rainforest' community of Europe's Atlantic coast. In Britain it is restricted to sites in the west of the country, many of which have been subject to management - including forestry practices - which have degraded their nature conservation interest.

Underplanting and replacement of broadleaved deciduous species by exotic conifers; invasive plants like rhododendron; increasing pressure from deer browsing which reduces natural regeneration; and in some areas high visitor numbers, are among the key threats to these ancient oak woodlands. The project was concerned with improving the habitat condition in seven of the most extensive Atlantic woodlands in Britain, ranging from Loch Maree in the far north-west of Scotland, through the popular Loch Lomond woodlands within easy reach of Glasgow, to Borrowdale woods in the Lake District and Meirionnydd oakwoods in north-west Wales. Together they cover nearly 4,900 ha of Atlantic oakwood habitat. At each site, a set of management targets was to be established based on the most important perceived threats. Actions would target the clearance of around 690 ha of exotic conifers and broadleaves, treatment of around 405 ha to eradicate rhododendron, and treatment of a further area of over 370 ha to control bracken. Another important activity would be controlling grazing - particularly by sheep, deer and feral goats through a mixture of stock fencing - over 60 km - and deer culling. The effectiveness of the various measures was to be monitored and assessed and the results disseminated on a web-site.
Objectives

The project objectives were: To restore a significant proportion of the Atlantic oakwood habitat within candidate Special Areas of Conservation (SAC) in the United Kingdom to 'favourable condition' To undertake scientific research to underpin the development of strategies for the management of grazing with Atlantic oakwoods. To establish standardised integrated management and monitoring plans for each SAC which will ensure the maintenance of favourable condition in the future. To disseminate the information and expertise gained through the project to the widest possible audience to assist in the development of an integrated approach to woodland habitat conservation.

Results

LIFE funding provided the incentive for this project's wide-ranging, co-ordinated and strategic approach to the restoration of a large proportion of the priority Atlantic oakwoods resource in the UK. The project focused on seven sites: Sites in Scotland Loch Etive Woods (1691 ha) Loch Lomond Woods (1458 ha) Loch Maree complex (223 ha) Loch Sunart Woodlands (3161 ha) Taynish Woods (385 ha) Site in Wales Meirionnydd Woodlands (461 ha) Site in England Borrowdale Woodland Complex (668 ha) The project pioneered the use of Local Operational Planning Teams to ensure that the wider issues of designation and condition monitoring of Natura 2000 sites were combined with the more local issues of woodland management and the economy. In terms of restoration work carried out on the seven sites, the overall targets set in the project application were generally exceeded. The final results were: Removal of exotic conifers from 688 ha at 7 sites Eradication of invasive Rhododendron ponticum scrub from 405 ha at 5 sites and follow-up spraying over 557 ha at the same sites Bracken control over 373 ha at 4 sites Regeneration measures undertaken over 35 ha at 3 sites Re-structuring operations over 14 ha on 2 sites Grazing control by over 61 km of deer fencing on 3 sites and over 14 km of stock fencing on 6 sites Erection of 148 ha of deer-proof exclosures on 4 sites Integrated deer management implemented at 5 sites and deer management strategies prepared for 4 sites Almost 8 km of roads and tracks constructed at 3 sites to protect the habitat during restoration operations and 3 km of new footpath constructed at 1 site to protect the habitat Some additional actions were completed at two Scottish sites. The practical works were supported by the production of Site Management Statements, condition assessments, management plans, surveys, deer management strategies and applied research. The applied research helped reveal some of the complexities about oakwood habitats. At many sites the current interest (for which the sites have been designated) is not in fact natural but the product of selection over several centuries. The use of oakwoods for charcoal burning and for oak products has tended to favour oak and some ‘natural’ oakwoods have been found to have been planted. This will have important management consequences, as ‘hands off’ conservation in favour of predominantly oak-based habitats may not be the best approach in the long term. A series of research publications were produced and are available as PDF files on the project website www.caledonian-partnership.org.uk As regards the complex
issue of deer management in Scotland, the project has made a significant contribution to the debate over the long-term reduction of deer numbers in Scottish SACs but has not been in a position to provide a definitive policy for resolving this problem. This will need to be done through the Deer Commission for Scotland working in partnership with the Forestry Commission and Scottish Natural Heritage. The deer management strategies produced by the project identify best practice for the future regardless of current constraints and short-term solutions and are backed up by a document ‘Deer Management Requirements for the Delivery of Natura 2000 Objectives in Atlantic Oakwoods’. An intensive programme of deer fencing and culling on 4 of the sites was undertaken. The most significant progress was at Loch Lomond where the deer cull brought numbers down from 39/km² to 10/km² and at Loch Sunart where the deer management strategy is the most advanced. This helped to support the cost of putting up over 40km of fencing over the whole SAC with the cooperation of private landowners. The project tackled the large scale removal of Rhododendron ponticum. Through the project the rhododendron problem has been largely addressed at a number of sites and only mopping-up exercises should be required to consolidate this work. The project has helped to develop new funding packages within the Scottish Forestry Grant Scheme to be launched in 2003. Higher rates of grant will be available for work in Natura 2000 sites. Regarding the long-term effect of the project actions, the work will be maintained and consolidated through 10-year management and monitoring plans for all the sites and sub-sites covered. This will provide the necessary framework for future management. The project held a final conference in partnership with the Wet Woods LIFE Project (B4-3200/98/516) in October 2001 and the proceedings 'Restoring Natura Forest Habitats' was published by the Caledonian Partnership in 2003.

