Pond Management Overview

How to use the management sections of this guide

The management guides in this series describe major pond management issues related to plants, shade, sediment, water depth and pollution.

The aim in these guides is not primarily to describe the *physical* means of managing ponds in these problem areas, but rather, to help you *decide what to do* in a way that will have the most positive effects.

Once appropriate management decisions have been made, then a range of practical options and techniques are usually available, and are outlined at the end of each guide.

Guiding principles for pond management

Much advice on managing ponds can be summed up in a few simple principles (summarised in Box 2).

A quick glance through this list will show that relatively little mention is made of physical management. This is because over the last 10 years there has been a profound shift in the way we look at pond wildlife. In particular:

- It has been realised that a range of different pond types and habitats have an important value which poor management can damage.
- More is now known about how degrading pollution can be and the difficult management problems it causes. As a result there is now greater emphasis on preventing pollution than on physically changing ponds.

Box 1. Myths about ponds

In the absence of information, many myths and misconceptions have arisen about how ponds function and how they should be managed. Each is discussed in more detail in the management guides.

- Ponds are artificial habitats which only exist because of human activity.
- Ponds must be managed to keep their wildlife value.
- Drying out is disastrous for pond wildlife.
- The process of pond succession ends in dry ground.
- Ponds should be at least 2 m deep.
- All pond zones, from deep open water to shallow margins, should be created and maintained in every pond.
- The bigger the pond, the better.
- Ponds should not be shaded by trees.
- Ponds must have 'oxygenating' plants.
- Ponds need to be dredged to prevent them from becoming choked with vegetation.
- New ponds need to be planted-up because natural colonisation is too slow.
- Pond water-level fluctuations should be minimised.
- Livestock should be prevented from having access to ponds.
- Ponds need an inflow to prevent them from becoming stagnant.
- Ponds are 'unstable' because of their small volume and area.
- Ponds are entirely self-contained systems, isolated 'islands' in a sea of dry land.

Left: a temporary pond which dries every year and supports the rare plant Small Fleabane
Right: a shallow pond in the New Forest which is one of the most important for wildlife in the UK

First steps in planning pond management

Pond management should always be preceded by some simple planning. This section summarises the main planning stages:

1. List the functions that you wish the pond to have (e.g. to benefit wildlife, provide a fishing amenity, give a good visual effect) – then put these in priority order.
2. List what are seen to be (i) the current assets of the pond, and (ii) the perceived problems.
3. Read the guides in this series relating to the problems to improve background knowledge.
4. Risk assess the pond (see the Assessment and Survey guide) to provide more context to your decision-making, and rethink the problems. Consider as broadly as possible the range of options to deal with them – include in this the potential for leaving the pond as it is, or digging a new one instead.
5. If physical changes are being considered and the pond has not been significantly modified or dredged for over 50 years, seek archaeological advice.
6. Check the law and legal requirements.
7. Identify a list of objectives and write up a simple 1-2 page management plan.
8. Start work - gently.
9. Monitor results closely for a year before continuing.
10. Be flexible: keep observing the pond and the effects of management, learn from your new information and re-set your management objectives.

What time of year?

There is no ideal time of year to manage a pond. Different animals and plants have different rhythms of breeding, growing and dispersing, so the least damaging time for one species can be the most damaging for another.

It is sometimes said that winter is the best time for pond management, but there appears to be no reason why this should be so. In fact it could be argued that the lower temperatures may make animals less active and less likely to move into safe areas if disturbed.

Certainly there have been cases where Great Crested Newt ponds have been managed in winter, devastating the population of newts which were hibernating underwater and in the banks.

In practice, this means that the 'best' time for pond work will usually be the period that is (a) of greatest benefit to the key or target species and (b) easiest to carry out.

In practical terms, tree work is usually done in winter (but note the proviso about Great Crested Newts). Work in the water is usually easiest when water levels are lowest i.e. in late summer and early autumn, before autumn rains begin in earnest.

Box 2. Pond management principles

1. Make the most of existing habitats. It is very easy to eliminate valuable habitats simply because they are not aesthetically pleasing or because their value is not appreciated. Poached muddy surrounds, shaded banks, bare sand, floating grasses and dense stands of emergent plants are all good examples of habitats which are undervalued. Some areas, like the drawdown zone, are mismanaged simply because their existence has not been adequately recognised.

2. Avoid making all ponds look the same. In any area (within a parish, a farm, or a nature reserve) retain examples of all stages of succession and a variety of maximum depths.

For example, avoid managing and maintaining *all* ponds at a mid-succession stage, the mythical conception of the 'ideal pond'. It is better to retain an *example* of a silty, shaded pond and a new or temporary pond rather than trying to cram all the habitats into every pond.

3. Risk-assess the pond (see the Assessment and Survey guide) and follow the guidelines for the need to collect survey information before management is undertaken.

Unless you have good survey data, or the ponds is low risk, don't suddenly change the management regime of a pond or *its surrounds* (e.g. by drastic deepening or tree clearance). The risk is that the existing value of the community will be damaged with little if any conservation gain.

4. The intensity of land-use surrounding a pond can have a vital effect on its conservation value. Protect ponds by creating or maintaining buffer zones of semi-natural land use around the pond wherever possible.

If there are protected species present in the pond (i.e. species listed on Schedules 5 or 8 of the Wildlife and Countryside Act), then the relevant statutory consents must be obtained to ensure that any work will not harm the species concerned. In such cases Natural England, Scottish Natural Heritage, the Countryside Council for Wales or the Northern Ireland Environment Agency should be contacted for a licence.