

Views About Management



A statement of English Nature's views about the management of Grace Dieu and High Sharpley Site of Special Scientific Interest (SSSI).

This statement represents English Nature's views about the management of the SSSI for nature conservation. This statement sets out, in principle, our views on how the site's special conservation interest can be conserved and enhanced. English Nature has a duty to notify the owners and occupiers of the SSSI of its views about the management of the land.

Not all of the management principles will be equally appropriate to all parts of the SSSI. Also, there may be other management activities, additional to our current views, which can be beneficial to the conservation and enhancement of the features of interest.

The management views set out below do not constitute consent for any operation. English Nature's written consent is still required before carrying out any operation likely to damage the features of special interest (see your SSSI notification papers for a list of these operations). English Nature welcomes consultation with owners, occupiers and users of the SSSI to ensure that the management of this site conserves and enhances the features of interest, and to ensure that all necessary prior consents are obtained.

Management Principles

Broadleaved semi-natural woodland

There are many different ways in which broadleaved woodland can be managed to conserve its value for wildlife. The following gives broad views on a range of regimes that may be appropriate on your site.

A diverse woodland structure, with open space, a dense understory, and a more mature overstory is important. A range of ages and species within and between stands is desirable. Some dead and decaying wood, such as fallen logs, can provide habitats for fungi and invertebrates. However, work may be needed to make safe dangerous trees in areas of high public access. Both temporary and permanent open spaces benefit groups of invertebrates such as butterflies. They may require cutting to keep them open, and should be of sufficient size to ensure that sunny conditions prevail for most of the day.

Felling, thinning or coppicing may be used to create or maintain variations in the structure of the wood, and non-native trees and shrubs can be removed at this time. To avoid disturbance to breeding birds the work is normally best done between the beginning of August and the end of February. Work should be avoided when the ground is soft, to prevent disturbing the soil and ground flora. Normally successive

felling, thinning or coppicing operations should be spread through the wood to promote diversity, but where there is open space adjacent plots should be worked to encourage the spread of species that are only weakly mobile. Natural regeneration from seed or stump regrowth is preferred to planting because it helps maintain the local patterns of species and the inherent genetic character of the site.

Deer management and protection from rabbits or livestock are often necessary. Whilst light or intermittent grazing may increase woodland diversity, heavy browsing can damage the ground flora and prevent successful regeneration. Invasive species, such as *Rhododendron* or Himalayan balsam, should be controlled.

Parts of a wood should be left unmanaged to benefit species that do best under low disturbance or in response to natural processes. Within these areas some trees will eventually die naturally and dead wood accumulate.

Lowland wet woodland

Wet woodland includes a range of different woodland types but usually is dominated by ash, alder and willow species. It often supports important invertebrate species and assemblages.

Areas usually benefit from minimum intervention and are often best left undisturbed to limit damage to their fragile soils. This allows the development of old stands where individual trees reach maturity and die naturally to create gaps in the canopy, leading to a diverse woodland structure. However, works to remove dangerous trees in areas of public access may be necessary.

Dry and wet lowland heath

On this site, a mosaic of both wet and dry heath communities occur. Heathland supports the greatest diversity of plants and animals (including a diverse invertebrate fauna and a number of characteristic bird species) where management maintains the open nature of the heath and by promoting a varied structure of uneven-aged stands of native heathers and other characteristic plants. It is generally beneficial if all stages of the heather life cycle are present. Without such management, heathland becomes progressively dominated by bracken, gorse and, on wet ground, purple moor grass tussocks. Eventually scrub and trees will invade. The precise management requirements will vary both between and within sites according to the needs of the different heathland interests present and site conditions.

Low intensity grazing is a suitable means of managing areas of dry heath. Generally areas of wet heath require limited management but light grazing may also be useful for maintaining the variation in vegetation composition and structure, and for controlling invasive grasses such as purple-moor grass. By feeding selectively in different areas and on different plants, free-roaming livestock help to maintain variation in the vegetation composition and structure. They can also suppress scrub encroachment and provide some light poaching to create small pockets of bare peat and sandy ground that are of benefit to a variety of specialised plants, invertebrates and reptiles. Sheep grazing is an acceptable method of management but cattle or hardy ponies may also be used, although care must be taken to avoid damage to the heather by trampling. An appropriate stocking rate should take into account local

conditions and the timing and length of grazing, but an off-take of between 30-40% of the current growth increment is desirable. Heavy grazing should be avoided on wet heath as it can lead to a decline in characteristic dwarf shrub cover in favour of grass and sedge species, as well as excessive poaching and erosion of the underlying peat.

Alternatively, cutting or mowing may be useful options for managing dry heath where a mosaic of patches of heather of different ages is desired. The cut material should be removed to avoid nutrient accumulation on site and to allow the cut plants to re-sprout successfully. However, mowing or cutting may not be suitable on wet heath or on mature stands of dry heath of importance for rare reptiles.

Prescribed burning can also be a useful tool for maintaining the structural diversity of some dry heathlands and for re-establishing areas of pioneer heath required by certain species, but special care is required when sensitive species are present and burning should not be used on wet heath vegetation. Burning must be used with caution, as inappropriate burning can be very damaging to both plant and animal communities and careful consideration should be given to the timing of the burn.

