

# Just Add Water

How to build a wildlife pond



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Patron Ken Livingstone  
Patron Simon Barnes

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Just Add Water is a step-by-step guide to wildlife ponds in your garden. No matter what size pond you create, your efforts can help local frogs, newts and other wildlife flourish.

## Foreword:

By Simon Barnes, Froglife's Patron.



Sun plus water equals life. That is the equation that governs almost everything that lives on this planet. We who live in a damp country celebrate the return of the sun every spring:

those who live in dry places long for wet and celebrate with joy when the rains come.

We can't bring the sun to our gardens. That is beyond our control. But we can bring water: and when we bring water we add immeasurably to life's possibilities. Water can be drunk, water can be lived in, water can bring in, like a trick of magic, animals and plants that simply weren't there before.

A pond is a small miracle, one that brings life to a place and joy to those all around. A new pond is a soft explosion of life. So here's what you can do after you've read this publication. You can light the green fuse, step back – and wonder at the forces you have unleashed.

## Contents

page 4

**THE VALUE  
OF WILDLIFE  
PONDS**

page 6

**MAKING  
YOUR  
WILDLIFE  
POND**

page 16

**LOOKING  
AFTER YOUR  
WILDLIFE  
POND**

page 24

**ENHANCING  
YOUR  
WILDLIFE  
POND**

page 28

**ENJOYING  
YOUR  
WILDLIFE  
POND**



# THE VALUE OF WILDLIFE PONDS

**In the wider countryside ponds are disappearing.**

One third of ponds are thought to have disappeared in the last fifty years or so. This has had an enormous effect on wildlife, particularly amphibians. Frogs, toads and newts are dependent on ponds to breed. If ponds disappear, so do they...

But there is a solution. Creating a wildlife pond helps wildlife locally. Big or small, adding water to your garden or backyard is a really good way to do your bit for the neighbourhood's wildlife. In addition, ponds can be fantastic places to spend time, relax and de-stress.

Graeme Skinner/Naturally Wild



## Animals to spot:



Frogs and toads return to ponds in early spring to lay their eggs. (Photo: Dawn Leppard)



There are three species of newt in the UK. The most common is the Smooth Newt.



## Wildlife ponds for everyone!

Not sure if you have space for a wildlife pond? Think again. Any pond size is good for some form of wildlife: from a buried water-filled bucket, to a textbook wildlife pond (complete with pond-dipping platform and bird-hide). The point is, wildlife ponds can be for everyone, whether you have a backyard, allotment or garden.

Don't be put off by price either. Creating a pond can be as cheap or expensive as you want it to be. You can spend £5 or £500. Similarly you can spend two hours, two days or two weeks. Whatever you do, Just Add Water.



The distinctive yellow and black collar of the Grass Snake makes it easy to identify. Grass snakes are excellent swimmers, so encounters are often fleeting.



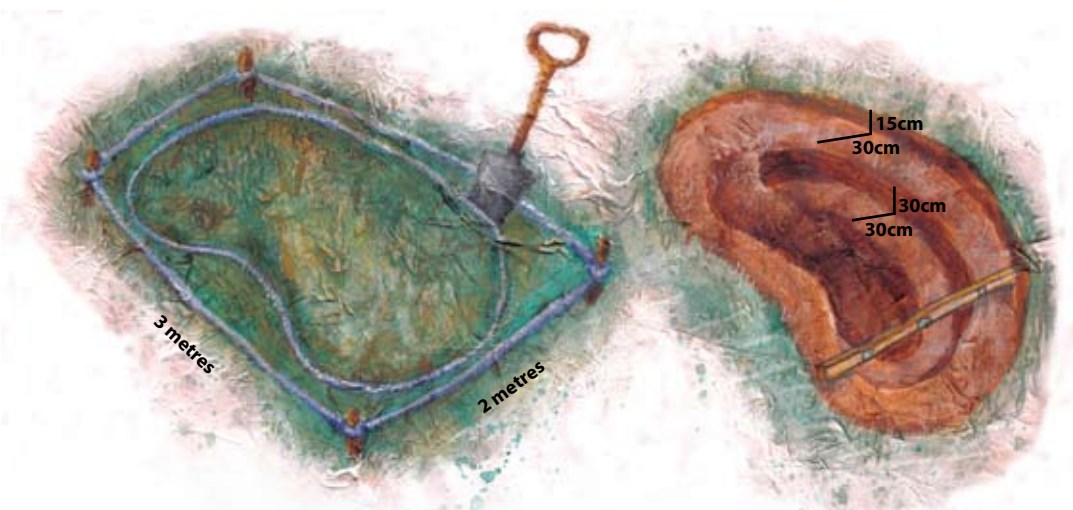
A healthy pond will quickly colonise with various invertebrates, including pond snails, dragonfly larvae and water boatmen.



The pond may be visited by hungry birds like kingfishers and herons, or thirsty mammals like foxes and hedgehogs.

