

Just add water.

A guide to creating wonderful wetlands
at home and in your community.



WETLANDS
CAN!

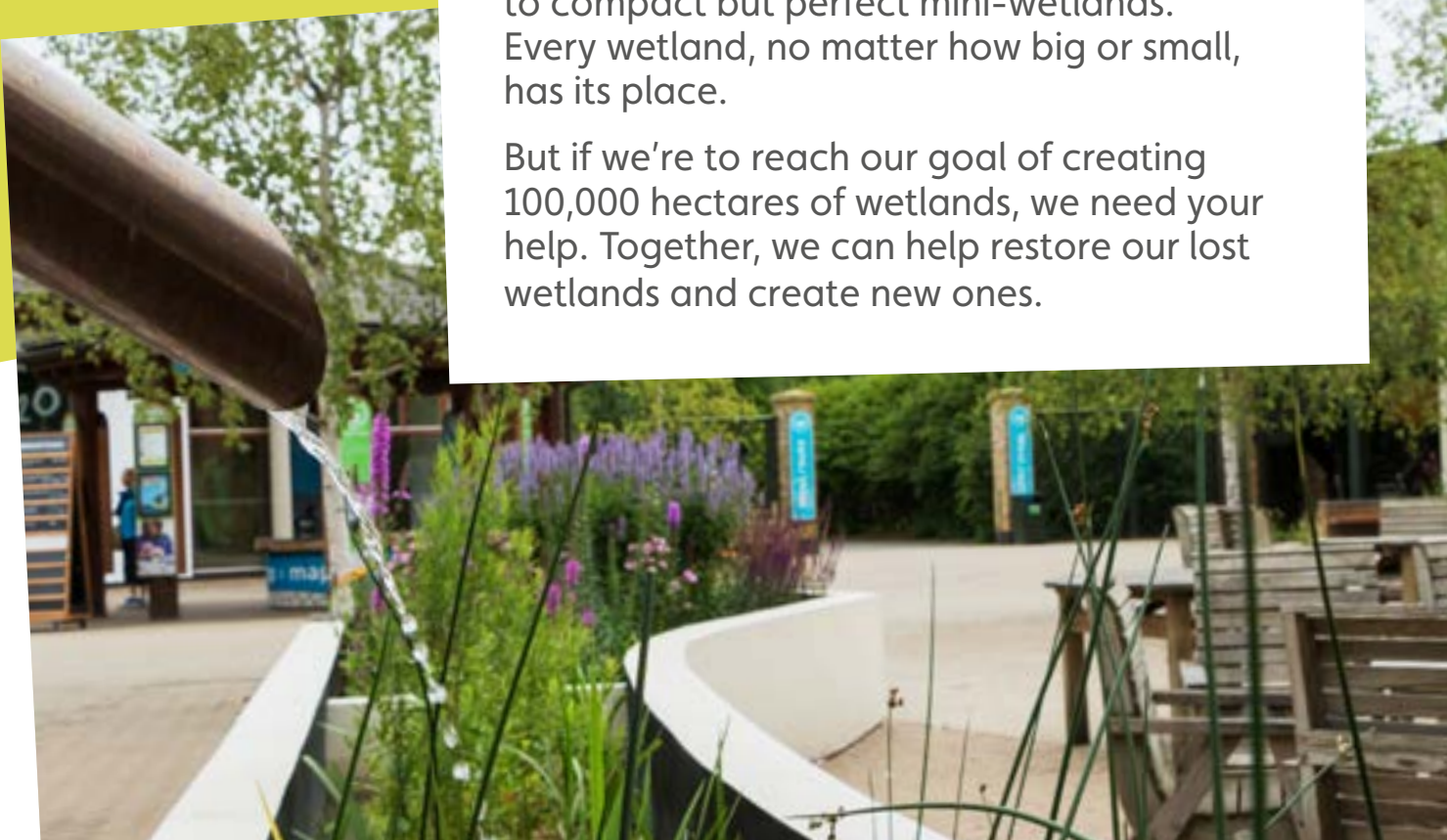
We need wetlands.

Wetlands are essential to almost all life on the planet, including our own. The Covid pandemic has shown us the importance of nature to our lives and the need to use its benefits to help us build back better.

Wetlands Can help us do all of this by helping to fight back against climate change, protect our communities from flooding, clean our water to restore nature and heal our mental health crisis.

Creating wetlands is what we do at WWT, from huge, landscape scale saltmarshes to compact but perfect mini-wetlands. Every wetland, no matter how big or small, has its place.

