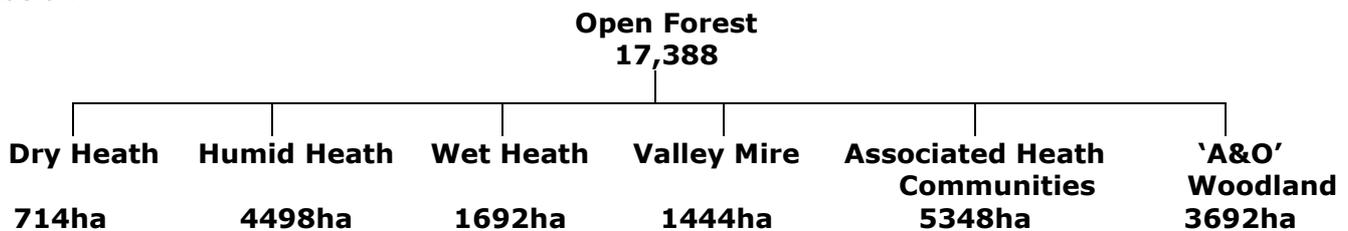


## Open Forest Management

The Open Forest, sometimes referred to as Uninclosed Forest, covers 17,388 ha of the New Forest. It is made up of a variety of habitats. The types and areas covered by each are shown below



The commoners' animals graze the Open Forest by ancient and registered rights of pasture and mast. The practice of commoning has given the Forest much of its traditional character and ponies are often called the 'architects' of the Forest. Grazing by commoners' animals, supplemented by an annual cut and burn programme are the principle tools of heathland management.

There are three main reasons for managing the Open Forest:

1. As part of the New Forest Act 1949, the Ministers Mandate, and the New Forest Special Area of Conservation Management Plan 2001 (commonly referred to as the SAC Management Plan)
2. Much of the vegetation actually benefits from cutting or burning by encouraging vigorous new growth and maintaining diversity
3. Cutting or burning areas of vegetation creates effective firebreaks to protect large areas of heathland, woodland and private property

Differing types of vegetation are treated as part of the annual Open Forest management programme, these include:

- Areas of old and degenerate gorse
- Humid and wet heath sites
- Valley mires
- Areas of accumulated bracken litter
- Pine and birch encroachment

Areas of dry heath are cut rather than burned, as they tend not to respond so well to controlled burning.

## Management Techniques

### Heather and Gorse Control

#### -Controlled Burning

Controlled burning is an effective management technique for vegetation control which provides a number of benefits for habitat maintenance and grazing. The Forestry Commission continues to give priority to an agreed programme of cutting and controlled burning to promote fresh growth of gorse, heather and purple moor grass (*molinia*), and to control the re-growth of Scots pine. Controlled burning is recognised as being a primary management tool for the maintenance of wet and humid heaths and valley mires within the New Forest SAC. The Forestry Commission burns on average, 350 ha on about 150 sites per season across the whole of the New Forest, which equates roughly to 3% of the heathland area per season. The burning rotation for heather stands ranges from 15 to 25 years, but 23 years seems to be the rule of thumb. The rotation for gorse is somewhat shorter at 12 to 15 years. These rotations do vary on a site to site basis, with the condition of the vegetation being a key factor. Legally the burning of lowland heathland extends from 1<sup>st</sup> November to the 31<sup>st</sup> March. This is in accordance with the agreed season as stipulated by DEFRA. Burning during the winter and early spring gives the best results as it has the least damaging effect on plants and animals. However, because of the weather conditions and the level of moisture within the vegetation, it is very often the case that the majority of the programme is only achieved during late February and March.

Before any burning takes place, the Team Leader has to carry out a full Risk Assessment for controlled burning and each team will be issued with a copy. The Team Leader also goes through a pre-burn checklist that is aimed to ensure the best practice is carried out on each site. This document is designed to make sure each of the burning teams have checked a variety of factors including:

- All site information, including a site map and grid reference, is at hand
- The site has been checked for sensitive species that could be harmed by the operation such as reptiles or nesting birds
- All warning signs have been erected properly
- The Fire and Rescue services have been notified of the intention to carry out a controlled burn

Once the checklist is complete, the team can commence with burning the site.

