

Following our recent publicity regarding the poor state of the countryside wildlife ponds in the UK we have produced the following guide to help you get started in improving your pond:

Please note the answers listed here are summaries of more in-depth answers available on each relevant information sheet available on our website www.pondconservation.org.uk/advice/faq

For more comprehensive answers to the following questions please see our 'Falling water levels and leaks' information sheet www.pondconservation.org.uk/advice/faq

- In summer, water levels drop dramatically in my large pond – Is this bad for the wildlife? – Surveys show that, in natural ponds, a water level drop of at least 0.5m is typical in summer. These falling water levels create a “drawdown zone” - one of the most biologically rich areas of a pond, used by many plants and animals.
- Water levels in our village pond are lower than they used to be – I think it has a leak! – First think about whether the falling levels are really a problem – if there's now lots of shallow water this will improve the pond for wildlife! If you are still worried and would like to take further steps, note that pond hydrology can be complex - so it is best to get the specialist advice of a hydrologist to advise you on the causes and solutions.
- Help! My garden pond liner has a hole – Step one is to locate the leak by letting the water drop until it stabilises. The next steps depend on the type of liner you have – please see the information sheet for advice on each sort.
- I've got to drain-out my garden pond – how can I save the wildlife? – If you don't have to empty the pond completely leave about an inch of water in the bottom as most pond species (except fish) can survive in this. If you need to empty your pond completely empty the pond slowly allowing creatures that can fly away to do so, transfer small creatures and plants to a temporary mini-pond (use a plastic box/old kids paddling pool etc), move adult amphibians to a dark and damp area in your garden.

For more comprehensive answers to the following questions please see our 'Problem aquatic plants' information sheet www.pondconservation.org.uk/advice/faq

- What's the submerged water plant that's filling my pond? – There are around 90 species of submerged water plants in Britain but many are becoming uncommon so check what you have before taking action.
- My pond is choked by waterweed – should I get rid of it? – Take care: submerged plants provide a vital habitat in what would otherwise be barren open water. Removing small amounts of submerged plants should not cause a problem but removing extensive areas could turn your pond into 'pea soup' as algae or duckweed take over and create problems harder to deal with.
- Canadian pondweed fills our village pond each summer, what should we do? – Although this plant is an alien species and has thuggish tendencies it can survive in ponds with polluted water. This has the benefit of creating habitat, and soaking up unwanted nutrients, in areas that would otherwise be bare. It is difficult to remove this plant completely and sometimes a mistake to do so as i) your pond could switch to an algal 'pea soup' or become overgrown with duckweed, ii) removing these plants can make them grow back more strongly at the expense of other native plants and iii) a habitat of alien plants is better than no habitat at all. However, if you do want to remove Canadian

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pondweed and other unwelcome plants there are a number of possible methods ranging from mechanical to herbicides and dyes. See our website for more details.

- Should I leave the plants on the pond bank? – It is a nice idea but it is a bit of a myth that this is essential. Many animals can't move about easily once they are out of the water, so the best thing is to swirl the plants vigorously in the water before removal to release small creatures. And even then, unfortunately, most won't survive because when you take out the plants, you take away their habitat.
- What's the best time of year to remove plants? – There is no ideal time of year to undertake this sort of management but you can decide dependant on the type of wildlife in the pond you are trying to disturb the least. See our information sheet for further help.
- I am interested in getting some plants to put in/around our pond to encourage the wildlife, what would be best? – for more information on planting up ponds please see the PDF available on our website - <http://www.pondconservation.org.uk/advice/makeapond>

For more comprehensive answers to the following questions please see our 'Algae and Duckweed' information sheet www.pondconservation.org.uk/advice/faq

- Our garden pond is the colour of pea soup and the village pond is covered in duckweed – why does this happen and what can we do? – Problems with algae and duckweed in a pond mainly occur due to too many nutrients in the water, which is not an easy thing to correct. Although, both algae and duckweed are natural plants for ponds, too many can be unsightly for people and may reduce the pond's quality for other wildlife. New ponds with blooms of algae (pea soup) will settle down after a season or two and just require lots of patience! If the problem is more persistent, there are many treatments to help – though most only offer a short-term solution and need to be repeated. Regular physical removal of duckweed or filamentous algae is hard work but has the benefit that you remove nutrients from the water locked up in the plants – which can improve matters in the long term. Addition of barley straw (or its extract) can be an effective and safe treatment. Dyes or chemicals should be used with care because they will eradicate not only the problem plants but other plants (and sometimes animals) in the process – so read the instructions carefully before purchase. The best solution in the long term is to tackle the nutrient problem at its root – this may mean removing bottom sediments, minimising the amount of soil or fertilisers running off into the pond and using rainwater rather than tap water to fill up your pond. There is a lot more information about both problems and solutions on our information sheet.