# MAKING YOUR WILDLIFE POND

Any sized pond is beneficial to local wildlife, though amphibians will prefer ponds over 1-2 metres in diameter.



## Where to put your pond:

Your pond will need a lot of sun, especially in early spring. Frogs prefer warm and shallow water to lay spawn. A bit of shade is not a bad thing though as many animals will seek shade during the summer months. Be wary not to put ponds underneath big trees though: the falling leaves can clog up ponds in autumn.

## Shape:

Generally, it's a good idea to add some shape to your pond edges – don't go for straight sides, instead add some curves. This will help add to the number of microhabitats found in your pond, and this makes it more attractive to wildlife. Many people go for the kidney-shaped pond style (as above). Use a rope or hose to mark the pond edges before

you start digging.

Don't forget to add a sloping aspect to at least one end of the pond – this will ensure wildlife can get in and out.

## Depth:

A pond should ideally have a section at least 60cm deep to protect certain animals (like frogs) from weather extremes (particularly in winter).

## Shelved areas:

Shallow, shelved areas are good for basking invertebrates and tadpoles, and can be the most diverse and abundant area of a pond.

### Surplus soil:

The soil excavated from the pond area can be used to form an embankment near the pond. For more information see Enhancing Your Wildlife Pond, page 24.



### Levelling off your pond:

When digging, ensure the edges of your pond are level. Use a spirit level, a flat length of wood or stringed pegs to level your pond (see above).

### Before laying your liner!

Ensure you remove any sharp stones or pebbles. Add a layer of geotextile or some old carpet between the soil and the new liner to lessen the likelihood of punctures.

**Water-wise:** see page 10.

### Liner edges:

When tackling the edges of your pond, dig a small trench around the pond into which the liner can sit firmly. Use small rocks to hold the liner in place. You can replant some lawn cuttings from your earlier digging on top of the liner trench (see above). This will hide the liner edges.

pond visitors

Water fleas (daphnia)



# MAKING YOUR WILDLIFE POND





Liners come pre-formed or cut-to-fit. Cut-to-fit liners allow you the freedom to make your wildlife pond your own shape, size and depth.

### Pre-formed ponds:

Many garden centres sell pre-formed ponds, largely designed for housing ornamental fish. These need to be carefully dug beforehand, but can last a long time (many over twenty years). The downside is that there is no room for creativity, and many pre-formed liner designs are exclusively fish-friendly, lacking slopes for other wildlife to get in and out.

Some people choose to make raised up garden ponds with troughs or raised pre-formed liners. Remember that many forms of wildlife will find this much harder to get in and out of.

### Liner ponds:

The most popular and reliable liners are made from butyl. This is a flexible material and can be cut to fit, allowing you to be more creative with shape and size.

The disadvantage of using pond-liners is that they are prone to punctures, often from sharp stones, (plus the occasional claw or beak). Don't let this put you off though, just be sure to add an extra protective layer (see page 7).

### Liner types:

**Butyl:** Though not always the cheapest, butyl liners are flexible, strong and durable. Go for a thickness that gives a lifespan of over twenty years if possible.

**Pre-cast plastic and fibreglass:** Strong, but time-consuming to install. Often lack slopes for wildlife.

**Clay:** The most environmentally friendly option, but can be time-consuming and problematic. If installed correctly this is the most natural option.



Pond visitors



Damselfly larvae

# MAKING YOUR WILDLIFE POND

## Be wise about water

**Water worries:** Using tap-water to fill your pond is normally fine. The chlorine in the water will disappear over a couple of days and will do little lasting damage. Topping larger ponds up in this way during the warmer summer is also generally fine, though be aware that extreme changes of water temperature can 'shock' animals if added in large amounts at once. Running roof drainage into ponds helps to keep garden ponds topped up or consider a water butt nearby. Don't be overly concerned about some of the water evaporating from the pond in summer. In most years the pond will top itself up naturally in the winter months.

**Chemical concerns:** In some cases ponds may collect run-off during heavy rain. In most places this is not a problem, but be wary of nearby sources of pollution (e.g. garden fertilisers, crop run-off). Steer clear of pond tonics and algae-control chemicals.

**Filters and pumps:** These aerate and clean the water, which is more of a necessity for those with ornamental fish. For wildlife though, filters and pumps aren't necessarily useful: their 'vacuum' action can kill phytoplankton and zooplankton, which can affect animals further up the foodchain. Carefully chosen plants can be very effective in keeping your water looking clean, (see Pond Plants, page 12).

Sam Taylor

## Tub-ponds: ponds for anywhere

Ponds for wildlife don't necessarily need to be big. Smaller ones can still benefit amphibians as places to cool off in summer, plus many other animals can use them as a pit-stop.

Just remember that animals will need to get in (particularly frogs) and out of the pond (froglets!). Ensure at all times that there are sloping sides, using pebbles, log-piles and planted areas.

You could recycle household items when making your wildlife pond.

