Views About Management

ENGLISH NATURE

A statement of English Nature's views about the management of Kilby – Foxton Canal 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

Canals

Despite their artificial origin and uniform structure, canals may have significant wildlife value as they are often fed by good quality water supplies. Additionally, they may represent the only freshwater habitat in many urban areas. Most canals support aquatic plants and animals similar to those found in natural lakes or ponds, but others may have species more typical of rivers. Often the marginal habitat and canal towpaths will also have some wildlife value and tunnels are frequently important for bats.

On navigable canals, boat traffic and associated canal management are likely to be the major influences on the wildlife present, and should be managed sympathetically to avoid conflict with the management of the canal for nature conservation. Low levels of boat traffic may be beneficial, preventing marginal plants from developing across the channel, but with greater levels of traffic it is increasingly likely that boats will cause excessive damage to aquatic plants as well as causing silt to remain suspended in the water column. Dredging is often undertaken to maintain sufficient channel depth for boat passage. If carefully managed this can be beneficial in creating suitable habitat and rooting substrate for plant growth, providing it is not undertaken too frequently or over excessive lengths. The uniform structure of many canals limits the

extent of shallow water habitat, and opportunities to create marginal shelves or adopt soft-bank construction may also be beneficial to the conservation interest of the canal. Where native crayfish are an interest feature, exposed gaps and crevices in masonry lining the canal may form an important habitat for the species, and any maintenance of the canal should aim to maintain these living spaces.

Management should aim to maintain water levels appropriate for the conservation interest of the canal. For example, lowering of water levels in the canal by excessive draw down within a given length of the canal could be damaging to aquatic communities, leaving a narrow strip of marginal vegetation exposed high above the water level.

Pollution or increased nutrients can lead to excessive algal growths and a loss of aquatic plants. Increases in the amount of sediment entering the canal should be avoided, as these can also result in high levels of nutrients and reduce the water depth of the canal, making it necessary for more frequent dredging.

The control or removal of the natural aquatic vegetation can lead to a decrease in the diversity of aquatic plants in favour of algae, as can the introduction of bottom feeding coarse fish which uproot plants and disturb the sediments. Indeed, canals are vulnerable to the introduction of many invasive species, such as non-native crayfish and Australian swamp stonecrop, and management may be necessary to prevent the spread of these species should they appear within the canal. Where native crayfish are present any measures which may limit the risks of transferring non-native crayfish or crayfish plague (such as information and awareness-raising initiatives amongst visitors to the waterbody) should be encouraged.

Artificial standing waterbodies

Artificial standing waterbodies include manmade lakes, reservoirs, gravel pits, subsidence pools, and flooded peat diggings. They may support wildlife equal to that of natural lakes, and can be important habitats for a range of specialised aquatic plant and animal species. Where they are large enough, these water bodies often support important populations of wintering wildfowl and breeding bird assemblages, as well as a varied invertebrate fauna (in particular dragonflies and damselflies).

Conservation value is largely determined by structural diversity and water quality. Increases in the amount of nutrients within the waterbody can lead to a loss of aquatic plants in favour of excessive growths of algae. This may result in a fundamental shift in the way a waterbody functions, reducing plant and invertebrate abundance and diversity, both of which are important food sources for a range of wetland birds. Increases in the amount of sediment entering a lake may smother stony beds and plants, reduce water depth in shallow lakes and also increase the amount of nutrients present. Some lakes may also be susceptible to acidification though control of this will require action at a catchment scale.

Sympathetic management of water levels is necessary for the maintenance of optimal water depths throughout the year (according to the requirements of the plant and animal species present). For example, the presence of extensive shallow water and wet marginal substrates will provide the feeding conditions required by a variety of

wintering, passage and breeding wildfowl, such as dabbling ducks and waders, whilst other species may require areas of water at least 3 metres in depth. Water level management should take into account the requirements of submerged aquatic plants that are restricted to areas where there is sufficient light for growth and minimal wave action. In shallow waterbodies (with an average water depth of less than 3 metres) plants may be able to grow throughout the waterbody, whilst in deeper waters plants will be restricted to the shallow margins. Changes in waterlevels can also alter nutrient regimes.

Management should aim to maintain the habitats associated with shallowly sloping margins that are not too exposed to wave action, as they are important for many species associated with standing open waters. For example, the maintenance of structural diversity within and between stands of aquatic vegetation (including emergent, floating and submerged vegetation) can provide important habitat for the immature stages of different dragonfly and damselfly species that require a wide variety of vegetation types.

Artificial waterbodies are susceptible to the introduction of invasive species, such as non-native crayfish, bottom feeding coarse fish, and plant species such as Australian swamp stonecrop, therefore some management may be necessary to control these. Where native crayfish are present any measures which may limit the risks of transferring non-native crayfish or crayfish plague (such as information and awareness-raising initiatives amongst visitors to the waterbody) should be encouraged. The control or removal of the natural aquatic vegetation can lead to a decrease in aquatic plants in favour of algae, and should therefore be avoided.

Standing waters and their surroundings are often also a popular environment for recreational activities such as angling and boating which should be managed sympathetically to avoid conflict with the management of the waterbody for nature conservation.

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 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.

Daubentons bat hibernation roost

Hibernating Daubentons bats require specific conditions to be maintained within the hibernation site. The internal conditions within the roost site should remain consistently cool (between 2-10°C) and dark away from the entrances with stable ventilation. Emergence points and flight lines should be free from artificial light and unobstructed, though vegetated cover around the entrance is desirable.

English Nature's advice should be sought before any changes are made to the entrance of the hibernation roost. Activities of any kind within the site should be largely avoided during the general period of September – April each year to minimise the risk of disturbance to bats during the sensitive period of hibernation. Building or engineering works taking place within or around the area should be avoided, as should the use of vehicles or machinery that would be likely to produce noise, fumes or heat near roosting sites or access points that may disturb hibernating bats.

The maintenance of some woodland and scrub cover in the vicinity of the hibernation site will provide sheltered and secured access to commuting routes as well as valuable feeding habitat for the bats. This will be important in the spring following hibernation when emerging bats will need to build fat reserves prior to the breeding season. Maintaining hedgerows, uncultivated field margins and extensively managed pasture near the roosting site will also provide appropriate commuting routes and foraging areas to support the bat population.

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.