#### The Benefits of Controlled Burning

- Cost effectiveness – the management of comparatively large areas of ground for about £150/ha.
- Not normally governed by terrain – ie. slopes, ditches and banks which are difficult to treat using other conventional methods using machinery.
- Creates habitat diversity – burning heathland on rotation creates a mosaic of age structures that can accommodate different species at different times throughout its rotation. This has ongoing benefits for species such as Dartford warblers, nightjars, woodlarks, lizards, snakes and insects. Heathland plants such as heather and gorse retain their vigour if burned at the right stage in their growth cycle.
- Removes accumulated biomass – reduces the natural fuel load of wild fires and allows plant species to flourish from seed

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- Keeps nutrient levels low – key for heathland survival (these habitats thrive with low fertility soil).
- Food source for Commoner's animals – Ponies, cattle and donkeys readily gather on recently burnt sites to browse the re-growth in the early spring, a vital stage in their annual feeding cycle.

## -Cutting

Cutting is used both in conjunction with burning and as an alternative method of vegetation control. Cutting is carried out using mowing/swiping with a tractor mounted machine or hand cutting with chainsaws, brush cutters, bow saws and loppers. Cutting is primarily used for controlling pine & birch succession, gorse, willow and general scrub management.

## -Heather Baling

In recent years heather baling has taken place on selected sites of heathland to supply heather bales for large scale restoration projects, where bales are used as 'soft' engineering materials. Heather baling is likely to be focused on humid or dry heaths which are more sensitive to burning.

## Bracken Control

Bracken is a vigorous, dominant plant and in some areas creates a tall, dense unbroken canopy that can grow up to 6ft in height. This canopy collapses each autumn forming a thick litter mat (known locally as thatch) that rots down slowly. Over a period of several years, the accumulated mat smothers most other low growing plant species. Bracken encroaches onto the open areas of heathland and it is these areas that the Forestry Commission aim to control. The three methods described below control bracken with varying degrees of success.

## -Herbicide Treatments

This is usually carried out on areas of bracken growing over heather. A selective herbicide is used such as Azulam. This is a post emergence, translocated herbicide which is absorbed by the foliage and stored in the rhizoids (roots) of the plant. The growth of the bracken in the following season is seriously retarded or fails entirely. The effects of a single treatment may last up to 5 years. The current area treated each summer (July to August) is approximately 100 hectares across the forest. The cost of the operation is approximately £150/ha.

## -Forage Harvesting

In basic terms bracken forage harvesting involves the cutting and removal of all bracken foliage, including leaf litter, from a site with the cut material then being transported to a central point for storage. This is carried out on bracken growing over acid grassland and primarily upon flatter, easy access sites that are free of obstructions. The bracken is cut using a tractor mounted forage harvester. The cut material is blown into a hopper enabling it to be removed from the site, thus leaving the ground free of the accumulated litter mat. The current size of this annual programme is approximately 65 ha across the forest, commencing from late August to the end of October. On average, the Forestry Commission produces 2000m<sup>3</sup> of forage harvested material per year. The cost of the operation is approximately £200/ha. A site can be forage harvested for about 4-5 seasons after which the bracken becomes too sparse to justify the operation.

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Once forage harvested, the bracken is transported to a central storage site where it is heaped to enable a composting process to take place. For this operation to be effective, the heap has to reach a minimum temperature of 60°C. This can be aided by regular turning of the heap. The Forestry Commission usually turn the heaps 2 or 3 times over a year. The addition of water whilst turning the heap also aids the composting process. It is important to maintain this temperature throughout composting as this eradicates any traces of carcinogens that may be present in the bracken, especially in the spores.

Sales of composted bracken are doing very well, with the majority of the product going to nurseries and garden centres. There is also a good market supplying RHS Gardens at Kew and Wisley, and local authorities.

## -Summer Swiping

Summer swiping is probably the most straightforward and basic form of bracken control and uses a simple set up comprising a tractor and a tractor mounted swipe (rotary mower). If an area of bracken is mown for several years in succession during the plants active growing season, its vigour is reduced and the canopy begins to thin and reduce in height, allowing other plant species to flourish. As with forage harvesting, mowing tends to be carried out where bracken is growing over grass, more so on forest lawns and grazing strips around Inclosures. The current size of this annual programme is approximately 15ha with the treatment season lasting from July to early August. It is thought that when bracken is cut at this time of year its sap 'bleeds' from the plant causing a dramatic reduction in growth and weakening the plant in general. The cost of this annual operation is approximately £75/ha.

It must also be mentioned that bracken does have its benefits. It provides food and shelter for several species. One such example is wild Gladiolus, a plant unique in the UK to the New Forest. This plant grows amongst bracken on several sites across the forest and relies to an extent on the protection provided by the bracken. Therefore, these known sites are managed with due consideration.