

## Views About Management

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

### **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.

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.