**Here are some suggestions:**

- Old bath
- Butler sink
- Half a wine barrel
- Sunken plastic paddling pool



pond visitors



**Water boatman**

(Photo: Dorling Kindersley)



# MAKING YOUR WILDLIFE POND

## Planning for plants

If you can't wait for your pond to colonise naturally, then get cuttings from trusted local ponds (with permission).

If you do choose to stock your pond 'artificially' then do so with care – avoid at all costs non-native plants, many of which could have a detrimental impact on local wildlife. The best practice is to keep it local and keep it native.

It can be tricky to locate suitable sources of native pond plants. Many garden centres and other retail outlets are unclear about the origin of their plants, and you may be buying hybrids or plants that have come considerable distance, very often from other countries. Do your research or consider buying native plants online (see [www.floralocale.org](http://www.floralocale.org)).

**Iris**  
*Iris spp.*



**Gipsywort**  
*Lycopus europaeus*



**Cuckoo flower**  
*Cardamine pratensis*



**Bogbean**  
*Menyanthes trifoliata*



**Watermint**  
*Mentha aquatica*



**Flowering-rush**  
*Butomus umbellatus*



**Rigid hornwort**  
*Ceratophyllum demersum*



**Common water starwort**  
*Callitriche stagnalis*





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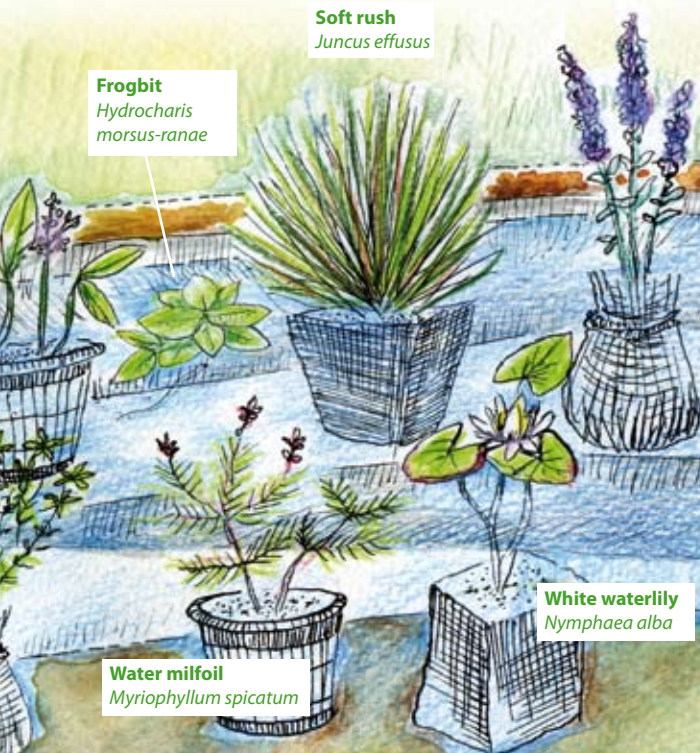
6

There are certain non-native pond plants that should be left well alone: (4) New Zealand water stonecrop or pygmyweed *Crasulla helmsii* (often sold as *Tillaea recurva*); (6) Water fern *Azolla filiculoides*; Nutall's pondweed *Elodea nutallii*; (3) Parrot's feather *Myriophyllum aquaticum*; Curly pondweed *Lagarosiphon major*; (1,2,5) Floating pennywort *Hydrocotyle ranunculoides*.

**Purple loosestrife**  
*Lythrum salicaria*

**Soft rush**  
*Juncus effusus*

**Frogbit**  
*Hydrocharis morsus-ranae*



**White waterlily**  
*Nymphaea alba*

**Water milfoil**  
*Myriophyllum spicatum*

## Common native water plants suitable for small garden ponds

### Deeper water:

Rigid hornwort  
*Ceratophyllum demersum*  
Water crowfoot  
*Ranunculus aquatilis*  
Water starwort  
*Callitriche stagnalis*  
Water milfoil  
*Myriophyllum spicatum*  
Curled pondweed  
*Potamogeton crispus*

### Floating-leaved plants:

Yellow waterlily *Nuphar lutea*  
White waterlily *Nymphaea alba*  
Frogbit *Hydrocharis morsus-ranae*  
Broad-leaved pondweed  
*Potamogeton natans*

### Shallows/ledge plants:

Lesser spearwort  
*Ranunculus flammula*  
Water forget-me-not  
*Myosotis scorpioides*  
Amphibious bistort  
*Persicaria amphibia*

### Marsh/edge plants:

Watermint *Mentha aquatica*  
Brooklime *Veronica beccabunga*  
Yellow flag *Iris pseudacorus*  
Rushes *Juncus* spp.  
Marsh marigold *Caltha palustris*  
Bogbean *Menyanthes trifoliata*  
Water plantain  
*Alisma plantago-aquatica*

Pond visitors



Ramshorn snail



# MAKING YOUR WILDLIFE POND

## Stop the Swap!

Froglife advise that you do not donate your frogspawn to other gardeners, or collect frogspawn to deposit in your own garden pond. The advice is given to help national efforts to stop the spread of invasive pond plants, animals and amphibian disease. In nearly all cases, amphibians will turn up of their own accord, often breeding in the first pond year.

