

Views About Management



A statement of English Nature's views about the management of Stanford End Mill & River Loddon 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

Rivers and streams

Rivers and streams naturally provide a diversity of habitats for plants and animals, including invertebrates, fish, mammals and birds). Some of these habitats are directly connected with the physical form of the channel and its banks; others are created by the vegetation which the river's form supports. Despite their varied character however, there are some common management principles that apply to all rivers and streams.

The rivers natural structure and form should be maintained. This will support a natural flow regime that will help conserve the geomorphological features of interest. It will also ensure the provision of resting pools for fish, conserve the quality of the riverbed as fish spawning habitat, and avoid the creation of artificial barriers to the passage of migratory fish and other animals, such as otters. Natural barriers to the movement of fish (such as waterfalls) should be left alone. Where artificial modifications have occurred - such as weirs and impoundments, embankment, straightening and dredging - the restoration of natural channel profiles and dynamics is desirable where appropriate. Any new infrastructure, such as road and rail bridges should be carefully designed to avoid the constriction of the river or blockage of its floodplain.

Opportunities should be taken to create additional riparian areas where flooding is acceptable, in order to reconnect the river with its floodplain.

Management should maintain the natural flow regime of the river or stream, including natural erosion and sedimentation processes, in order to meet the requirements of the full range of flora and fauna it supports. Abstraction levels should be managed to protect the characteristic flow regime, including seasonal base flows and flushing flows. Compensation flows are generally not an acceptable alternative to reducing abstraction, and river transfers may also have an undesirable effect on river ecology.

Bank-side vegetation should be allowed to develop, allowing characteristic plants to flourish as well as benefiting those animals that spend part of their life-cycle out of the water. A mix of trees, bushes, tall and short fen and grass is desirable and can be encouraged by careful management. For example, grass swards are best managed by cutting once or twice a year or lightly grazing with stock at low densities. If it is not possible to reduce stocking densities on bank-side habitats, it may be necessary to consider fencing the bank-side habitat as an alternative measure to addressing artificially exacerbated bank-side erosion caused by excessive trampling by livestock. Associated habitats, such as oxbow lakes, areas of marshland, vernal pools and floodplain woodland, can all be very important for invertebrates and should be considered integral with the river system.

The characteristic aquatic plant communities associated with in-channel vegetation should be allowed to flourish, including fringing emergent vegetation and beds of submerged plants. Any cutting of vegetation should aim to leave at least 50% of the channel vegetated, comprising an active marginal fringe and a mosaic of submerged and floating beds that are allowed to flower and set seed.

Of particular importance for invertebrates are exposed riverine sediments, which include sand and shingle bars or spits as well as eroding banks and river cliffs. The nature of these features is such that they tend to shift and move over time and management should aim to ensure that a similar proportion of exposed sediment is maintained within any given stretch of the river. The invertebrate communities associated with exposed riverine sediments are sensitive to excessive shade, compaction by grazing livestock and mechanical activity and management should aim to keep most areas of exposed sediment free from these impacts. Where appropriate, any coarse woody debris within the river channel should be left in situ. As well as providing a valuable habitat for certain invertebrate species, it can also promote the deposition of river shingles behind the debris and can generally increase in-channel structures, which are of benefit for invertebrates.

Rivers and streams are susceptible to the introduction of invasive plant and animal species e.g. mink and signal crayfish. Surrounding Japanese knotweed and Himalayan balsam should also be controlled.

The maintenance of good water and sediment quality are essential to maintaining a healthy river system. Management should minimise pollution of the river from point and diffuse sources, including discharges of domestic and industrial effluent, and run-off from agriculture, forestry and urban land. Effluents entering the river directly or

indirectly should be treated to reduce the levels of phosphorus contained within them to concentrations that will not lead to a proliferation of algae or the disappearance of characteristic plants and animals. Organic pollution should also be controlled to avoid de-oxygenation of the water or any toxic effects on aquatic animals and plants. Siltation of the river bed can smother and infill coarse gravels, which can affect fish spawning success and the establishment of submerged plants, as well as having an impact on the invertebrates living in and on the riverbed. Riparian areas and the wider catchment need to be managed sensitively to avoid excessive run-off of soil particles and nutrients into the river. Ploughing should not be allowed to destabilise river banks and an unploughed strip of at least 2m should be left adjacent to the riverbank.

Neutral hay meadow

Neutral hay meadows 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 which, together with an associated build up of dead plant matter, suppress less vigorous species and reduce the botanical diversity of the site. This is traditionally achieved by closing the fields to stock in the autumn and cutting the resultant growth as hay. The cut is usually done in early July, but may vary depending on local factors, including past management and current weather conditions. It should always be after ground-nesting birds have fledged their young and any short-lived, characteristic plants have set seed. The aftermath is then grazed in late summer/autumn. Aftermath grazing is important for maintaining a species-rich sward, both through controlling competitive grasses and through hoof-prints providing suitable sites for seedlings to establish. Heavy poaching must be avoided, however. Periodic dressings of well-rotted farmyard manure may be acceptable if the sward does not receive regular input of nutrients from flooding. Occasional dressings of lime may be acceptable.

For the damper meadows, regular and careful maintenance of surface drainage including ditches and drains can be necessary to prevent adverse changes in the plant species composition of the sward. Deepening of surface drainage should be avoided.

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.