Sustainable Wetland Restoration

Regenerating rare habitats in the New Forest

Forestry Commission England

Sustainable Wetland Restoration in the New Forest is an outstanding project that has improved the conservation value of more than 600 hectares of habitats, including some of Europe's most valuable wetland habitats. The ambitious project has also benefited associated wildlife and local livelihoods within the designated Special Area of Conservation. The rare and special wetland habitats targeted by the project were woodland on river banks, bog woodland, wet grassland and valley mires. To support their restoration, a total of 10 km of river was also restored.

objectives

The project targeted half the main water basins in the New Forest and set out to:

- Gain a better understanding of how New Forest wetlands function and establish an integrated programme for their sustainable management.
- Reverse the effects of historic drainage, tackle threats from invasive and non-native species, and restore European priority wetland habitats for the benefit of wildlife, the landscape and people.
- Create conditions which would extend and regenerate priority wetland habitats.

actions

- Surveys and maps were prepared to assess the state of rivers, locate habitats and identify restoration priorities for rivers, riverside and bog woodland, mires and wet grasslands (known locally as "lawns").
- A stakeholder group, the Water Basin Management Forum, was set up to guide project delivery, plan for future wetland management, and promote understanding about wetland ecology and its value.

Project actions have included:

- Employing traditional woodland management techniques, such as coppicing and pollarding to cut back holly, beech, ash and oak.
- Removing non-native, invasive species such as rhododendron and sycamore.
- Felling large areas of conifers growing in the floodplain.
- Re-aligning fences to restore grazing of river corridors by Commoners' livestock*.
- Infilling drains with heather bales and bank spoil to reduce river erosion and raise water levels.
- Recreating the old meandering river form by using clay plugs to block off straightened channels, and raising river bed levels.
- Building debris dams to reduce flow rates and encourage seasonal flooding.
- Setting up a project website, newsletters, signage/information boards and regular events to tell the project story.

* Commoners are those people that own land in and around the forest and have a right to graze animals on forest land.

achievements

- The project restored internationally important habitat including 18 ha of bog woodland, 184 ha of valley mires, 141 ha of wet grasslands and 10 km of river.
- It safeguarded remnants of some of Europe's most valued wetland habitats through partnership working, pooling environmental specialists and local knowledge from a wide-range of disciplines to devise and implement innovative solutions for long-term ecological issues.
- The experience, skills and knowledge gained contribute to the long-term management of the New Forest, and have enabled a shared vision for sustainable management of New Forest rivers and wetlands amongst diverse organisations.

background

Natura 2000 is a Europe-wide network of sites designated by the EU as being of importance for nature conservation. The New Forest Natura site is one of the most important within the network, containing 75% of the valley mires in North West Europe. It has the largest area of lowland heath, and the greatest concentration of ancient trees in Western Europe. It is also the largest site in Western Europe where heathland, grassland, mire and pasture woodland survive together in a functioning ecosystem based on pastoralism (tending herds of large animals). This complex mosaic of wildlife habitats was formerly common in lowland Western Europe but is now rare and fragmented. Starting around 150 years ago, the New Forest rivers were straightened, deepened and widened in order to drain the adjacent wetland for tree planting. This provided better conditions for growing timber, but at a great cost to the environment. Faster flowing rivers increased the erosion of river bed material, reducing the river's ability to support biodiversity, lowering its connection with the floodplain, and in turn leading to the drying out of adjacent wetland features.

Both the survey methods and the practical habitat restoration techniques used on the project can be easily applied to similar projects. Many of the methods used in activities such as running the stakeholder group, carrying out public consultation and managing the project partnership, could be adopted by other initiatives.

quotes

"This is one of the first projects to address restoration at such an extensive scale. More than 50 Environment Agency staff have been involved in activities ranging from monitoring water levels and fish populations, to driving dumper trucks and excavators. Some have commented on how they have found this project really worthwhile – it has delivered work on the ground, which sees real results and environmental improvements. Consultees, partner organisations and experts have commended the work. One renowned practitioner describes the work as 'awesome'!"
Sir John Harman, Chairman Environment Agency.

partners

Environment Agency
Forestry Commission
Hampshire County Council
National Trust
Natural England
RSPB

funding

The European Commission LIFE-Nature 3 fund contributed 40% of the £2.9 m project cost. The remainder was provided by the joint project partners.

lessons learnt

The time required to conduct stakeholder consultations and win support for work to proceed was frequently under-estimated. Once achieved, partnership working proved very successful and the knowledge acquired through project delivery has already been applied to other Site of Special Scientific Interest (SSSI) habitats.

Contact: Kevin Penfold Tel: 02380 283141 kevin.penfold@forestry.gsi.gov.uk