

# History and management of heathland

Heathlands are open landscapes dominated by plants such as heather, gorse and grasses, typically with scattered trees like silver birch. Most heathland in England was created from the late Stone Age onwards through woodland clearance on naturally thin, acid soils, which allowed heathland plants suited to the poor soil conditions to expand. Heaths were kept open through human activity, primarily grazing, with some burning, timber harvesting, quarrying and turf, bracken and scrub cutting for fuel or animal bedding. On Cannock Chase, grazing continued until the First World War. Without management, heathlands return to scrub and woodland - with the loss of culturally rich and rare landscapes. Today, heathlands like Cannock Chase are popular visitor destinations for activities such as studying wildlife, horse riding and cycling on bridleways, or just for enjoying the peace and quiet and the fine views.

## Status of heathland

One fifth of the planet's lowland heathland is found in Britain, with Cannock Chase containing the largest surviving area of lowland heathland in Central England. However, more than 80% of Britain's historic heathlands have been lost in the past 200 years through agricultural change, conifer planting, development pressure and neglect .



Oldacre Valley in the early 1900s. Old photographs can reveal how much heathland habitats have changed in the last century.

## Nature Conservation designations

Cannock Chase is designated as a **Special Area of Conservation (SAC)** of European importance because:

- It is one of the best areas in the UK for its dry Heath and important areas of wet heath

Its designation in 1951 as a **Site of Special Scientific Interest (SSSI)** reflects its national importance for its:

- Important ancient landscape and size (it is the largest area of heathland in the Midlands)
- Wetlands with uncommon plants (e.g. greater tussock sedge and round-leaved sundew) and locally important populations of dragonflies, butterflies and moths
- Large concentrations of fallow deer, a nationally significant breeding population of nightjars, and rare and notable invertebrate and amphibian species

SSSIs are subject to regular monitoring by the government's statutory advisor, Natural England,

whose objective is for all SSSIs to be in **favourable condition**. For heathland, this means:

- Open heathland with 5-15% cover of trees and scrub, less than 10% bracken cover and 1-10% bare ground for invertebrates
- A good cover of heather (25-90%) and associated heathland plants of varied size and age
- Wet heaths should have healthy communities of bog mosses and natural hydrological conditions with clean water
- Taking precautions against fire, ameliorating atmospheric nitrogen impacts and limiting the spread of invasive native species (e.g. bramble and bracken) and alien non-native species (e.g. Himalayan Balsam and infections from imported fungi or moulds)

Although much of Cannock Chase is moving towards favourable condition, more is needed to fine tune the site and improve management. Low intensity grazing is a suitable means of managing dry heath.



## Why manage heathland?

Without regular management, most heathlands will rapidly be lost to encroaching vegetation like grass, bracken, trees and scrub, resulting in the loss of specialist and often rare heathland species and a cherished cultural landscape.

### The main issues

(1) Airborne nitrogen (N) arising from the burning of fossil fuels poses a great threat to heathland. Increased N causes plants like bramble, bracken and young trees to out-compete the special heathland plants. Higher N levels over Cannock Chase increase the need to control these species to maintain the open landscape and allow heathers, bilberry and other heathland plants to thrive, protecting the rare species that depend on them.

(2) The natural aging of heather results in a change from open ground with young plants to a closed community with shady, humid conditions under a canopy covered in flowers in late summer. In time, this becomes a more mixed structure of old, degenerate plants. Each stage supports its own characteristic associations of plants, mosses, lichens and invertebrates, birds and reptiles. It is important to manage the heathland to make sure that each of these stages is well represented.

**Management techniques** today aim to replicate traditional land management practices. Each has pros and cons and management need to balance the need to reach and maintain favourable condition with the needs of other interests.



#### Heather cutting

- Useful restoration measure
- Promotes age diversity in heather
- Removes nutrients if cut material is removed
- Best with subsequent maintenance through grazing
- Machinery uses fossil fuels & can cause soil compaction & damage archaeology
- Not possible on wet/uneven ground



#### Controlled burning

- Helps remove nutrients
- Breaks up even-aged stands/re-starts heather growth cycle
- Can affect watercourses through run-off & increased soil acidity
- Large burns may reduce diversity of old stands of heather & damage mosses and lichens
- Can encourage grasses & bracken if over-frequent
- Housing, roads & power-lines restrict potential burning areas



#### Bracken control

- Spraying and repeated cutting can be effective in controlling bracken
- Allows other heathland plants to recover, supporting more wildlife
- Repeated cutting poses a threat to nesting birds
- Concerns about herbicide use/availability of herbicides with low environmental impacts

#### Grazing

- Increases species-richness by limiting more vigorous plant species & creating structural diversity for other species
- Can help reduce the effects of nutrient inputs & suppress scrub and bracken
- Heather cover generally increases under light grazing
- Visitors often enjoy seeing grazing animals in a natural environment
- Some people can be nervous of livestock, especially if accompanied by dogs or on horseback.
- Heavy grazing can lead to the replacement of heather with grasses
- Today, grazing usually requires fencing

#### Tree & scrub removal

- Removing birch, pine and other scrub species helps to retain open vegetation and prevent succession to woodland
- Repeated need for scrub control and stump treatment to prevent re-growth

