Nutbourne Common

Report by Sussex Wealden Greensand Heaths Project

Nutbourne Common is owned by Pulborough Parish Council. This report has been produced at their request by Rob Free of the Sussex Wealden Greensand Heaths Project following a site visit on 12th September 2006.

Description

The site covers 4 acres. It is not registered common or designated public open access land under the Countryside and Rights of Way Act 2000. Public access is therefore permissive. However, a Public Right of Way (footpath) crosses the site and an informal path runs through the site.

It is located approximately 500m to the north of Hurston Warren Site of Special Scientific Interest (SSSI) and 1.6 km north of Parham Park SSSI. Soils are light, acidic and sandy, similar to those found on the neighbouring SSSIs.

The site is bounded by an old boundary bank topped by occasional large standard oaks and remains of an outgrown holly hedge. Apart from a few old oaks, the site supports recent (c.30-40) year old secondary woodland growth with younger, more widely spaced trees (c.10-20) years in the centre of the site. This secondary woodland is quite dense and comprises English oak to the north-west with mainly silver birch to the south and east. The ground flora is poor in species and is comprised almost exclusively of bracken with some ground ivy. The centre of the site supports old common gorse bushes, an alder buckthorn and a dead dwarf gorse bush amongst bracken.

Evaluation

Current Ordnance Survey maps still show the site as supporting an open habitat of "bracken, heath or rough grassland". This, together with evidence from local users and the implied past use as a common, indicates that until very recently Nutbourne Common was much more open than it now is and that the woodland now present can be termed as recent secondary wood.

Lowland heathland and unimproved acid grassland are both UK Biodiversity Action Plan priority habitats. Conserving and restoring these habitats is considered of high priority in order to safeguard the many rare species associated with them, particularly a number of invertebrate species at the northernmost limits of their European range and birds including the nightjar. Britain has 20% of the world's remaining heathland, although what we have left is less than 20% of that which existed 200 years ago. This has been largely attributed to changes in farming practices, the abandonment of traditional commoning (such as firewood cutting, unfenced grazing and gathering bracken for livestock bedding), and the planting of conifers for timber. Heathland is found on outcroppings of acidic sands low in nutrients which favour heathers. Although any heathland restored on this site would be small it will be close to Hurston Warren SSSI and may therefore act as a 'stepping stone' assisting the

migration of heath species along the chain of sites following the Greensand outcropping between Washington Common in the east and Petersfield Heath to the west.

Secondary woodland tends to support fewer species compared to ancient woodland as many of the rarer woodland plants are relatively slow at colonising new habitat. However, oak trees, particularly those in open situations, do support a wide range of common species of invertebrates, lichens and birds. Both oak and birch will readily colonise open ground in the absence of grazing animals or active management. The leaf litter from oak in particular will enrich poor soils. For this reason, and the shade they create, oak trees will tend to eliminate heathland, turning the poor, podsolised heath soils into the richer brown earths found in established woodlands. Well established secondary woodland therefore tends to be harder to restore to heath compared to recently wooded ground. The seed from heather species can remain dormant in the soil for at least 60 years waiting an opportunity to germinate. This is normally regarded as an upper limit for the suitability of a site to be practicably returned to heath.

To improve the diversity of woodland it is desirable to thin congested trees, selecting healthy, compact trees for retention and thinning out diseased or top-heavy trees liable to wind-throw. The reduced competition for space allows the retained trees to develop properly and allows in more light for woodland ground flora to establish.

Bracken is an invasive species of woodland and open habitats and has low conservation value. It spreads mainly by underground rhizomes and tends to smother ground flora. Long established stands also deposit a thick mat of partly decomposed litter on the soil surface which suppresses the germination of dormant seeds present in the soil.

Gorse is a natural component of heathlands and provides shelter and nesting sites for heathland bird species and invertebrates. It is desirable to have some gorse on a site, although as a legume it fixes atmospheric nitrogen and therefore tends to improve soils which is overall undesirable for the continued existence of a heath. A balance therefore needs to be reached whereby gorse is not allowed to become too prevalent.

On areas used by the public it is a sensible precaution to carry out an annual inspection for safety. For countryside sites it is not expected that all dead wood is removed from trees near paths used by the public, although dangerous trees should be dealt with. Dead wood forms a valued habitat for certain insects and should be retained on site where possible. The removal of scrub and low tree limbs ('crown lifting') near paths can improve sight lines and make users feel more safe.

Management Recommendations

Restore area of open heath in the centre of the site by the felling of trees. Trees
should be felled in the winter when not being used by nesting birds. Cut material
may be burnt on site and larger logs stacked as 'habitat piles'. The stumps of
young deciduous trees should be treated with an appropriate herbicide such as
Roundup to prevent regrowth.

- Spray bracken with the selective herbicide Asulox in July/early August. This may require treatment over two consecutive years as the herbicide is normally only 70-95% effective.
- Rake off or scarify leaf litter on the open areas to encourage the germination of dormant heather seeds.
- Coppice old gorse to promote bushy young growth. A proportion of the very old gorse will fail to re-grow and die. As there are too many gorse bushes on site this will be beneficial overall.
- Selectively thin trees in the wooded margins of the site retaining specimen trees and old oaks.
- Inspect areas used by the public annually and remove dead tree limbs/trees considered to be an immanent hazard.
- Carry out tree pruning/scrub cutting near paths to improve sight lines.

Sussex Wealden Greensand Heaths Project

The Sussex Wealden Greensand Heaths Project was established by the South Downs Joint Committee in order to help conserve and restore heathland in the Sussex Downs Area of Outstanding Natural Beauty and the low Weald. The Project is able to offer management advice, grant towards restoring heathland and help with practical management through Project staff and a team of volunteer rangers. The Project will continue until late 2007 and will be happy to assist with restoring heathland on Nutbourne Common.



Tree clearance, Chapel Common SSSI



Bracken spraying, Black Down



Restored Heath, Iping Common SSSI