

## Views About Management



### **A statement of English Nature's views about the management of Allendale Moors 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

### **Blanket bogs**

Blanket bogs are a peatland habitat confined to cool, wet climates. Peat forms where certain plants decompose very slowly under waterlogged conditions. In ideal circumstances, the peat develops over large expanses of uplands, effectively 'blanketing' them. The wet, nutrient-poor growth conditions provided by peat means that the bogs and their associated pools support unique communities of specialised plants and animals. They can also be important habitats for breeding populations of wading birds. In addition the peat contains significant stores of carbon which must be protected.

Many of these habitats have traditionally been managed for livestock and/or for grouse shooting. Where this management has been intensive, damage may have occurred through overgrazing, burning and or drainage. However, the nutrient-poor and waterlogged conditions of blanket bogs often means that very little management is actually needed and such sites should require little intervention. On some sites light grazing may be beneficial. This can be used to control the development of invasive vegetation on the blanket bog, especially on those sites that may have suffered from drainage and previous intensive management. However, care needs to be taken in deciding the precise timing and intensity of grazing. As a general rule, the wetter a

site is, the greater the sensitivity to grazing. Light summer grazing by sheep is likely to be an acceptable regime. Heavy grazing must be avoided, as it may lead to an increase in the cover of grazing tolerant plants, such as purple moor-grass, and a consequent reduction in the extent of important moss and lichen species, and can also cause damage through trampling.

Burning blanket bog can also reduce its conservation value by reducing the diversity of plant and animal species present on the bog, and should not be introduced on high quality blanket bog. Sensitive areas, such as those that contain pools should not be burnt, as it can be very damaging to certain sensitive plant species and invertebrate populations. Burning can also damage the peat soils themselves and can prevent the formation of new peat. This can result in peat erosion and the loss of peat by wind or water. In areas where the risk of accidental fires is high, firebreaks can be cut, providing care is taken when using the necessary machinery to avoid damage to the underlying peat.

New drainage should not be introduced to blanket bogs and deepening of any existing drains or grips should not be undertaken. It will often be necessary to block existing drains to prevent further drying out of the bog and damage to peat soils. On sites that have been degraded, it may be necessary to undertake further restoration works.

### **Flush and spring fen**

Groundwater sometimes breaks out on the surface, either as gentle seepages, which give rise to flushes, or through greater flows that are evident as springs. The plants and animals that occur in and around these habitats are dependent on the water chemistry and flow rate. Mosses, liverworts, sedges and rushes are common and often predominate, whilst several species of orchid are also associated with these communities.

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

Grazing is often required to keep the vegetation short and open around springs and flushes. The precise timing and intensity of grazing will vary according to local conditions and requirements but should aim to keep a relatively open sward without causing excessive poaching. Feeding of stock should take place well away from the springs (and any other sensitive habitat), and the location of structures such as animal shelters should not encourage the animals to gather in the area. This is to ensure the springs and flushes do not become enriched by nutrients from animal food or dung, or even from carcasses. Light trampling by grazing animals can be of benefit in moderation by breaking down leaf litter and by creating areas of bare soil, needed by some invertebrates and mosses and for seedling establishment.

Drainage schemes should not intercept the source of groundwater to springs or flushes, or reduce the area of surface they irrigate.

### **Upland acid grassland**

Upland acid grasslands develop on nutrient-poor, acidic soils and are a natural component of the uplands. When found in a mosaic with other habitats, such as dwarf shrub heath and mire communities, acid grasslands can be an important addition to the diversity, structure and function of the upland landscape. More commonly they occur as extensive areas covering large areas of the uplands as a result of heavy grazing on dwarf shrubs, including heathers.

Where the objective of management is to retain acid grassland as part of the upland mosaic, active management is required. If neglected, the build up of dead plant material may suppress less vigorous species and reduce the species and structural diversity of the site. Traditionally, acid grasslands are managed by grazing. However, the precise timing and intensity of grazing will depend on local conditions and requirements, such as the need to avoid trampling ground-nesting birds. Especially, if part of a mosaic, the grazing impacts on adjoining habitats such as heath, bog, flushes and limestone grassland needs to be taken into account.