But if we're to reach our goal of creating 100,000 hectares of wetlands, we need your help. Together, we can help restore our lost wetlands and create new ones.



Why create a wetland?

Wetlands Can help us fight back against climate change, protect our communities from flooding, clean our water to restore nature and heal our mental health crisis. Here are seven ways your mini-wetland can help.

We've lost lots of our small wetlands
50% of ponds were lost in the UK in the 20th Century and we continue to lose more, filled in or paved over for land use. As urbanisation has increased, our blue space has decreased.

Wetland species are in trouble
One quarter of wetland plants and animals around the world are at risk of extinction. Mini wetlands will tempt wildlife back and make your neighbourhood more biodiverse.

It can help create habitat corridors
Wildlife doesn't just need healthy habitats to live, they also have to be able to move around. Creating wetlands adds little pockets of habitats that can help form wildlife corridors.

It's easy and fun

It gets you outside, in the fresh air, doing something active! Once it's finished, you'll have a real sense of accomplishment. Plus, it's something family and friends can get involved with.

It can help reduce flooding

In towns and cities, rain washes off buildings and straight into the drains, which can overwhelm drainage networks. Diverting your water into a wetland can make a difference if everyone does it.

It can improve water quality

Wetlands help to clean our water and restore wildlife by filtering out pollutants

They improve your wellbeing

The cooling effect of water makes them attractive places to be around during the summer, and being around nature has been proven to slow your heart rate and relieve stress.

90%

It's estimated that we've lost 90% of wetlands in England in the last 400 years.



1. How to build your own drainpipe wetland.

Do you wish you had a pond, but don't have the space? Here's a great way to turn your drainpipe into a mini-pond with built in water supply – you'll have your very own wetland reserve. And it's virtually maintenance free.

The wetland itself is simply two containers – recycle anything to hand like washing bowls or under-bed storage boxes. The first container will become a rain-fed pond, and this can overflow into the second box which will become a mini-flood plain.

Building it near a drain, or at the top of a slope into your garden, is a good idea.

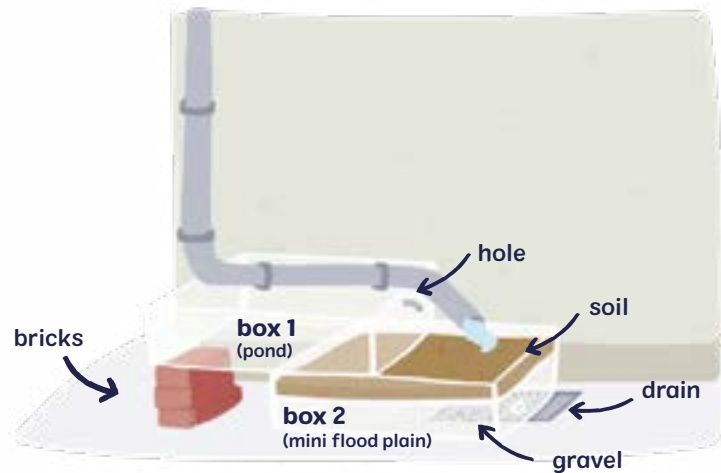
What you'll need:

- Two broad containers – this is a great way to reuse large plastic containers or tubs
- Garden soil or peat-free compost
- Aquatic and water loving plants – keep back a couple of flower pots
- Wood, stone, brick, mud or any material you can recycle to clad your mini-wetland
- A small cheap sheet of membrane from a garden centre
- Peat-free aquatic soil (*or loam garden soil that is free from pesticides or fertilisers*)
- Horticultural grit
- Gravel



Step one:

Locate your drainpipe and estimate the height of the outflow using the two stacked boxes. Then start with **box 2**. Cut a hole in the bottom at one end, and position this over the drain, or, even better, over your garden to create extra wetland habitat. Fill it with gravel, and then a permeable sheet if you have one. Then add some growing medium – garden soil or peat-free aquatic soil.



