

A Brief History and Management of Heathland

A summary of a presentation by Mark Webster 21/9/15

Summarised by Keith Redhead with reference to The History of the Countryside by Oliver Rackham



Heath is a term which has not changed in meaning since Anglo Saxon times. It means certain undershrub plants, heathers and gorse. Heathland it appears was actually created by civilization. Small clearings made by Mesolithic man lasted long enough for heath to develop. Heaths were formed on a much larger scale by Neolithic settlements especially during the Bronze Age. This is evidenced by the presence of Bronze Age Barrows on Heaths. However heathland needs to be managed or if neglected will return to woodland. Heathlands began 3,500 years ago in areas of poor soils and are rarer than rainforest. In the UK we have only 16% of the area of Heathland remaining compared to the 1800's. Heathlands are important ecologically because they contain different habitats and therefore unusual and distinctive flora. They are important archeologically because of earthworks, barrows and ditches.

Heathland is characterized by nutrient poor soil where few species of flora can survive. Heathland is similar to moor, both of which are dominated by heathers. Moorland however is not so unstable.

Moor or Upland Heath is characterized by upland areas, high rainfall and peaty soil.

Heathland is characterized by low rainfall and sandy soil.

Lowland Heathland

Lowland heathland is a broad term that refers to a mosaic of wet, damp and dry habitats, characterised by attractively flowering dwarf shrubs such as heathers (ling, bell and cross-leaved heaths) and gorses (common, western or dwarf). These plants are permanently low growing and cannot grow into trees. They also have a short life span of about 30 years and cannot survive under much shade. They are generally found on poor, acidic soils, in relatively wet areas with a mild temperature and below about 300 metres altitude. They support many rare plants and animals, such as the marsh gentian, southern damselfly, nightjar and sand lizard, which often live only in these areas.

Heathland has characteristic soil type or *podzol* (a Russian term). Typically it is an acid soil. Heathland plants especially Ling (*Calluna vulgaris*) alter the soil type. Percolating rainwater dissolves the organic acids out of the leaf mould and leaches the humus and iron compounds out of the topsoil leaving it light in colour. The substances become deposited in the lower strata where the soil particles become cemented together in pans.

The soil consists of the following strata: (see diagram page 3)

- Organic debris
- (Peat)
- Mineral sandy soil which is bleached to a characteristic whitish or pale grey colour.
- Humus pan – Hard black layer
- Iron Pan – hard concrete like layer rust coloured
- Subsoil

Podzols are characteristic of heaths and less peaty moors and will persist for millennia even if the vegetation changes.

Heathers

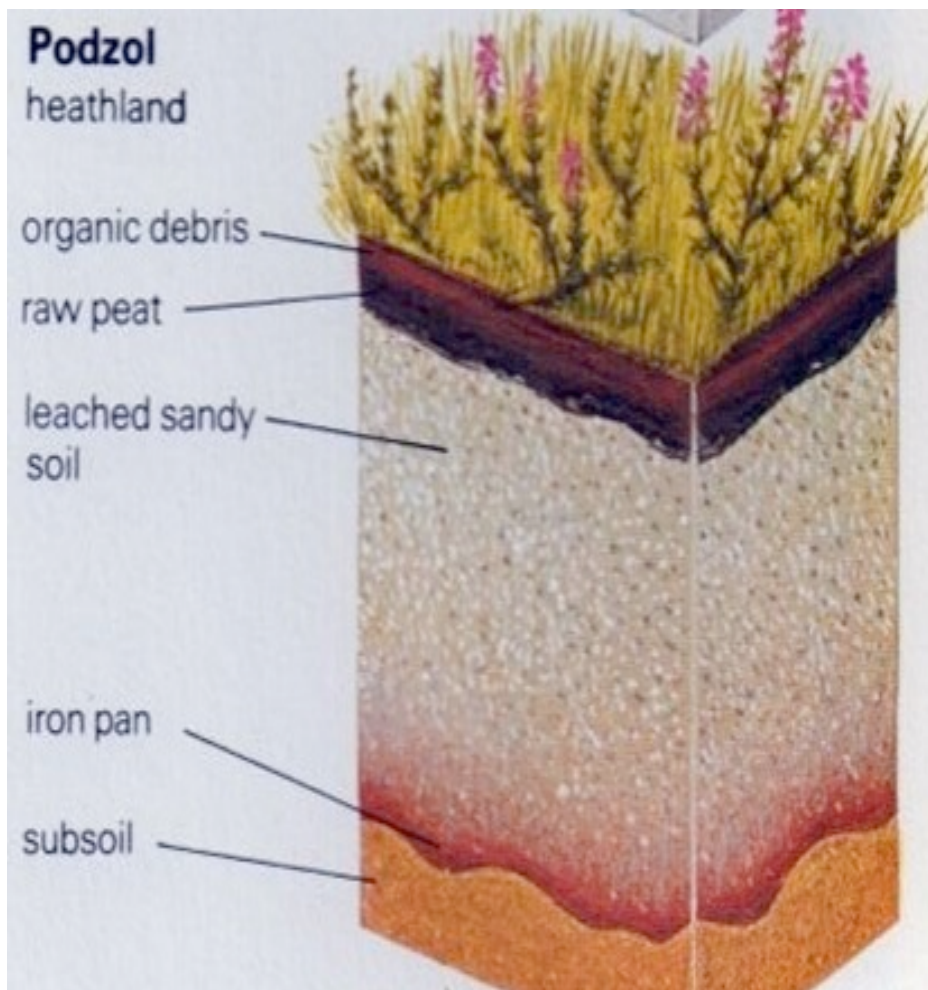
Consist of 3 main types:

- Ling (a Norse name) (*Calluna vulgaris*),
- Cross leaved Heath (*Erica tetralix*) (see below)





- Bell Heather (*Erica cinerea*) See right



Gorse (also known as furze)

2/3 species of Gorse in Norfolk. They are: Common or European Gorse (*Ulex europaea*), Western Gorse (*Ulex gallii*) and Dwarf Gorse (*Ulex minor*). Heathlands contain fauna such as Rabbits, Birds such as the Dartford Warbler, Nightjar and Stone Curlew and Reptiles such as Adder, Common Lizard, Smooth Snake and Slow worm.

Invertebrates of Heathland include:

- Silver Studded Blue
- Green Hairstreak Butterfly
- Black and Red Sandwasps
- Green Tiger Beetle
- Ladybird Spider
- Beewolf

Threats to Heathland

- Development
- Conifer Planting
- Change in agricultural Practice
- Neglect and Lack of Management

Solutions to Maintaining heath

Grazing: The use of the right animals and at the right time of the year is believed to be in most cases the best possible management to maintain the openness and diversity of the habitat.

Control of invasive species: some heathland species, such as bracken, gorse and scrub, were cut as fodder for the farm animals. Nowadays they do not have any economic value and they have increased in area beyond advisable conservation limits. Exotic species, such as rhododendron and gaultheria have escaped from gardens and spread aggressively on heathlands, shading and excluding the native species.

Maintaining low nutrient levels: the enrichment of the soils, through litter accumulation, fertilisation or atmospheric deposition of nutrients tilts the ecological balance towards less specialised vegetation which can out-compete the heathers.

Management of recreational pressure: heathlands and their wildlife are susceptible to damage by excessive trampling, motorbikes and horse-riding in sensitive areas, as well as by arson fires.

References

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