

## Views About Management

### **A statement of English Nature's views about the management of Bourley and Long Valley 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

### **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. For example, Dartford warbler require areas of open heath (with less than 25 trees per hectare) with over 50% cover of mature heather (preferably over 30 cm tall) and patches of dense, compact, mature gorse bushes (0.5-3 m tall) to be maintained. 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.

### **Valley mire**

Fen often develops within valleys and the origins and movement of the water within the fen give rise to a number of different vegetation zones. The variety of plant and

animal life in the valley mire is closely linked to the number and type of zones it contains.

Management should aim to maintain the groundwater quality and quantity, though the quantity is not likely to be naturally constant throughout the seasons or between wet and dry years. The groundwater is often susceptible to contamination by agricultural fertilisers, or by pollution leaking from landfill sites.

Grazing is important in the management of the valley mire. Animals help to break up the tussocks of rank grasses such as purple moor grass, opening the sward up to a greater variety of plants. The precise timing and intensity of grazing will vary according to local conditions and requirements. Some (but not excessive) trampling is necessary to create open soil, for invertebrates, mosses and seedling establishment. Grazing also limits the spread of willow, alder and birch carr, which naturally tends to develop around the central watercourse and it should be restricted to this area, other than for a few isolated clumps elsewhere for the benefit of birds and invertebrates. Swamps are also important for invertebrates and birds and the inclusion of some swamp vegetation, such as reedbed, within the mosaic of habitats present will add to the conservation value of the site. However, excessive spread of reed, reed canary grass, or reed sweet grass is likely to be an indication of worsening water quality, the cause of which should be investigated and addressed to maintain the characteristic fen communities.

Stock feeding, or the location of grazing infrastructure, for example stock shelters, should take place downstream of the valley mire. This is to ensure the mire vegetation does not become enriched by nutrients from animal food or dung, or even from carcasses, causing unwanted changes in the composition of the characteristic mire vegetation in favour of tall, species-poor communities.

Drainage schemes should not intercept the sources of ground and surface water to the valley mire. It is important for the watercourses of the valley mire not to receive run-off from fertilised land or surface water from farmyards. The bed of the watercourse should not be lowered, nor should its water level be artificially raised, other than as part of a well thought-out conservation scheme. This will ensure the various vegetation components of the valley mire are maintained in their ideal proportions, and that 'head-ward' erosion is not triggered, in which increased flow gradually erodes the peat and silt on which the valley mire has developed.

### **Heathland birds**

To benefit breeding and roosting nightjar, open ground adjacent to a woodland edge or within woodland clearings should be maintained. The open areas should consist of predominantly low vegetation (grass, heather) 20-60 cm tall with frequent bare areas (greater than 2 m<sup>2</sup>) for nesting and roosting. The presence of scattered trees and open scrub not exceeding 50% cover overall will provide nesting habitat and song posts.

Dartford warbler require areas of open heath (less than 25 trees per hectare) with over 50% cover of mature heather (preferably over 30 cm tall) and patches of dense, compact, mature gorse bushes (0.5-3 m tall) to be maintained.

The maintenance of scattered mature Scots pine in undisturbed locations will provide suitable nest sites for hobbies.

### **Birds in coniferous forests**

Coniferous forests can be important habitats for many rare birds in England, including ground nesters, cavity nesters, song birds and birds of prey. Whether managed for silviculture or arboriculture, clear felling and restocking should be managed to benefit the birds as much as is economically feasible.

The most important measure is to maintain a diversity of age ranges within the forest, and a 10 year difference between adjoining coupes is a good generalisation. Stands of age class 0-6 years are ideal for woodlark and less than 5 years for nightjar. This will provide cleared areas for ground nesters, young forests for migrants and song birds, and mature forest for cavity nesters and birds of prey.

Cleared areas should be no less than 5ha, as this is the minimum size required for the ground nesters Woodlark and Nightjar. These rare birds have declined with the reduction and fragmentation of their native heathland habitats and are becoming increasingly reliant on cleared areas of coniferous forests. The ideal maximum sizes of cleared areas are 50ha in the uplands and 30ha in the lowlands. When clear felling, it is beneficial to leave some high stumps for cavity nesters, and these are also good foraging habitat for woodpeckers. Leaving behind some felled dead wood will also increase the invertebrate population, an important food source for many bird species.

Other areas of semi-natural habitat within the forest, such as heathlands, bogs and water bodies, should remain undisturbed. Disturbance should be kept to a minimum especially in clear felled areas which may support ground nesting birds.

### **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.