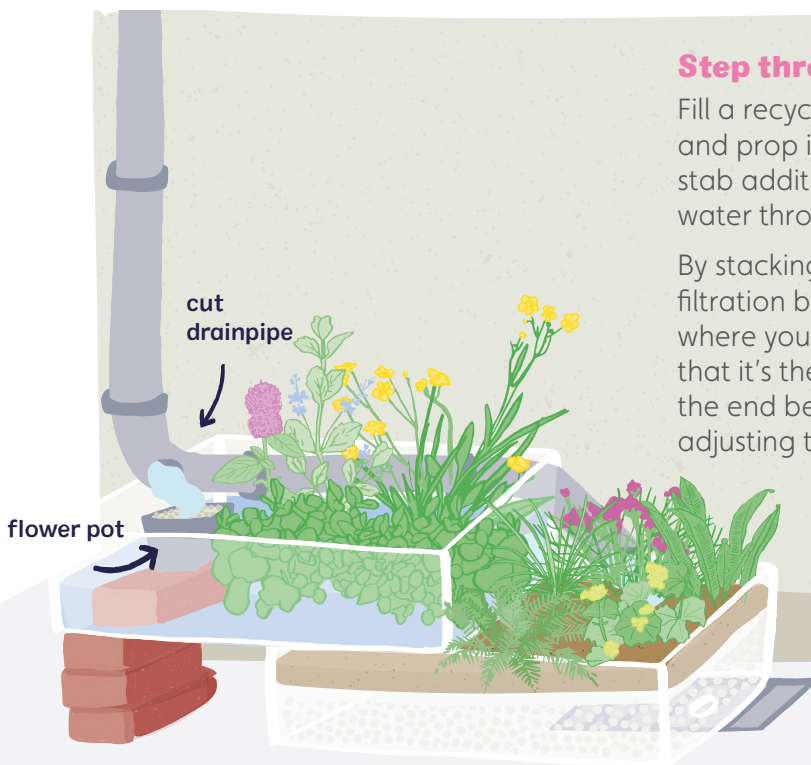
Step two:

Position **box 1** slightly on top of **box 2**, and prop it up with something – old bricks or logs are good. Make sure it's secured in place. Carefully cut a hole at the top of the second box, at the end where it overlaps with the first, so that water can flow out into the mini-floodplain.

Step three:

Fill a recycled plastic flower pot with gravel and prop it in the pond. Use a mesh pot or stab additional holes to achieve a good water through-flow.

By stacking up the pond, floodplain and filtration boxes, you can get an idea of where you'll need to cut the drainpipe so that it's the right height. But don't cut it till the end because you'll probably end up adjusting the whole thing as you plant it.



Step four:

For both boxes, consider what textures, colours and spread of plants you want. For **box 2**, you're looking for plants that can cope with long periods of dryness with occasional bursts of heavy water. Ferns are often good in lower light conditions. For **box 1**, use pond plants that are small so they won't dominate and are native to the UK.

TOP TIP

Peat-free aquatic soil – a heavy dense version – will help keep the aquatic plants in place and won't dissolve into the water.
A sprinkling of horticultural grit on top will help to weight them down.

Step five:

Re-pot the aquatic plants into a larger mesh pot so that they have growing space – but don't throw away the mesh aquatic pot they come in, as it might be reusable as a filtration box. Plant the floodplain box plants directly into the soil. Don't plant too much – they'll need space to grow.

Step six:

Secure the pond and floodplain boxes in place and improve how they look with cladding. Make sure the cladding is substantial and isn't easily blown or knocked over. Old bricks are sturdy, but you can also use wood, stone, mud, plants, hollow twigs and all sorts of material.

Step seven:

When you're happy with the height and position and it's all fairly secure, use a hacksaw to cut the drainpipe to the right height. You may need to buy a replacement shoe (the spout) if you can't slide the old one off to reattach – these cost around £3.

You can build this mini-wetland in even the tiniest urban space, creating your very own wetland reserve.

Step eight:

Let the pond fill with rainwater rather than tap water. It may be cloudy at first but will clear. Rainwater will keep the pond largely algae free because it contains fewer chemicals than tap water.

Cut back the plants as per their instructions. For many plants this will be once a year at the end of the growing season.



For more help, videos and information please visit wwwt.org.uk/drainpipe-wetland/

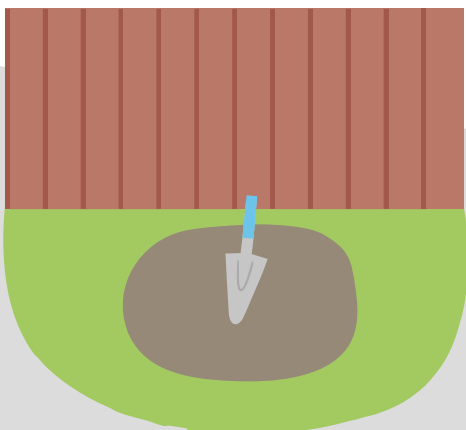
2. How to create a mini-pond.