## Good plants for amphibians:

Tadpoles will often be seen feeding on algae and decaying matter in the pond. On spring days you might see them congregate in shallower sunny areas of the pond, particularly if there is an algae-covered rock on which to graze. For tadpoles and adult frogs, it's a good idea to have an area of tightly arranged plants at one end of the pond at least, to provide cover from predators.



## How to plant up your pond:

Most aquatic compost bags have instructions on the back for planting up ponds. Many suggest using plastic containers. A more environmentally friendly option is to wrap soil and roots in hessian sacks instead (your local garden centre may have some spare). An additional bonus of doing this is that it stops plants from toppling over and spilling soil into the water.

When using aquatic soil, or garden soil, ensure that it has not been contaminated with pesticides or fertilisers. This can lead to algal blooms further down the line.

## Transferring animals:

Moving animals (or their spawn!) is generally to be avoided. Even if the pond you have in mind is a good quality, well-established pond there is still risk that you may accidentally introduce disease or undesirable animals or plant life (see Ponds and the Law, page 30).

It is best to allow animals to arrive at your pond naturally. Amphibians often find their way to a pond within a year or two and some can travel over a kilometre or so to get to new ponds. Likewise many invertebrates like dragonflies, water boatmen and pond snails have surprising abilities to colonise.

## Fish: what's the big deal?

The best wildlife ponds generally have no fish in them. This is because fish can quickly dominate a pond, eating much of the other pond life and limiting the variety of wildlife in your pond. Their excretions can clog up the pond too, meaning the pond requires cleaning out more regularly.

Written consent and health checks are required from the Environment Agency to move any wild fish (or fish spawn) to inland waters in England and Wales. This is to minimise the chances of spreading disease.

You can attract newts to ponds by growing pond plants on which they can lay their eggs. A wide range of plants with thin and easily folded leaves are used for egg-laying by newts. These include Water forget-me-not *Myosotis scorpioides*, Watermint *Mentha aquatica* and Marsh marigold *Caltha palustris*.

Pond visitors



**Pond skater**

(Photo: Dorling Kindersley)

# LOOKING AFTER YOUR WILDLIFE POND

Like the wider countryside, ponds change with the seasons. They can go from an icy murky pool in winter to a colourful wildlife metropolis in summer. As a result, pond management is a seasonal job.

## Spring:

For many people, spring is all about the arrival of **frogspawn**, but there is far more than this going on. Each day there's new wildlife arriving or new buds sprouting. Spring is a fantastic time of year to use a torch to see what's going on after dark. Throughout the months of spring you could see female newts serenely laying their eggs on the leaves of submerged plants.

As far as jobs go, spring can see blooms in two particularly **fast-growing pondweeds**: blanket weed and duckweed. If left unchecked, these can smother ponds and

limit growth of other plants. To tackle these problem plants nothing beats hard work. Carefully run a net along the surface to scoop up **duckweed**, and twist a cane or stick amongst the **blanket weed** to pull this out. Always leave removed pondweeds to sit next to the pond for a day or two. This will allow animals accidentally scooped up to fall back into the pond. Don't leave pondweeds there for too long though, otherwise their nutrients will fall back into the pond. After a couple of days, add the pondweed to your compost heap.



## Summer:

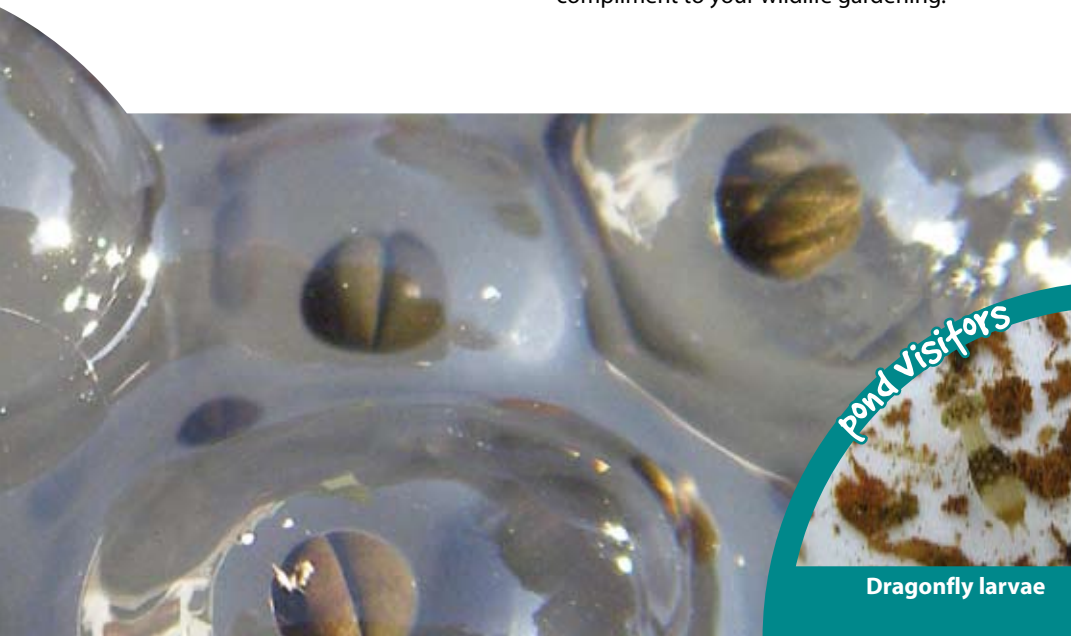
As **young frogs, toads and newts** make their first tentative steps onto land, summer ponds are full of all sorts of other emerging life. **Dragonfly and damselfly larvae** can be seen climbing out of ponds before turning into majestic flying adults. **Water boatmen** flourish and **pond snails** hatch out in droves to Hoover up the pond algae. Like spring, it's a great time of year for torching. Be wary of stone slabs near the pond at this time of year – in hot, sunny weather emerging amphibians can quickly dry out and die on hot paving slabs. You can stop this happening by covering these areas temporarily with a damp towel, or a moist lawn roll.