There is some benefit in retaining a few scattered individual trees and some small patches of scrub. For example, the maintenance of scattered mature Scots pine in undisturbed locations will provide suitable nest sites for hobbies. However, this should not encroach on the open nature of the habitat, and mechanical control or manual cutting followed by the careful application (spot application on areas of wet heath) of a suitable herbicide may be necessary to prevent this. Bracken invasions may need to be controlled in the same way.

Where gorse is present, scattered stands with a bushy structure rather than large continuous blocks are of greater benefit to the characteristic bird and invertebrate species associated with gorse scrub. Winter cutting of 'leggy' stands of gorse and the removal of cut material will maintain gorse at different stages of re-growth and avoid nutrient accumulation in the soil.

Although careful maintenance of existing ditches and drains is usually acceptable, the abandonment or deepening of ditches or drains should be avoided. Water levels within areas of wet heath should be maintained to avoid adverse changes to the characteristic plant composition of the habitat. In some instances it may be appropriate to restore natural drainage where this is possible.

Lowland acid grassland

Free-draining, acidic soil is the key requirement of the grassland communities at this site, but their maintenance also depends on active management. If neglected, the sward becomes dominated by tall, vigorous grasses or bracken which, together with an associated build up of dead plant matter, suppress less vigorous species and reduce the botanical richness of the site. Eventually the sward reverts to scrub and even woodland. Traditionally, management has consisted of stock grazing and this remains the most appropriate management tool. Grazing, through the removal of plant matter and nutrients, helps to maintain an open sward of small tussocky grasses. It also, through disturbance and trampling, creates areas of open ground suitable for colonization by the lichens, ephemeral plants and invertebrates that are often

characteristic of this type of grassland. However, rabbit grazing, though difficult to control, can also be a useful management tool in some situations. Occasional management of invasive scrub and bracken may be necessary.

Neutral pasture and marshy grassland

Neutral pasture and marshy grassland require active management if they are to retain their conservation interest. In order to maintain a species-rich sward, each year's growth of vegetation must be removed. Otherwise the sward becomes progressively dominated by tall and vigorous grasses (and rushes on the damper grasslands) which, together with an associated build up of dead plant matter, suppress less vigorous species and reduce the botanical diversity of the site. This management is achieved by grazing. Grazing usually takes place at times between late spring and early autumn, but the precise timing and intensity will depend on local conditions and requirements, such as the need to avoid trampling ground-nesting birds, but should aim to keep a relatively open sward without causing excessive poaching. Cattle are often the preferred stock on the wetter pastures, being relatively tolerant of wet conditions and able to control tall grasses and rank vegetation. Cattle also tend to produce a rather uneven, structurally diverse sward. However, ponies, or even hill sheep, can be used if necessary. Heavy poaching should be avoided but light trampling can be beneficial in breaking down leaf litter and providing areas for seed germination. An element of managed scrub, both within and fringing a field can be of importance to birds and invertebrates, as can a surrounding hedge.

For damper pastures, regular and careful maintenance of surface drainage including ditches and drains can be essential to prevent adverse changes in the plant species composition of the sward. Deepening of surface drainage should be avoided.

Lichens on Rocks

Lichens are highly sensitive to changes in environmental and substrate conditions. The key management principal is to ensure that substrate is not removed and that management ensures limited changes only to sunlight and humidity and avoids nutrient enrichment. Nutrient enrichment particularly is one of the most serious threats to lichens and can result from fertilizer drift from slurry or manure applications on adjoining land. However, natural eutrophication (eg bird perches) is not harmful and will result in particular lichen communities. In general the application of pesticides, herbicides and fertilizer is often damaging and best avoided. In many cases lichens may be subject to becoming overgrown and shaded or scratched by shrubs. Also, lichens on rocks are vulnerable to physical disturbance and measures to limit damage caused by recreation may be necessary in some areas.

Active Quarries (EA sites)

Active quarries form a very important part of the geological resource of England for two reasons. Firstly, many of these sites are in areas where natural geological exposures are rare or absent. Secondly, these sites often provide much better exposure of geological features than comparable natural exposures, because quarrying has revealed vertical rock sections not visible in natural outcrops.

There are two main management principles for active quarries. The first is to maintain exposure of the geological features during the working life of the quarry.

The second is to ensure that representative sections of exposure are retained once works have ceased. Exposure is usually maintained when the quarry is active as a natural consequence of the extraction process. However, positive management during the working life of the quarry may be required to ensure that important sections are not concealed by, for example, quarry waste or buildings.

In planning restoration and after-use of the quarry, it is important to consider geological conservation at an early stage. After-use should include the maintenance of exposures which are sufficiently extensive to demonstrate the important geological interest.

It is desirable for scientific researchers to have access to important geological exposures during the working life of the quarry, where health and safety considerations allow safe access. This is particularly important on sites where scientifically interesting fossil or mineral material is being extracted and which would be permanently lost if not examined and collected.

All habitats

The habitats within this site are highly sensitive to inorganic fertilisers and pesticides, applications of which should be avoided both within the site itself and in adjacent surrounding areas. Herbicides may be useful in targeting certain invasive species, but should be used with extreme care. Access to this site, and any recreational activities within, may also need to be managed.