Building a pond is one of the very best things you can do to help nature. They provide homes for frogs, toads, newts and a whole range of other creatures, as well as providing drinking water for your local wildlife. This mini pond is suitable for a small garden, backyard or even a balcony.



Step one:

Find a suitable space for your mini pond. It should get plenty of light, but not be in direct sunlight all day. Avoid placing the pond under a tree, as it will fill up with leaves. Place your container in your chosen location. If it's going in a garden you can dig a hole just bigger than the container. Lower the container in and then fill any gaps around the edges with soil. It can sit on top of a hard surface, if that's all you have.

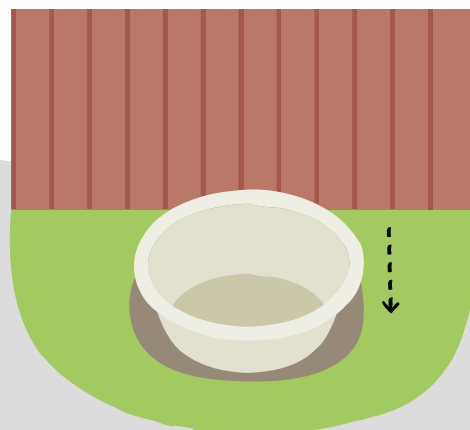


What you'll need:

- A washing up bowl or wide garden dish (or any other similar sized watertight container)
- Small stones or gravel
- Pebbles, rocks or twigs (to act as stepping stones)
- Aquatic plants to bring your pond to life

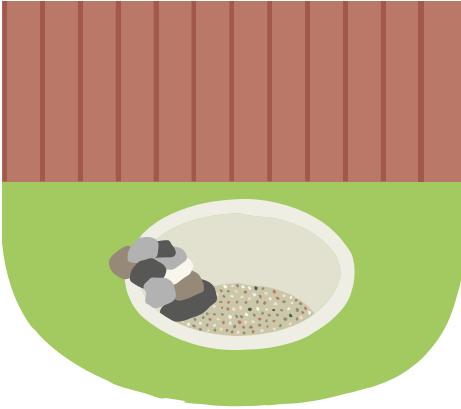
Step two:

Put a layer of clean gravel or small stones in the bottom of the container. Put yourself in the place of a creature such as a frog that might live in the pond or a creature such as a hedgehog that might fall in. How will you get out? Make stepping stones from pebbles, rocks or twigs so that creatures can easily get in and out. This is really important. You don't want animals getting stuck in your pond!



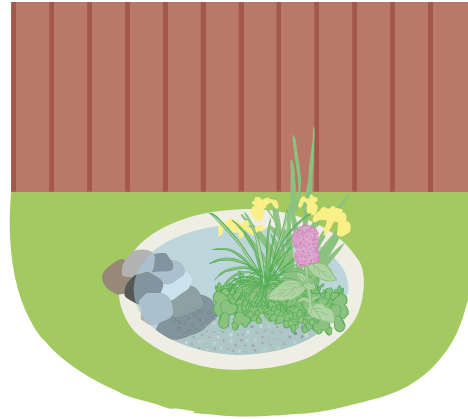
Step three:

Fill up your pond with rainwater if you have any. Water from a water butt is ideal. If you don't have rainwater, you can use tap water but it may need to stand for a day or two before you put it in the pond.



Step four:

Add a few aquatic plants to your pond. This will oxygenate the water, provide shelter for wildlife and look pretty! Miniature floating lilies, frogbit, or spiked milfoil won't take over the space.



Depending on where you live, you might get different wildlife using your mini-pond. Even up high, you might see birds drinking from it on days when rain is scarce, or dragonflies laying eggs.



For more help, videos and information please visit
wwwt.org.uk/mini-pond/

3. How to create a bog garden.

A bog garden is a fantastic alternative to a pond. And if you've got a pesky part of your garden that always seems to collect water, this is a fantastic way to use that space – creating something more attractive that provides wildlife habitat.

What you'll need:

- A length of rope or hose
- Peat-free compost
- Garden grit or gravel
- A piece of pond liner (*you can re-use old liner with holes*)
- Damp-loving plants – read on for our suggestions



Step one:

Outline the area where you want your bog garden to go using rope or hose. Make sure you've chosen a location away from overhanging trees as you need as much sun as possible.

Step two:

Dig a shallow hole 45-50cm deep. This is enough for most people to dig in the garden and will accommodate the roots of most damp loving perennials. Once lined, pierce 2-3 times with a fork for drainage if using an undamaged liner.

