

# HABITATS

## The Habitats of the Crown Land in the New Forest

The New Forest is a mosaic of different habitats created through centuries of human management and livestock grazing. The publically owned Crown Land, that covers about 25,825 hectares of the New Forest National Park, is managed by the Forestry Commission and consists of Statutory Inclosures, primarily for the production of timber, and Open Forest which includes Ancient and Ornamental (A&O) woodland, heath, grassland and valley mires.

### Inclosures

The inclosures\* are the timber plantations of the Crown Land in the New Forest and those that survive today generally date from about 1700 to 1968 (though as far back as the New Forest Act of 1483 the first medieval inclosures were created, mainly to produce timber for shipbuilding) . They fall into two legal categories:

- Statutory Inclosures – made under the New Forest Acts of 1698, 1808 and 1851
- Verderers' Inclosures – made under the New Forest Act 1949

\*note that 'inclosure' is spelt with an 'i' not 'e' when used for forestry enclosures.

Together they cover one third (8500 hectares) of the New Forest.

Both broadleaf and conifer species are grown in the inclosures, with a huge range of age, from newly planted whips to mature 200 year old trees. At present, approximately 47% of trees are broadleaves and 53% are coniferous.

Woodland within inclosures tends to fall into patterns of groupings of certain species of tree, each grouping not necessarily sharply defined on the ground:

Stands of coniferous plantation: predominantly, but not exclusively, monocultures of either Douglas fir, Scots pine and Corsican pine

Broadleaf plantations: historically oak and beech, now mainly oak. Many of the mature stands of broadleaf plantation are over 200 years old and are often referred to as the Napoleonic plantations because they were planted to replace the timber used in the Napoleonic wars.

Mixed conifer and broadleaf: can be a broad range of species, many growing as natural regeneration where seeds have germinated naturally in the soil.

Pre-Inclosures woodlands (PIW's): some inclosures contain fragments of pre-inclosed woodland, valley mires and heathland habitats. These include old oak and beech pasture woodlands which have survived behind the fences since the 15<sup>th</sup> and 18<sup>th</sup> centuries. These woods are ecologically similar to the 'A & O' woods on the Open Forest but their age structure has been influenced by their inclosure which has left them ungrazed.

Plantations on ancient woodland sites (PAWS): some plantations have been established on land that was previously 'ancient' woodland. Ancient woodland is a piece of land that has been continuously wooded since, at least, medieval times. PAWS are considered to have the potential to be returned to semi-natural deciduous woodland because the important 'bank' of seeds and spores will still be present in the soil. There are many conservation projects now taking place to restore PAWS to semi-natural woodland once the plantation crop is harvested.

## Open Forest

Open forest habitats are those left uninclosed and are therefore open to being grazed by the domestic stock depastured under commoning rights. There are at least 5000 ponies turned out in this way, all through the year, together with about 5000 cattle and clusters of donkeys. Between the months of September and November about 300 to 400 pigs are turned out onto the forest, during what is called the 'pannage' season. Also, some commoners make use of their right of 'sheep' and depasture sheep onto small areas of the forest. For background to the history of commoning, the Verderers' Court and the commoning rights see:

[www.verderers.org.uk](http://www.verderers.org.uk)

The key Open forest habitats:

## Ancient and Ornamental Woodlands

The name 'Ancient and Ornamental' woodland derives from the New Forest Act 1877 and refers to uninclosed woods originating in the 18<sup>th</sup> century or, indeed, remnants of the ancient wild woods of the forest, consisting mainly of oak and beech with an under-wood of holly. A&O woods are semi-natural since they are the result of both natural processes and the influence of people through the centuries. These woods were the source of much of the firewood and building materials for local people. In many places trees were managed, since medieval times until the Victorian period, by pollarding, which allowed useful wood to grow above the browse line of grazing animals that were free to roam below. This created a habitat known as 'wood pasture' or 'pasture woodland'. In 1698, the Act of the Increase and Preservation of Timber in the New Forest outlawed the process of pollarding and then, although the product of existing pollards continued to be harvested, the practice completely died out after 1851, when the reduction of browsing pressure due to the effects of the Deer Removal Act, made it unnecessary. For more information about pollarding using Burnham Beeches as an example, please see:

[www.cityoflondon.gov.uk/things-to-do/green-spaces/burnham-beeches-and-stoke-common/Documents/Burham-beeches-pollard-fact-sheet.pdf](http://www.cityoflondon.gov.uk/things-to-do/green-spaces/burnham-beeches-and-stoke-common/Documents/Burham-beeches-pollard-fact-sheet.pdf)

A&O woodland in the New Forest is one of the richest locations in Britain for beetles, fungi and other groups which rely on deadwood, both standing and fallen. In an effort to maintain this biodiversity (species richness) of deadwood species, the Forestry Commission follows guidelines prescribed in the Management Plan of the Crown Lands.

## Dry Heaths

The name comes from the dominant plants: heathers, such as Ling and Bell Heather. Gorse is also abundant. Heathlands are typically found on poor soils, overlying sand or gravels. The sand and gravel drains rainwater freely, reducing the availability of water to plants. The fast draining rainwater also leaches out soluble minerals resulting in a poor, acidic soil. The acidity of the soil creates a lack of decomposers, like earthworms, and a build up of raw humus and leaf litter follows.

The maintenance of heathland has been largely under human influence historically, with activities such as grazing of domestic animals, deliberate fires and tree removal, and this has reduced colonisation by birch and pine. This process now continues under a management plan, with the grazing of commoning stock, controlled burning and machine cutting.

## Humid & Wet Heath and Valley Mires

The rapid drainage that is a feature of the dry heath leads to water collecting at the bottom of slopes. This creates a water-logging effect that reduces the amount of air in the soil. These conditions favour rushes and sedges. The soils of these wet or humid heaths are also acidic and this combination of a lack of soil oxygen and a very high acidity reduces decomposition, both due to lack of micro-organisms as well as there being few decomposers.

If there are small valleys between heaths, water accumulates, water-logging increases and stagnation reduces useful inorganic and organic minerals as well as producing complex and, occasionally, toxic ions. These conditions reduce decomposition even more than on the wet heath. If dead plant matter accumulates this may result in peat building up.

What tends to happen on these, so called, valley mires is that sphagnum mosses thrive on the surface, floating on the water or above the peat, and within this the flowering plants take root. Uneven moss growth produces hummocks that dry out as they increase in height and these become colonised by plants of the wet or dry heath communities.

Bog Myrtle, bog asphodel and cotton grass are very typical plants of the mires.

## **Acid grassland and Forest lawns**

Where grasses can grow on the forest, between heath and bog (where heathers and mosses dominate respectively), the soil is often relatively infertile and poorly draining. This leads to a general acidity and only allows for grass species that will tolerate these soils.

Better drained soils, nearer to streams, where seasonal flooding deposits nutrients, tend to produce more neutral grassland. This is better grazing for the commoning stock and is referred to as forest lawn. With time flowering plants that are resistant to grazing will be favoured and this leads to an interesting diversity of species.