

## Views About Management

### **A statement of English Nature's views about the management of Cotswold Water Park 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**

Artificial waterbodies include a range of manmade habitats, including lakes, gravel pits, reservoirs, subsidence pools, and flooded peat diggings, which, despite their origins may support wildlife equal to that of natural lakes and can be important habitats for a range of specialised aquatic plant and animal species. The rich variety of wetland habitats associated with artificial waterbodies include extensive shallow and deep open water, vegetated margins, reedbed, fen, damp grassland, surface pools, ditches, scrub and wet woodland, all of which can add considerably to the diversity of the habitats and species present. For example, they often support important populations of wintering wildfowl and breeding bird assemblages typical of lowland open waters and their margins, as well as a varied invertebrate fauna (in particular dragonflies and damselflies).

Sympathetic management of water levels within the main water body is necessary for the maintenance of optimal water depths throughout the year (according to the requirements of the plant and animal species present). 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.

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.

The protection of appropriate water quality is important for maintaining aquatic habitats and the range of species associated with them. Increases in the amount of nutrients within the waterbody (as a result of pollution from direct discharges and also from diffuse sources resulting from land management practices within the wider catchment) can lead to a loss of aquatic plants in favour of algae. Changes to the amount of water within the waterbody (by abstracting water from inflowing streams or raising the water level) can also alter nutrient regimes, as well as change the available area of some habitats. Increases in the amount of sediment entering a waterbody may smother stony beds, reduce water depth in shallow waterbodies and also increase the amount of nutrients present and should therefore be avoided. Other activities that can lead to a decrease in aquatic plants in favour of algae include the control or removal of the natural aquatic vegetation, or the intentional or accidental introduction of species such as bottom feeding coarse fish that uproot plants and disturb sediments on the bottom of the waterbody.

In common with other freshwater systems, artificial waterbodies are susceptible to the introduction of invasive species such as non-native crayfish or plant species, for example, Australian swamp stonecrop, and some management may be necessary to control these where they occur. 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. 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.

Other wetland habitats surrounding the open water may require some active management, for example cutting of scrub and carr may be necessary to prevent aquatic plants growing on the lake margins becoming overshadowed.