Step three:

Add a three cm layer of grit or gravel. This will help prevent the soil from blocking the drainage holes.

Step four:

Put the soil back in the hole, trim back the liner and mix in just a small amount of compost. You don't want too many nutrients as this will make the fast-growing plants of your bog garden hard to control.

Step five:

Plant up your garden and keep watering the plants until established, if they are drying out (if not, just leave them be). Leave the area to get naturally waterlogged over winter.

Choosing the right plants

The moisture loving plants of the bog are colourful and dramatic. Many grow big and tall and can make a real statement in your garden. Create contrasts with a variety of uprights, foliage, bold broad-leaved plants and filigree ferns.



- **Yellow iris** – great for perches and to give summer colour
- **Purple loosestrife** and **meadowsweet** – good to create height
- **Creeping jenny** – great ground cover
- **Marsh marigold** – good early blooms in spring
- **Hemp agrimony** – fantastic autumn colour
- **Willow and dogwood** – their colourful stems create winter interest

TOP TIP

You can even make a bog garden in a container – line half a barrel with punctured plastic (you could use old ripped plastic that's no use for anything else) and you're good to go. Or why not fill in an old or leaky pond?

For more help, videos and information please visit

www.wwt.org.uk/bog-garden/

Looking after your wetland.

Choosing the right plants

When you think of ponds, you might think of unusual and ornamental plants from other lands. But if you choose plants from closer to home, you'll be providing much more valuable habitat for wildlife and avoid highly invasive species. Here are some of the most striking and easy to maintain native wetland plants.

- Marginal pond plants like **yellow flag iris**, **water mint**, **flowering rush**, **water forget-me-not** and **arrowhead** are attractive pond-edgers that like to be submerged in shallow water
- Marsh plants like **marsh marigold**, **ragged robin** and **greater spearwort** are perfect for damp patches, creating a bog garden
- **Floating lilies** and **water crowfoot** provide habitat for small wetland amphibians and invertebrates in deeper water
- Submerged plants like **hornwort** and **water violet** sit under the water and provide oxygen



Wetland care throughout the seasons.

SPRING

Spring is the time that animals such as dragonflies, frogs and newts will want to use your wetland for breeding, so you will want to do very little to disrupt them. It is a great time to sit back and enjoy spotting wildlife.

SUMMER

It's not bad for wildlife if the water levels get lower but if you want to top up your wetland it's best to use rainwater from a water butt or downpipe. You can use tapwater if you don't have access to either of these, but if you can, let it stand in a bucket for a few days as this allows some of the chlorine to evaporate.

AUTUMN

Skim off fallen leaves using a net, washing any invertebrates off the leaf matter using rainwater. Compost the leaves, don't put them next to the wetlands as nutrients will drain into the water. Cut back any dead or overgrown areas and always compost unwanted plants with care, to avoid spreading seeds.

WINTER

Leave something floating in the pond so that if it freezes, the object can be removed to leave a hole for air-breathing creatures and other wildlife to drink from. If it's safe to do so, wipe off snow to allow light into the pond. If light can't get in, the pond plants can't photosynthesise, and will die. It's best not to disturb your wetland in winter, as there may be amphibians hibernating at the bottom of it.

One small wetland can help us take a huge step forward.

Through our Wetlands Can! campaign we're calling for the creation of 100,000 hectares of nature-rich, connected wetlands across the UK.

We urge the UK government to get behind WWT's **WetlandsCan!** campaign by providing the information, plans and funding needed to create wetlands at scale, helping to build a 'blue recovery' from the current climate, nature and wellbeing crises.

Find out more about our [Blue Recovery proposal](#).

Visit the WWT website for more [tutorials](#) on how to create different wetland features, from a full wildlife pond to a rain garden. There's also helpful information on invasive plant species to avoid and sustainable gardening.



Join the movement

If you want to help us send a message to government to prioritise wetlands, then please sign WWT's urgent pledge to create 100,000 hectares of healthy wetlands around the UK at www.wwt.org.uk/WetlandsCan

In England alone 90% of our wetlands have been lost and those remaining are still under threat. Globally, wetlands are disappearing three times faster than forests. We need everyone to help us raise the profile of this undervalued but vital habitat to help solve some of today's most pressing issues.

**WETLANDS
CAN!**

SHARE THE LOVE

Share the wetlands you create with us using [#WetlandsCan](#) on our social media channels – follow us [@wwtworldwide](#)