Problem plants can be a continuing issue in the summer months, and in many years some of the **pond plants** may need cutting back. Be mindful of causing too much havoc at this time of year – many invertebrates are particularly sensitive to disturbance.

When **cutting the lawn** or **strimming lawn edges** be especially careful of disturbing frogs, particularly young ones. **Long grass** is a favourite summer haunt and many injuries occur to amphibians by mowers and trimmers during this time. You can limit the damage by walking the garden length thoroughly before mowing. Most frogs will hop away once disturbed. Consider leaving parts of the lawn to grow wild and ensure mown areas are kept short throughout.

In some parts of the UK, you might come across lots of dead or dying frogs throughout the warmer months. If this is the case please contact Froglife and help our research on amphibian diseases ([www.froglife.org/disease](http://www.froglife.org/disease)).

Summer is also a likely time to see grass snakes make hunting forays into gardens, particularly in areas where there are lots of amphibians. Grass snakes are the ultimate compliment to your wildlife gardening.



pond visitors

Dragonfly larvae



# LOOKING AFTER YOUR WILDLIFE POND

## Autumn:

Ponds are quieter in autumn. Most animals have reproduced and moved on or died off. A few species have moved back into the pond ready to see out winter (like frogs). Plants have died back, leaving their seeds for the following year.

This is the best time of year to give the pond a **clear-out**, since the least number of species will be affected. Be wary of removing too much of the **silt** on the bottom of the pond – it contains **eggs, grubs** and other **insect larvae** (see page 20).

**Falling leaves** in large numbers could clog up ponds and cause a nutrient overload in autumn. This can lead to algal blooms in spring. Steer clear from using **pond-netting** though, sometimes the animals you're trying to attract (like **grass snakes** or hedgehogs) can become caught and die. The best solution is to try and get out there daily to take some of the leaves out with a net. Alternatively consider **cutting back nearby trees**.

## Winter:

Ponds are largely silent in winter, with little plant growth and almost no movement from the depths. **Common frogs** are the only larger animal that might be visible. Male frogs lie dormant on the bottom of the pond and on sunnier days you might see them occasionally stir.

The biggest threat to pond animals in winter comes from ice. **Prolonged freezing** stops gases from moving in and out of the pond, leaving the water susceptible to a build-up of toxic gases and chemicals released as animal and plant matter continues to decompose. This can seriously damage the pond ecosystem, affecting a number of animals (not least frogs, which can die of so-called '**winterkill**'). To avoid this, remember to **make holes in the ice** during frosty weather. You can do this by leaving a **pan of hot water** on the ice surface to melt a circular hole. Alternatively leave a **ball floating** in the water the previous day, and remove this once the pond has iced over. Never use salt, antifreeze or chemicals. Don't be tempted to use a hammer either. The shock-waves can kill wildlife and ice shards could puncture the liner.



Wendy Sabine



Ruth Carey



Tony Wharton

pond visitors

**Caddisfly larvae**  
(Photo: Dorling Kindersley)



# LOOKING AFTER YOUR WILDLIFE POND

## Pond nutrients and blooming problems

Nutrients are plant food. They exist in the soils, float freely in the water and they are released when dead plants, leaves and animals decompose.

Nearly everything that goes on in your wildlife pond relates to the nutrients in the water.

The presence of free nutrients in the water can lead to so-called 'algal blooms'. Being small and quick to reproduce, the algae (or phytoplankton) can replicate exponentially causing a murkiness or algal cloud (sometimes quite thick) to form in the water. Often what's lacking in these situations is an animal predator – a classic is the water flea (*Daphnia*), a species capable of reducing phytoplankton in a matter of days.

