

# WILDLIFE OF THE NEW FOREST NATIONAL PARK

Ecology and Management

seaulieu river

# Rockford bog

#### Life II Project

Taking place between 1997-2001 this was a partnership of 10 organisations including English Nature, Forestry Commission, Hampshire County Council, Hampshire and Isle Of Wight Wildlife Trust and the Verderers. Life II was a £5.25 million project, grant aided from the EU Life fund and resulted in the production of the New Forest Special Area of Conservation (SAC) management plan.

#### Life III Project

This followed on with an additional £2.7 million for practical habitat enhancement work including the conversion of dry areas back to wetland.

# Introduction

The New Forest is home to a wide range of special habitats, each contributing to the uniqueness of the National Park. This factsheet looks at the ecology of these habitats and how they are currently managed as well as considering the future management issues that exist.

### Freshwater management

The freshwater habitats of the New Forest include rivers, streams, ponds and valley mires. There are around 5,866km of water courses within the Park including the River Lymington, the longest river within the Park, running 25km from source to mouth covering a catchment area of 119km<sup>2</sup>. About 150 years ago, some New Forest rivers and streams were "canalised" by deepening, straightening and widening the course. This drained the Forest, providing better conditions for growing timber, but as a consequence it severely impacted on the natural habitats and wildlife along the river course. This resulted in faster flowing rivers which led to an increase in erosion and drying out of adjacent wetland features.





Holmsley Stream

As the New Forest supports a complex mosaic of wildlife habitats which are now rare in Western Europe and are often fragmented, this was of particular concern. These habitats include bog woodland which is of sufficient size and structure to be recognised as a European priority for conservation. As a result of these concerns the Environment Agency undertook a survey in 1996 which identified that some of the New Forest rivers had lost their 'self-mending' ability due to these past management systems.

The European funded Life projects were created to address this need for action.

# Heather cutting and baling

Cutting and bailing heather is more expensive than burning. The heather is cut and baled. Many bales have been used for conservation purposes in recent years, having been placed as dams to hold water in areas of valley mire restoration.



Heather bales

# Heathland management

The presence of large herbivores has been crucial in creating the New Forest heathland landscape that is so special. This heathland habitat is maintained by grazing and human management and the succession of plants is therefore limited. This results in what is termed a 'plagioclimax' community.

#### **Controlled Burning**

Heather is burnt to produce new young growth which is more nutritious. It also stops trees encroaching onto the open heath.

Some burning has probably gone on for many centuries but in 1870 a formal, controlled programme was introduced in the New Forest. Burning is carried out between the beginning of November



Red and dun belted Galloways grazing



and the end of March since a cooler fire results in better regeneration. Nature conservation can benefit from burning as it produces different areas of heather at different growth stages. However, some areas such as mature dry heaths are damaged by burning. It is also better for conservation if burning is done in small blocks and infrequently. The frequency of burning is identified by the Forestry Commission in discussion with the commoners and Verderers.

#### **Conservation implications**

Invasive species such as scrub and gorse would quickly shade out and replace the more highly valued heathland plants and animals which depend on open conditions if methods such as controlled burning were not used to maintain it. Several rare species like the Dartford warbler depend on the rotational burning of gorse to produce the dense vigorous growth they prefer for nesting cover. However, a mosaic with older gorse is thought to be important for providing insect prey.

# Potential tensions

Burning can produce tensions between those that carry out the burning and some conservationists. This is largely to do with the time of year that the burning is carried out. With global warming the seasons have started to shift and spring is commencing sooner than ever. This means that the end of the burning season coincides with the start of the bird nesting season and can also have an impact on reptiles such as the smooth snake which is a protected species. The New Forest National Park Authority supports careful use of controlled burning as part of a range of measures to manage and maintain the distinctive and diverse landscape of the National Park.

While areas that have been burnt can appear unsightly in the short-term, controlled burning is an important tool for maintaining the landscape that people know and love as 'the New Forest' in the long-term.

Heathland areas are subject to controlled burning only once in a generation - about every 25 years - and nature recovers surprisingly quickly. Burning revitalises many of the plants on the heaths, removing old growth and allowing a nutritious flush of new young growth for animals and wildlife to graze. It also provides thick cover for nesting and shelter.



