

Views About Management

A statement of English Nature's views about the management of Stowell Meadow 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

Marshy grassland

Wet grassland requires active management if it is to retain its conservation interest. Generally, each year's growth of vegetation must be removed. Otherwise the sward becomes dominated by tall, vigorous grasses and rushes which, together with an associated build up of dead plant matter, suppress less vigorous species and lower the botanical richness of the sward. Traditionally, this management is achieved by grazing. Cattle are often the preferred stock, 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. 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. 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. Careful maintenance of existing ditches and drains is usually acceptable practice, but abandonment or deepening of ditches

can be harmful. Cultivation, increased drainage or the application of pesticides, including herbicides, or fertilizer is likely to be damaging and should be avoided.

Areas of wet woodland such as alder and willow carr around the fringes of the wet grassland usually benefit from minimum intervention and are best left undisturbed.

Flush and spring fen

Groundwater sometimes breaks out on the surface, either via gentle seepages, which give rise to flushes, or through greater flows that are evident as springs. Groundwater is rich in dissolved minerals, picked up during its passage through soils and rocks. The resulting water chemistry and degree of flow at the point where groundwater breaks out determine the type of plants and animals that occur in and around springs and flushes. The greatest contrast in the types of flush and spring fens that develop around groundwater seepages is between those arising from chalk or limestone rocks and those on quartzite or granite. Mosses, liverworts, sedges and rushes are common and often predominant plant species in flush and spring fens and several species of orchid are also associated with these communities. Flush and spring fen may also be a component of other types of fen, such as valley mire and basin mire.

The maintenance of the characteristic composition and diversity of flush and spring fens is dependent on a number of factors operating both at the surface and below ground. 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. The groundwater comes from aquifers, and these may become depleted due to abstraction or failure to recharge. They may be contaminated by agricultural chemicals such as fertilisers, or by pollution leaking from landfill sites. When this has occurred, the characteristic sward of short herbs and mosses will be replaced by rank grasses, reeds and nettles. Changes in flush and spring vegetation as a result of changes in the quality and quantity of the groundwater that feeds them are important indicators of the condition of the groundwater aquifer.

Grazing is often necessary 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 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 be designed not to intercept the source of groundwater to springs or flushes, or to reduce the area of surface they irrigate. Apart from a thin scattering of well-rotted farmyard manure, fertiliser, lime, pesticides and herbicides should only be used down slope of the flush or spring, and should be kept clear of any wetland fed by them.