On other areas of upland acid grasslands the objective of management may be to restore the dwarf shrub vegetation characteristic of upland heath. Where this is the case, a reduction in grazing pressure is likely to be required. Indeed, it may be necessary to remove grazing altogether for an initial period and it will usually be appropriate to avoid winter grazing in the long-term. The ability of dwarf shrub heath to recover depends on a number of factors, particularly whether or not heather and other dwarf shrubs are still present in the grass sward, and at what frequency. If there is some heather present, then grazing should be removed from these areas first. The soil under grassy areas previously dominated by heather may contain a large and viable seedbank, so light disturbance of the ground surface may be a useful technique for restoring areas that have only been recently replaced by grassland. Different types of upland heath may require different management techniques to restore them, for example, to recreate wet heath, water levels may need to be raised.

Occasional management of invasive scrub and bracken may be necessary on some sites, although these habitats can also be of wildlife interest in their own right.

### **Dry upland heath**

Dry upland heath develops in nutrient-poor, acidic conditions and is dominated by dwarf shrubs, especially heather. Upland heaths can support a rich variety of plants and animals, including many rare and scarce species of plants, birds and invertebrates. The physical structure of the vegetation is one of the reasons for this; a good mixture of large, old dwarf shrubs along with patches of shorter vegetation will provide feeding, breeding and sheltering areas needed by birds, insects and other plant species.

Dry upland heaths have a long history of active management. Grazing can be a useful form of management, however the numbers and types of grazing animals present should be carefully considered. Too little grazing could, in the long term lead to the growth of trees and shrubs. Too much grazing (especially in the autumn and winter whilst plants are not actively growing) leads to loss of dwarf shrubs and domination by grasses and rushes. Increasing altitude and wetness reduces the ability of moorland

vegetation to cope with grazing pressure. Supplementary feeding can also damage the vegetation if managed inappropriately.

On sites where grazing has been heavy in the past, a period of no grazing, or very low grazing levels can be beneficial as it allows dwarf shrub plants that have been suppressed to recover in size and vigour.

Burning has both advantages and disadvantages which should be carefully weighed up on a site by site basis, in discussion with English Nature. Burning can be helpful in influencing how grazing animals distribute themselves across the site, for the provision of firebreaks (to control possible wildfires) and some species may benefit from the breaking up of large stands of even-aged heather. However, burning can also be damaging and reduce structural diversity. Some plant species are sensitive to burning and could be lost and excessive burning could result in insufficient cover of the mature heather needed by some nesting birds (e.g. Merlin). Burnt sites, especially with thin soils and steep slopes can be vulnerable to soil erosion. Burning can also encourage bracken or gorse invasion (which benefit from the nutrients released from the ash).

If burning is carried out, it should only be undertaken during the winter and should follow an appropriate burning rotation in order to create a mosaic of habitats with vegetation of different ages, composition and structure, which in turn supports a wide diversity of species. Areas with particularly sensitive species or habitats should be identified and avoided. Burning should not be carried out unless a suitable grazing regime is in place because heavy grazing of land that has recently been burnt (especially in winter) can prevent regeneration of the dwarf shrubs and lead to a rapid conversion of the site to grassland.

Cutting is a possible alternative to burning on dry heath. If cutting is used, care must be taken to remove the resultant litter, or germination of seedlings will be inhibited. Cutting can be usefully employed to create firebreaks. However, care must be taken when using the machinery required for cutting as this can be damaging to fragile peat soils, in particular those of wet heaths and the use of machinery should be avoided where possible on wetter areas.