If your pond lacks water fleas then (with permission) consider asking a nearby pond owner for a small amount of silt and water, but be very careful not to transfer any plant fragments with it (see page 12).

Both duckweed and blanket weed are indicators that the pond has a lot of free nutrients in the water. To tackle this consider adding larger pond plants - their growth will use up some of the free nutrients in the water and hinder growth of problem plants. If this doesn't work it might be worth considering cleaning the pond out the following autumn.



## Pond restoration: get the wellies

Autumn is the time of year best suited to pond clearance, since many of the plants and animals are dying back and frogs are not yet returning to ponds to lie dormant through winter.

Next bucket out the water, or use a pump if you have one, until there is only a small layer of water on the bottom, along with the pond silt. Carefully remove the uppermost layer of silt and put this in a bucket. This layer is where most invertebrate eggs and larvae are lying dormant, so this will need to go back into the pond once re-filled.

Put all pond plants into buckets while doing the work. You might also come across amphibians (particularly frogs in late autumn). If so, carefully place them in a bucket (remember air-holes) with lots of damp vegetation and release them back into a covered area (e.g. under a bush, a log-pile) next to the pond as soon as the work is finished.

Refilling the pond with tap-water is generally fine, though sensitive animals (e.g. overwintering dragonfly larvae) may need to be kept out of the pond until the following day to allow time for the chlorine to dissipate.

If you regularly remove dead leaves and vegetation from your pond then you might only need to clean out your pond once every five or ten years. However, most ponds will need some clearance at least every three or so years.



(Photo: wellies/Emma Scott)

pond visitors



**Tadpole** (common frog)

# LOOKING AFTER YOUR WILDLIFE POND

There are dangers associated with water, particularly for smaller children, but these can be overcome.

## **The educational benefit**

to children from having a pond in their garden or backyard is enormous. Where else locally can they learn about the seasons, about life-cycles, about wildlife communities and adaptation? Where else can they see tadpoles grow legs, colourful dragonflies lay eggs or hedgehogs quietly having a drink? Real-life experiences of this kind cannot be matched by TV.

Sadly though, the educational value of wildlife ponds can be overshadowed by some fears surrounding child deaths in garden ponds.

In recent years, there have been a handful of cases of young children drowning in garden ponds. The resulting media coverage of these events can lead to many worried parents wanting to fill-in existing ponds.

Froglife believes that filling in ponds should always be a last resort, since the damage this can do to wildlife communities locally can be enormous.



## Playing Safe

**Wildlife ponds can be made safe if you have small children.** Here's how...

**Never leave young children unsupervised near any large container holding water.** This includes large plant pots, tub-ponds, paddling pools and garden ponds.

**Encourage children at every opportunity to respect water.** This will benefit many children as they grow and could have wider positive impact. Many more drownings occur in water bodies other than ponds.

**Put up a fence.** Make sure it is at least 1.1 m high. The fence can be made of strong wood, unclimbable grating or with vertical railings no more than 100mm apart. Don't forget to leave a small gap between the ground and fence to allow animals access. A childproof, lockable gate is another option. Some people find willow-fencing more aesthetically pleasing.

**Install a pond grille.** Install a rigid mesh or grille across the pond to create a secure pond cover. The grille needs to be able to support the weight of a child and should remain above the surface of the water at all times. Garden centres stock grates and newer products are easy to install.

**Gently sloping sides.** These are important for wildlife, and for people too should they fall in.

It's worth stating that these can be temporary measures while children are smaller. Once children are older you can remove these features, promoting the pond as a place for enjoying and learning about the natural world.

pond visitors



Smooth newt



# ENHANCING YOUR WILDLIFE POND

Animals favour ponds for different reasons. Adult amphibians use them to lay their eggs. Grass snakes use them to search for frogs and tadpoles. Birds use them to drink and bathe. The best wildlife ponds and gardens cater for all of these needs by providing a rich variety of terrestrial habitats around the pond.

## Here's some ideas to get you started:

**Damp areas:** Emerging amphibians are very susceptible to drying out (dessicating) in the sun. Avoid dry features (like slabs and cobbles) that heat up quickly.

**Bog gardens:** A bog garden is a marshy wet area that is invaluable for wildlife, and it's great for wetland plants too. Many amphibians use these areas to stay cool in summer and they are also attractive for a range of invertebrates.

Bog gardens are simple to make, just dig a hole to a depth of 30cm and lay a cheap butyl liner inside the hole. The removed soil can then be placed back on top of the liner. Pierce the liner with a garden fork to allow some drainage. You can choose to leave your bog garden bare and let plants colonise naturally, or alternatively you could consider planting some native marsh wildlife flowers.

Make sure your bog garden stays damp by adding rainwater from a water butt. You could even consider putting your bog garden near a gutter outflow.

**Grass piles:** After mowing your lawn consider making a compost heap. Secluded sunny spots are best and wildlife visitors might include hedgehogs (to hibernate) and grass snakes (to lay eggs).