For more comprehensive answers to the following questions please see our 'Silted up ponds' information sheet www.pondconservation.org.uk/advice/faq

- My pond's silted up and is drying out – is dredging a good idea? – For wildlife, there can be some very good reasons to dredge-out ponds, such as to create deeper water for uncommon or declining species, or to remove polluted sediments which are degrading water quality. However, dredging can also damage the existing wildlife in ponds so needs to be undertaken with care. Deepening ponds that have dried every year for many years (temporary ponds), and dredging ponds located in semi-natural landscapes (woodland, heathland etc) is particularly risky. You can risk assess your pond using the guidelines on our information sheet (Silted up ponds) and if you find that dredging is the best step forward see the various methods available on this sheet.

We are still developing answers for the following questions....

- We have had goldfish dumped in our village pond and would like to remove them, should we and if so how would be best?
- Can I protect our pond from being filled in by the local council?
- We have a dried up site of an historic pond on our land, how do we go about restoring it?

How good is my pond?

- Make sure before carrying out any survey/maintenance work that you have the landowner's permission to do so.
- You can do our simple pond dip survey to look at current wildlife, clarity of the water, plants etc – it may be better than you expect:
<http://www.pondconservation.org.uk/bigponddip>
- You can pay for a professional survey to be conducted. We recommend that you contact a local professional ecological consultancy company to do this work, or use someone from the contact list at the end of this sheet.
- Look for obvious sources of pollution – is the pond next to a road, urban development or agricultural land?

Does my pond need management?

- Consider pond management at a landscape level – Ideally make sure that all the different types of pond in the area are maintained, to maximise the chances of keeping the very wide range of species that ponds support across a region. So keep shallow, seasonal and deep ponds, new ponds and silty ponds full of vegetation, grazed ponds and wooded ponds.
- Risk assess your pond before deciding whether or how to manage it. Essentially:
 - If the pond is a murky black hole in an *arable* or *intensively urban area* with few, if any, plants then the chances of the pond having anything very special is quite low. With a pond like this, dredging to remove (what are probably) polluted sediments is likely to be no-bad-thing, bank re-profiling, & possibly tree removal, would often be helpful and - best of all – reducing future pollutant inputs by buffering the pond (with an unmanaged areas around it), or blocking polluted inflow drains, may help improve pond quality in the long term. Essentially “go for it”
 - If the pond is in an intensive land-use area or *semi-intensive area* (e.g. improved grassland) – *and the pond looks interesting* (e.g. has stands of wetland plants), then be cautious and precautionary with management – retain a good area of all the plant species or habitat types that are present in the pond.
 - And finally the most risky ponds are those which have a high probability of supporting endangered or rare species – even if the pond looks uninteresting to our eyes. These are ponds located in any *semi-natural habitat* (e.g. *old woodland, heathland, unimproved grassland*), *and ponds in or adjacent to long established wetland areas like river valleys, fens, grazing marsh*. In these high risk places we'd recommend getting professional survey information before any invasive management is done (e.g. clearing sediments or plants, changing the pond depth or modifying the banks) and also exploring other options, such as new pond creation, as an alternative to management.

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Can I obtain funding for Pond Management?

- Unfortunately Pond Conservation is a charity with limited resources and unfortunately we cannot currently offer funding for pond restoration or management schemes.
- We have listed other sources of funding on our website:
www.pondconservation.org.uk/advice/fundingforyourpondproject
- For *pond creation*, Pond Conservation may have funding available if you are planning to create a new complex of ponds (5+ water bodies) with a clean water source to help *BAP species* through our Million Ponds Project – see the website for further details:
www.pondconservation.org.uk/millionponds/funding

Information available:

- The Pond Book is Pond Conservation's guide to management and creation of countryside ponds and is available to purchase through our website for £17.00:
www.pondconservation.org.uk/advice/Buythepondbook
- Useful and extensive information on creating new ponds is available online to download through the Million Ponds Project. There are 8 fact sheets covering all aspects of creation from design and water source, through to planning, costing and management:
www.pondconservation.org.uk/millionponds/pondcreationtoolkit

Help us to do more

We hope you have found this information helpful.

Pond Conservation is the national charity which works to protect freshwater wildlife. 80% of ponds in England and Wales are in a poor or very poor condition.

With your help we can stop the decline by:

- Campaigning on behalf of ponds and their wildlife
 - Researching the problems facing freshwaters, and find solutions
 - Creating thousands of new, clean water ponds
 - Carrying out recovery projects for many threatened species
 - Helping everyone to enjoy the freshwater world and learn more about it.
- Please help to support our work by becoming one of our Founding Supporters.

www.pondconservation.org.uk/supportus/joinus

We offer a service to our members where we will test the water of your pond to see whether it is polluted or of a general bad quality. We can also use your postcode and the name of your water company to establish whether your tap water is suitable for filling your pond.

Pond Conservation survey contacts

Unfortunately Pond Conservation do not have the staff available to conduct pond surveys, however we do have a few contacts that could:

- Southern England: Robert Aquilina - robert.aquilina@btopenworld.com (amphibians, invertebrates, Dorset based)
- Oxon, Bucks, Berks: Rod d'Ayala - dayala@waitrose.com (amphibians)
- Herefordshire and surrounding counties: Will Watson - w.r.c.watson@btinternet.com
- Suffolk: Adrian Chalkley - adrian@boxvalley.co.uk