

Views About Management

A statement of English Nature's views about the management of Preston Marshes 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

Marshy 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.

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 and reedmace,) 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 raising the water table 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 are artificial habitats created by land drainage, or occasionally by the channelisation of small streams. They may represent the only remaining freshwater habitat within former wetland areas, and often support a wide range of aquatic plant and animal (in particular invertebrate) species that would have previously been more widespread in ponds and wetlands.

If left unmanaged, silt accumulates in the bottom of the ditches, 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, periodical 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 a rotation, creating a series of different management stages across a site at any one time. All stages of the management cycle have wildlife interest; recently cleared ditches are good for plants and animals which favour newly created habitats

and cannot tolerate competition with other species; middle-stage ditches support a rich aquatic plant flora; and late-stage ditches may be important for a variety of invertebrates. 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 ditch systems are subject to water level control, which should be managed to ensure that there is a sufficient depth of water (0.3-0.5m) 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. Other activities that can lead to this include the control or removal of aquatic plants, or the introduction of species such as bottom feeding coarse fish which uproot plants and disturb ditch sediments. Ditches are also susceptible to invasion by non-native aquatic plants such as floating pennywort and water fern, which are able to grow rapidly taking up available habitat and smothering other plants. Some native plants including a number of duckweed species are also able to take over in this way (although such growths are usually exacerbated by increased nutrients in the water) and management may be necessary to control such invasions where they cause a problem.

Scrub

Scrub habitats are low-growing communities where the main woody components are bushes or small trees, such as hawthorn, rowan and juniper. Scrub supports a wide variety of species and ecological communities. In particular, the transitional zone between scrub and other habitats can be important for wildlife, especially invertebrates.

Often, scrub is a transitional stage that will develop into woodland if unmanaged. Maintaining structural diversity and a mosaic of age classes within areas of scrub is important for maintaining the diversity of species the scrub is able to support. For example, hawthorn scrub supports the greatest variety of bird and insect species in the early and middle stages of growth.

Scrub can be managed using rotational cutting, which should aim to maintain a mosaic of patches at different stages of growth. Scrub can also be cut in small patches to create an intimate mixture of scrub and grass and/or heath.

Grazing is another method for managing scrub and on some sites may be a more suitable management tool than cutting. By its nature, grazing can help to create a patchy mosaic of scrub and other upland habitats. As with cutting, it can also help to maintain a range of age classes. However, stock levels do need to be carefully controlled. If grazing pressure is too high the structure of the scrub vegetation may become impoverished. Also, the scrub may not be able to regenerate naturally,

leading to a loss of cover over time. Where the objective is to increase the area of scrub an initial period of fencing to control grazing may be required.

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.