Burning heather and gorse, Picket Post



## Woodland management

The woods of the New Forest have been affected by people since before medieval times. Firewood was collected and some trees were coppiced or pollarded to produce wood for raw materials or foodstuff for animals. Coppicing involves cutting the trunk of a broadleaved tree close to the ground and allowing new 'poles' to grow from the stump. After a number of years these can be cut and the whole process begins again. Coppicing was not very common within the Open Forest because it requires the exclusion of grazing animals. Outside the Open Forest where this was not such an issue, coppicing was more common. Inside the Perambulation trees were pollarded instead. This is a similar process except the first cut is made higher up the trunk of the tree, above the reach of animals.



Path through beech woods, Brockishill



Timber felling by Forestry Commission in Plantation woodland

#### Plantations

In the 19th Century, plantations often tended to be characterised by blocks of softwood trees that were the same age and often consisted of one or two species within regular blocks of planting. Great changes occurred to woodland management and this effected the ecology. Inclosures continued to exclude grazing animals and many areas of older trees were felled and replanted. Much of this replanting was with non-native conifers.

The more commercial management of the Inclosures means that there is less dead wood, and dense shading, so less species diversity. Some insect feeding birds such as the goldcrest and long-tailed tit are found in mixed plantations

and even pure conifer stands have conservation value. They support birds such as the crossbill and siskin and provide nesting sites for the carrion crow and birds of prey such as buzzard and hobby. The plantations are managed for timber but with regard to their conservation or landscape interest. The unenclosed pasture woods on the other hand are left largely unmanaged.



Long-tailed tit © MJ Matthews

#### **Restoration of ancient woodland**

During the 20th Century difficulties in meeting wartime demands for timber led to policies to convert existing semi-natural woods to forestry. Forestry policy now recognises the importance of ancient semi-natural woodlands for wildlife and landscape, and restoration of 'Plantation on Ancient Woodland Sites' (PAWS) is an important process. Nowadays, once conifers are harvested from areas of ancient woodland they are returned to broadleaved trees through natural regeneration. This is part of the procedures outlined in the Forestry Commission's Forest Design Plans.

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# Coastal management

Coastal habitats themselves rarely require interventionist management but it is important to manage human activities and engineering works to ensure they don't disrupt coastal processes. The New Forest District Council produces a shoreline management plan which identifies levels of protection for the coast. Decisions need to be made whether to defend property and land, look to manage coastal retreat or hold the existing line. Several important areas of the National Park coastline are managed by local authorities or the Hampshire and Isle of Wight Wildlife Trust to balance conservation with access. The key challenge facing the coast in the future is sea level rise induced by climate change. This will lead to a loss of habitats if they are prevented from moving inland – a process known as coastal squeeze.

# Grassland management

Grassland was traditionally grazed or cut for hay. There is a link between the ecological value of grassland and management for agricultural purposes: grasslands with the greatest diversity of plants, and highest conservation value, are normally those that have not been improved by drainage and the addition of fertilisers.

Grazing management assists the grasslands. This tradition has been threatened by changes to the rural economy and agriculture, primarily resulting in less grazing. Combined with this there has been an increase in pressures for grassland for other activities such as the creation of horse paddocks. Traditionally grasslands were used as back-up land for commoners' stock. Some of this land has been lost for development, particularly on the edge of the National Park.

# Future management issues

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In the past, nature conservation focused primarily on a hands-on approach in terms of management techniques. Nowadays, the current thinking is towards more 'landscape scale' management. This involves managing sites holistically, allowing dynamic change and minimising human interference. This is a much more extensive style of management. The National Park is ahead of the field in this respect as, by definition, it is concerned with wider scale, extensive management due to the scale and range of habitats that are designated. Some national parks are beginning to take this a step further and are examining the re-introduction of species to assist management. Whilst the New Forest National Park is not currently considering this, other national parks, such as the Cairngorms, are reviewing the feasibility of re-introducing species such as beavers.

Landford Common

Coastal defence at Hurst spit

# Further reading/ useful information

Other New Forest National Park Authority factsheets New Forest Centre Library *The New Forest:* Colin R. Tubbs, 2001 PAWS woodland: http://www.forestresearch.gov.uk/fr/infd-5z5gj8 info on Forest Design Plan: http://www.forestry.gov.uk/forestry/infd-6a4krt Life Projects: www.newforestlife.org.uk

www.newforestnpa.gov.uk Factsheet available on CD, in large-print, or Braille on request