**Toad homes:** Build a toad home for your back garden (visit [www.froglife.org/advice](http://www.froglife.org/advice)). All you need is some basic DIY skills. When the shelter is complete, just put inside a few leaves and twigs. With adult supervision, this can be an excellent exercise for children.

## Amphibian wintering

**sites:** For amphibians you could consider making a 'hibernaculum': an area where frogs, toads and newts can see out the winter. To do this lay down some old logs, brick-rubble or even hardcore, and cover this with excavated soil. Make sure your hibernaculum is in an area which is not in full sun, and that the soil drains well. Encourage moss and grass to grow on the top of stones and bricks by covering with a layer of soil or turf.



**Amphibian hibernacula recipe:** split logs, dead wood, rocks and bricks, loosely filled with topsoil (or turf/moss).

**Above:** for impermeable soils. **Below:** for free-draining soils.



## Plants to grow in a wet area:

Bugle *Ajuga reptans*  
Marsh marigold *Caltha palustris*  
Hard rush *Juncus inflexus*  
Lady's smock *Cardamine pratensis*  
Ragged robin *Lychnis flos-cuculi*  
Purple loosestrife *Lythrum salicaria*  
Marsh woundwort *Stachys palustris*

## Pond visitors



**Common frog**

(Photo: Darren Bealing)

# ENHANCING YOUR WILDLIFE POND

**1 Log piles & rockeries:** Leaving logs and rocks around the edge of the pond helps emerging invertebrates and amphibians find shelter, particularly in winter. In addition dead wood attracts invertebrates on which amphibians can feed whilst they hide. Log piles can ensure many amphibians will stay in your garden all year round.

**2 Lizard rockeries:** South-facing rockeries might attract nearby common lizards, and other reptiles into gardens. Use the soil excavated after digging your pond.

**Butterfly banks:** After creating your pond, consider using leftover soil to create an excellent wildflower bank for invertebrates like moths and butterflies. Sow the soil with native wildflower seeds. Like rockeries, south-facing sunny banks are best.





### 3 Grasses and wildflower areas:

Depending on the size of your garden, plant a wildflower, herb or hedge area or strip. This will create a more varied mosaic of wildlife habitats – butterflies and bees will particularly favour these areas.

### 4 Compost heaps:

Any type of compost heap can be beneficial to wildlife even if it is enclosed. This is because a compost heap attracts lots of invertebrates such as slugs and snails – an ideal meal for any hungry frog or hedgehog. A traditional

open compost heap will produce a large amount of heat as the vegetation is rotting down, which will be especially favourable to slow worms, particularly if you lay some old carpet over the top. Grass snakes visit some compost heaps in the late spring to lay their eggs.

Whether you add these features for the benefit of wildlife or to complement your garden design, you might be surprised how much pleasure you can get from wildlife watching.



pond visitors

Grass snake

# ENJOYING YOUR WILDLIFE POND





## Here are some ideas to help get you going:

**Sit and watch your pond,** up-close or from a window, even for five minutes a day, to keep up to date with the latest visitors. How long before you see your first frog in the pond? When do the tadpoles start to grow legs? Keep a wildlife notebook – it might one day be useful for helping others learn about the changing climate.

**Make a pond-hide:** bird-hides are a really effective way of seeing birds up close. Why not add one near your pond? This is particularly effective if there's a bird-feeder hanging nearby. Patience is the key thing!

**Frogwatch:** count all the frogs, toads and newts you see each year in your garden, and their goings-on. Submit your sightings at [www.froglife.org/yoursightings](http://www.froglife.org/yoursightings). Your information could have national significance for amphibians in the future.

**Pond-dipping:** you can buy nets or pond-dip packs from many online shops or you can make your own using wire, a bamboo cane and netting. Carefully collect water in a plastic kitchen container (white is best). Put the net into the water and sweep it slowly backwards and forwards. Gently empty the contents into the container full of water and see what you have caught. Make sure you carefully return the animals to the pond soon afterwards.

**Classify the creatures you find** using a wildlife book or a Field Studies Guide ([www.froglife.org/frogalogue](http://www.froglife.org/frogalogue)).

Classic pond invertebrates to look out for include water boatmen, pond skaters, dragonfly nymphs and caddisfly larvae.

**Get snap-happy:** develop your patience and reactions by trying wildlife photography, capturing your garden wildlife visitors on film. There are a number of competitions you can enter if you get a good shot.

**Keep a pond diary:** ponds change dramatically with the seasons, with new life turning up throughout. Consider keeping a diary of this transition. You could make a scrapbook (with photos) or even make your own blog, to inspire others about the magic of ponds.

pond visitors



Grey heron



# ENJOYING YOUR WILDLIFE POND

Many wildlife conservation efforts in the UK are held together by valuable legislation. For ponds, these are outlined below.

## Ponds, wildlife and the law:

**Moving plants and animals between ponds:** You should always get permission from any pond-owner should you intend to transfer species between ponds. Movement of some species, if protected or considered damaging to native wildlife, is illegal under The Wildlife & Countryside Act 1981. Transferring fish and some amphibians may also require a licence or consent. Seek advice at every opportunity from the Environment Agency, Natural England, the Countryside Council for Wales or Scottish Natural Heritage.