Top

Environmental issues addressed:

Themes

Biodiversity issues - Invasive species
Habitats - Forests

Keywords

research project, restoration measure, environmental impact of agriculture, protected area, environmental impact of forestry, forest ecosystem

Target EU Legislation

- Nature protection and Biodiversity
- Directive 92/43 - Conservation of natural habitats and of wild fauna and flora- Habitats Directiv ...
Target Habitat types

- 4010 - Northern Atlantic wet heaths with Erica tetralix
- 91A0 - Old sessile oak woods with Ilex and Blechnum in the British Isles
- 91C0 - Caledonian forest
- 91D0 - Bog woodland

Natura 2000 sites

SCIUK0012682Taynish and Knapdale Woods
SCIUK0012745Borrowdale Woodland Complex
SCIUK0012750Loch Etive Woods
SCIUK0013573Loch Lomond Woods
SCIUK0013597Loch Maree Complex
SCIUK0014789Coedydd Derw a Safleoedd Ystlumod Meirion/ Meirionnydd Oakwoods and Bat Sites
SCIUK0019803Sunart

Beneficiaries:

Coordinator: Caledonian Partnership, Highland Birchwoods Ltd
Type of organisation: Mixt enterprise
Description: Highland Birchwoods was established in 1992 in order to promote the conservation, sustainable management and economic potential of native woodlands in the Scottish Highlands. It is registered in Scotland as a charitable company limited by guarantee. It was founded as the result of a joint initiative by the Forestry Commission, Highland Regional Council, Highlands and Islands Enterprise and Scottish Natural Heritage. In 1995 Highland Birchwoods launched the Caledonian Partnership with the specific aim of halting the decline in the extent and condition of native forest habitats. The partnership includes voluntary conservation organisations and government forestry, conservation and research agencies with wide experience of native woodland restoration.
Administrative data:

Project reference: LIFE97 NAT/UK/004244
Duration: 01-APR-1997 to 31-AUG -2001
Total budget: 3,406,516.51 €
EU contribution: 1,703,258.26 €
Project location: North West (UK)(United Kingdom) Wales(United Kingdom) Scotland(United Kingdom)

Read more:

Brochure: Title: Borrowdale's Rainforest Author: National Trust

Brochure: Title: Coedydd Meirion -Meirionnydd Woodlands Author: Countryside Council for Wales No of pages: 16

Poster: Title: "Expansion of native oakwoods into habitat cleared of conifers" (89.9 KB) Author: A-M. Truscott, R.J. Mitchell, S.C.F. Palmer, ...[e Editor: Centre for Ecology & Hydrology No of pages: 1

Poster: Title: "Browsing and the regeneration of Atlantic oakwoods" (81.6 KB) Author: A-M. Truscott, R.J. Mitchell, S.C.F. Palmer, ...[e Editor: Centre for Ecology & Hydrology No of pages: 1


Publication: Case study: Title: "Using an ecological site classification at the landscape scale to guide the restoration of Atlantic oakwoods within the Ben Lomond National Park" (347 KB) Author: Alice Broome, Jon Clare, Duncan Ray, ... [et al] Editor: Woodland Ecology Branch No of
Publication: Proceedings  
Title: "Core Sites for a Forest Habitat Network: Towards Implementing Viable Forest Habitat Networks" (1.10 MB)  
Author: Kenny Taylor and Caroline Vawdrey  
Year: 2005  
Editor: Final Core Forest Conference, New Lanark (United K  
No of pages: 22

Publication: Proceedings  
Title: "Restoring Natura Forest Habitats: Report of a LIFE-Nature Conference" (1.09 MB)  
Author: Caledonian Partnership  
Year: 2003  
Editor: Highland Birchwoods  
No of pages: 101

Publication: Research findings  
Title: "A preliminary history of the clyde valley woodlands" (2.20 MB)  
Author: Philip Sansum, Mairi Stewart and Fiona Watson  
Year: 2005  
Editor: Highland Birchwoods  
No of pages: 56

Publication: Technical report  
Title: "Thinning in atlantic oakwoods: Assessing options at the stand scale" (1.53 MB)  
Author: Thompson, Richard  
Year: 2005  
Editor: Highland Birchwoods  
No of pages: 40

Publication: Technical report  
Title: "Stand dynamics in Tilio-Acerion Woodlands of the Clyde valley" (1.24 MB)  
Author: Richard Thompson and Andrew Peace  
Year: 2005  
Editor: Highland Birchwoods  
No of pages: 44

Publication: Technical report  
Title: "Analysis of age structure in Atlantic oakwoods and implications for future woodland management: Report to the Caledonian Partnership for the Life '97 project - Restoration of Atlantic oakwoods" (815 KB)  
Author: Richard Thompson, Jonathan Humphrey, Colin Edwards  
Year: 2001  
Editor: Silviculture North Branch, Northern Research Stati  
No of pages: 48

Publication: Technical report  
Title: "The sunart oakwoods: a guide to their sustainable management" (1.86 MB)  
Author: Peter Quelch  
Year: 2005  
Editor: Highland Birchwoods  
No of pages: 36