### **Calaminarian or metallophyte grassland**

Calaminarian (metallophyte) grasslands occur mainly on thin, free-draining soils enriched with heavy metals (such as lead, zinc and copper). They are usually found overlying river gravels, alluvium, and artificial mine waste. These communities can range from short, closed swards to sparsely vegetated habitats. Many plant species typical of metallophyte grassland require open bare ground in order to persist. Management should aim to maintain the extent of the grassland, the diversity of metallophyte species present, and a short open sward structure. Generally, little routine management is required as vegetation change in such toxic environments is often very slow. However, sporadic light grazing may be beneficial on a few sites, particularly those with closed swards. Also, where dead plant material has accumulated over time this can mask the metal toxicity of the soil and allow more vigorous competitive species to establish. In such instances, consideration may need to be given to the use of rotovation. This will increase the area of bare ground and re-

establish the toxic conditions necessary to maintain the special character of the vegetation.

### **Limestone grassland**

Limestone grasslands occur on shallow soils over limestone rock and can support a rich variety of plants and animals, including a number of rare plant species. A distinctive feature is the high proportion, and variety, of flowers within the grassland sward. Management plays an important role in the survival of limestone grassland habitats and is important for maintaining the characteristic species-rich sward associated with these grasslands. Without management limestone grasslands may rapidly become dominated by ranker grasses, lowering the species diversity of the site, which may eventually become dominated by scrub .

Traditionally, management of limestone grassland is achieved by grazing. The precise timing and intensity of grazing will vary both between and within sites and may need to be judged on a year by year basis. Low stocking rates can help to create a diverse mosaic of tall and short vegetation, which can support a wide range of wildlife and is especially valuable to invertebrates. Some winter grazing can help prevent the build-up of vegetation and stop scrub invasion, whilst still allowing plants to flower and set seed. More intensive grazing during the summer months can encourage the spread of the more common and competitive grass species, which are able to survive and reproduce despite being repeatedly defoliated during the growing season. Heavy grazing should be avoided as it is more likely to result in a uniformly short and less diverse sward, which is likely to be of lower nature conservation importance. Supplementary feeding can also have a significant effect on vegetation and cause damage.

### **Upland bird assemblages**

The English uplands support a highly distinctive breeding bird community with many species of international importance. The diverse variety of upland habitats should be managed in order to safeguard their populations.

There is evidence that the densities of some species of ground nesting bird differ between grouse moors and similar areas not managed for grouse, suggesting that moorland management benefits some species whilst disadvantaging others. It is not clear whether these differences are due to habitat differences or management (rotational burning) or to the control of species like crow, fox and stoat.

Structural diversity of vegetation is important and thus sympathetic grazing and burning regimes are crucial. Areas of taller heather in places, such as on slopes or along watercourses, may provide suitable nest sites for Merlin, Hen Harrier, Short-eared Owl and Twite. Conversely, shorter vegetation (particularly on flatter, gently sloping land) provides nesting and feeding sites for birds such as Golden Plover and Curlew. Any burning above peat soils needs to be cool and quick, and should avoid damage to the moss layer and the peat surface.

Grouse moor management also involves intensive predator control and in some locations this may result in increased numbers of certain species of ground nesting birds. For species with precariously low numbers, such as black grouse, this work

may be undertaken alongside habitat improvements to maintain or build populations. Any disturbance to, or illegal persecution of birds of prey would clearly be damaging.

Improvements of enclosed land should be avoided. The re-instatement of tussocky, uneven swards through appropriate stock grazing will provide nest sites and feeding areas for Snipe, Redshank, Lapwing and Curlew.

Bracken control is desirable where seen to be invading habitats of importance. Some patches of bracken may be targeted for scrub or woodland regeneration. In places bracken can provide potential nest sites for birds like Twite, Ring Ouzel and Linnet.

On both open moorland and enclosed farmland, it is vital to maintain or enhance soil wetness and wetland features such as pools and flushes, and to retain and develop local cover of native scrub, scattered trees and woodland. The blocking of grips across peat and blanket bog will enhance soil wetness.

Upland riparian habitats can support important populations of Common Sandpiper, Grey Wagtail and Dipper, whilst Tufted Duck and Goosander also inhabit upland standing freshwaters. These habitats should have exceptionally high water quality, and appropriate levels and flow regimes. The natural channel of rivers should be retained or restored, as should the shore profile of standing waters. Surrounding swamps and fens should be retained or restored around standing waters, as should the native bank side vegetation of rivers.

#### **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.