**Destroying ponds:** If you have a pond and are moving house, ask the new occupiers if they plan to remove the pond. If this is the case and you have concerns about this

process then ask someone with a pond whether they are willing to accept stock. If possible, movements should not be over one mile away. Animals should never be released onto a nature reserve or a public place without consent. Release of animals in an unauthorised place could make you liable for prosecution under the The Abandonment of Animals Act (1960).

**Non-native animals and plants:** The release of non-native animals into the wild in the UK is against the law. For pond species this includes Red-eared Terrapin and the North American Bullfrog. If you come across either of these species please contact Froglife or another relevant organisation.

Laws relating to release of non-native plants are more lax. However, we urge the public to be extra vigilant and discourage the purchasing or movement of non-native or hybrid plant species.



## Froglife [www.froglife.org](http://www.froglife.org)

Froglife is a UK wildlife charity committed to the conservation of amphibians and reptiles – working with people, enhancing lives together for a healthier planet.

Froglife works to protect, conserve and secure a future for amphibians and reptiles in the UK. We speak out for amphibians and reptiles, encouraging best-practice and pulling in new audiences to understand and appreciate the needs of our species. Our work addresses key threats to amphibian and reptile survival including: destruction and removal of habitats, non-native wildlife disease, invasive species and persecution.

## EnVironment Agency [www.environment-agency.gov.uk](http://www.environment-agency.gov.uk)

The Environment Agency looks after your environment to make it a better place – for you, and for future generations. Your environment is the air you breathe, the water you drink and the ground you walk on. Working with business, Government and society as a whole, we are making your environment cleaner and healthier.

We create around 50 ponds every year across England and Wales in the course of our flood risk management, conservation and fisheries work, and we are aiming to increase this total still further in the coming years, because the value of ponds to both wildlife and people is very special.

## Five ways to help amphibians:

- 1. Frogwatch!** Contributing your garden sightings of amphibians can help national research on how they are faring against threats like non-native amphibian disease and countryside pond loss. Report your sightings: [www.froglife.org/frogwatch.htm](http://www.froglife.org/frogwatch.htm)
- 2. Get Toad-patrolling:** Each spring thousands of toads migrate back to their ancestral breeding ponds. At many sites this will involve crossing busy roads. Froglife coordinate toad crossings at over 700 sites nationally, where volunteers help toads across roads while recording important information. Take action locally: [www.froglife.org/projects](http://www.froglife.org/projects)
- 3. Become a Froglife Friend:** Help Froglife give a voice to amphibians and reptiles by becoming a Froglife Friend. Your support helps us conserve the UK's amphibians and reptiles. For more information turn overleaf. [www.froglife.org/support](http://www.froglife.org/support)
- 4. Join an ARG:** Spread right across the UK is a network of volunteers who do a great deal locally for amphibian and reptile conservation. Visit Amphibian and Reptile Groups of the UK (ARG UK) to find your nearest group: [www.arguk.org](http://www.arguk.org)
- 5. Sign up to NARRS:** The National Amphibian and Reptile Recording Scheme (NARRS) is led by The Herpetological Conservation Trust (The HCT) – learn how to survey ponds locally and contribute to national efforts to find out the conservation status of all UK amphibian and reptile species. [www.narrs.org.uk](http://www.narrs.org.uk)

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[www.froglife.org/justaddwater](http://www.froglife.org/justaddwater)

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[www.froglife.org](http://www.froglife.org)



If you would like to become a Froglife Friend please fill in this form, detach and post it to: Froglife, 9 Swan Court, Cygnet Park, Hampton, Peterborough PE7 8GX

Name .....

Address .....

..... Postcode .....

Contact Tel. ....

Email .....

Level of Froglife Friendship: ☐ £15 ☐ £50 ☐ £500

I am a UK taxpayer. Froglife (registered charity no. 1093372) can benefit from Gift Aid on my donation.

Signed ..... Date .....

I would like to pay by: ☐ Cheque ☐ Card (see below)

Card No. (long number on front) .....

Start Date ..... Expiry Date .....

Issue No. (if present) ..... Security Code .....  
(last three digits on reverse)

Name on card .....

Address (if different from above) .....

## Get Frog-Friendly... become a Froglife Friend

Join Froglife today and help us give a voice to the UK's amphibians and reptiles – saving species, improving habitats and enhancing lives in the process.

For as little as £15 we give you regular newsletter updates, exclusive invites to Froglife events and special offers for Froglife merchandise.

### Three ways to join Froglife:

**Online:** [www.froglife.org/support](http://www.froglife.org/support)  
**Call us:** we take card payments by phone 01733 558844

**By post:** add your details to the left, including your cheque or card details, detach and post it back to us

**Give Froglife Friendship as a gift:**  
[www.froglife.org/froglife](http://www.froglife.org/froglife)