

## Views About Management

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

### **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. Occasional dressings of lime may be acceptable on some neutral pastures.

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.

### **Floodplain fen**

Floodplain fens develop on flat areas that have historically been flooded by waters from rivers and streams that meander across these plains when the volume of the water draining through the catchment is high. Floodplain vegetation may also be dependent on seepage from subterranean aquifers or from seepage down or at the base of the constraining slopes. Consequently, there may be parts of any particular floodplain that should be thought of as spring or flush, and it may also contain basin fen, swamp, wet woodland and grazing marsh. Traditional methods of management have produced a species rich sward that supports a rich variety of flowering plants, invertebrates and birds.

Floodplain fen is commonly composed of tall grasses and herbs, such as reed, willow-herb, milk parsley, meadowsweet, angelica and nettles, and requires active management if it is to retain its conservation interest. If left unmanaged the sward becomes dominated by tall, vigorous grasses and rushes which, together with an associated build up of dead plant matter and the encroachment of scrub, suppress less vigorous species and lower the botanical richness of the sward. Grazing, sometimes with rotational cutting (and removal of cuttings) is usually required. 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.

There is often a broad interface between floodplain fen and types of swamp, such as reed-bed or saw sedge, in which the main swamp species is interspersed with a proportion of other swamp species.

Water quality is crucially important for floodplain fen and management should ensure the protection of appropriate water quality. Most floodplain fens depend on an adequate supply of nutrients being maintained. However, excessive nutrient enrichment may result in the replacement of the characteristic floodplain fen communities with very species-poor vegetation, composed of little but a tall dominant grass such as reed or reed sweet grass with nettles or soft rush. Management should also ensure that floodplain fens are not exposed to water-borne toxins such as herbicides, insecticides and hydrocarbons.

Winter flooding is an important factor in the management of floodplain habitats and, where this is the case, management should ensure the frequency and extent of flooding is appropriate for maintaining the nature conservation interest of the site. For example, watercourse engineering or abstraction has in many cases reduced the frequency and extent of flooding. Changes in agriculture and the use of floodplains

for built development have also often resulted in smaller floodplains and the requirements of floodplain habitats should be considered in the design of such schemes in the future. The balance between groundwater and floodwater influence on the floodplain should be identified and maintained when designing the extent and frequency of controlled flood events.

### **Swamp**

Swamp habitats develop on the fringes of open water, or in shallow depressions with permanent standing water. The plants may be rooted in the submerged soil or form a floating mat of inter-twined roots, rhizomes and stems. Swamps usually consist of a dominant single species of plant (e.g. reeds, tussock sedges, reedmace, reed sweet grass, reed canary grass and bull rushes) with a few other species thinly distributed among them. In common with most other types of wetland, swamps represent a transient stage in the change from open water to dry land.

Management should either seek to retain swamp communities in the same place or should acknowledge the dynamics of succession by ensuring there is always a new niche for the swamp communities to develop in. The succession from swamp into floodplain fen, for example, as the diversity of species present increases, may be slowed by managing the water levels and by periodically removing any encroaching scrub. If the vegetation surface of the whole wetland appears to be building up or drying out for some other reason it may be necessary to lower the ground level by creating scrapes or ponds. A programme of rotational cutting to maintain the reedbed may be necessary to encourage the vigorous growth of reed whilst preventing excessive build up of litter. Cutting should take place during the winter (November – March) and all cut material should be removed.

Management should ensure that appropriate water quality is maintained according to the requirements of the wetland communities present. Where swamp is in continuity with a waterbody, the water quality in the waterbody will affect the swamp. While some communities, such as reed swamp are unlikely to be very sensitive to nutritional enrichment, others, such as tussock sedge and narrow leaved reedmace, will be out-competed by other species (e.g. reed or reed sweet grass) where any increase in the amount of nutrients present occurs.

Swamp habitats have often survived where the vegetation has traditionally been cut for a variety of purposes, including use as building materials or animal bedding. It may be beneficial to consider re-instating these traditional management practices where they are not in conflict with other nature conservation objectives, such as the specific requirements of certain birds or invertebrates.

### **Ditches**

Ditches often support a wide range of aquatic plant and animal species. If ditches are left unmanaged, silt accumulates in the bottom and emergent plants such as reeds are able to colonise across the width of the ditch, leading to a loss of aquatic plant diversity and a gradual drying out of the ditch. To prevent this, periodic removal of sediment and vegetation may be necessary to return the ditch to an early stage of the management cycle. Ideally, ditch management should be undertaken on rotation, creating a series of different management stages across a site at any one time. The

removal of both sediment and vegetation is usually better than simply cutting the vegetation, which does not recreate the earliest stages of the ditch management cycle. Where possible, management should aim to create shallow shelving margins rather than steep ditch sides. Where water voles are known to be present, the relevant good practice guidelines for ditch management and conservation should be followed.

Most ditches are subject to water level control, which should be managed to ensure that there is a sufficient depth of water in ditches throughout the year. Rapid or extreme changes in water level should be avoided unless they are known to be important to plant or animal communities relying on such fluctuations.

Ditches are susceptible to increased levels of nutrients which can cause a loss of aquatic plants and increases in algal growth.

### **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 controlled.