



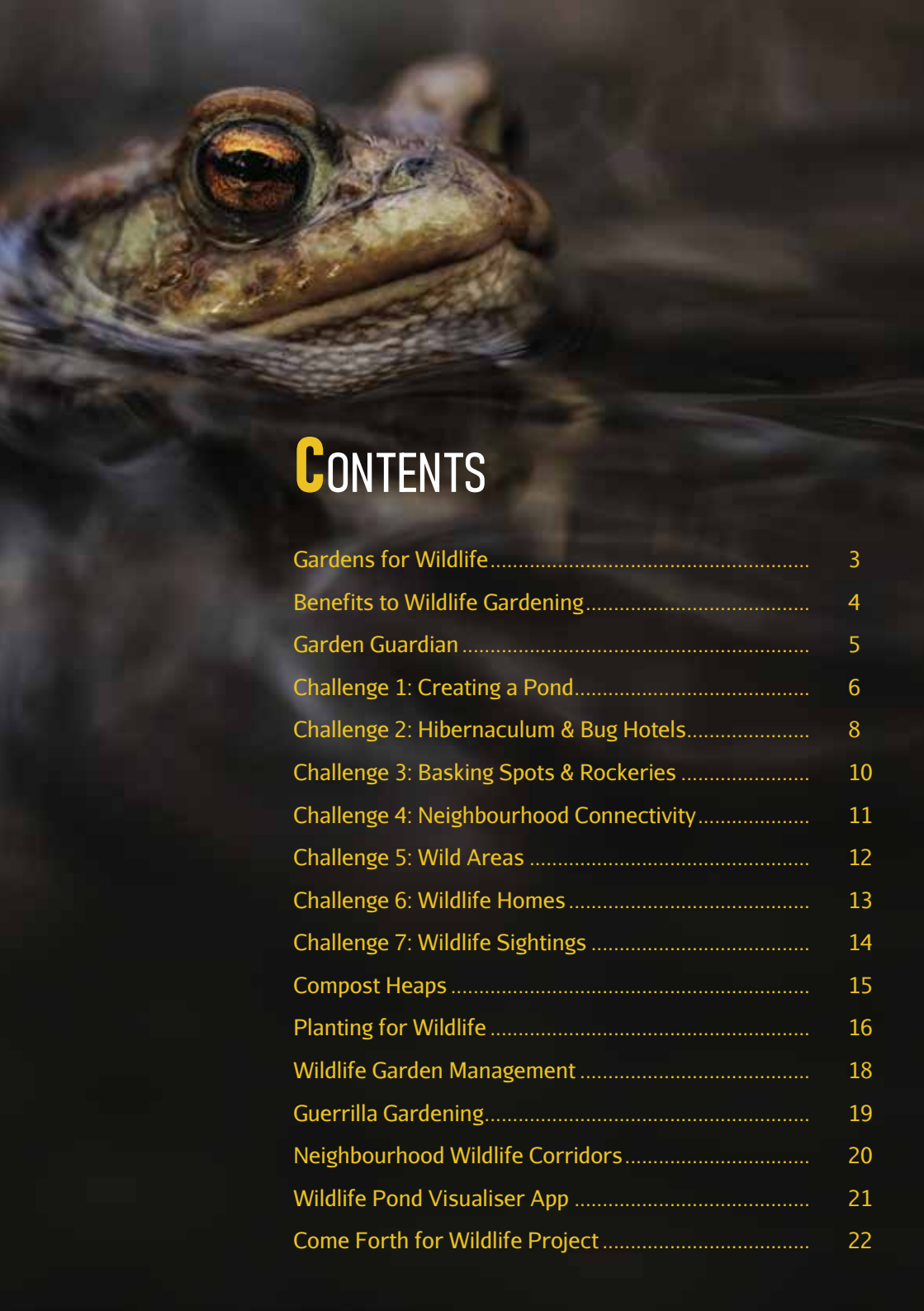
GARDEN GUARDIANS

.....
**Wildlife Gardening in your
Neighbourhood**



Come Forth for Wildlife





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GARDENS FOR WILDLIFE

Have you noticed that wildlife is becoming harder to spot? If you have, you're not alone. In the UK, many species of plants and animals are becoming rarer and there are a variety of things to blame. Perhaps the most important reason is that the habitats of many species are being lost to towns, cities, roads and intensive farming. Don't despair as we can all do our bit to help our wild friends and this booklet will give you a few ideas to get you started. Are you ready to Come Forth for Wildlife?

Where should you start? If you're lucky enough to have a garden then this is the

perfect place to create a wildlife haven with just a few simple steps. If you don't have a garden then even a few pots on your windowsill, a feeder for birds, or a bug hotel on the side of your building will make a world of difference to the wildlife in your area. And if you want to go even further, why not try your hand at some guerrilla gardening (page 19)! Wildlife is everywhere, even if you don't see it in your day-to-day life. The more you do for wildlife and the more often you look for it, the more you'll see and discover what's living on your own doorstep. Seize the day Garden Guardians!





**“One touch of nature makes
the whole world kin”**

- William Shakespeare



BENEFITS OF WILDLIFE GARDENING

There's no question that wildlife gardens are great news for many of our native plants and animals, but what's in it for you? Is wildlife gardening just a selfless act for those who really love plants and animals? It certainly is not - gardening for wildlife can benefit anybody!

Wildlife gardening is a fantastic way of getting close to nature, and studies have shown how vital this is for your health, happiness and wellbeing. What's more, if you attract wildlife to your own garden you and your family can access the natural world every day and not just on the odd occasion when the sun is out and you take a trip to a local nature reserve. Imagine being able to enjoy the beautiful sounds and sights of nature on your own doorstep! Children find

joy in the smallest of creepy-crawlies and will love learning about the array of birds visiting a feeder. These first-hand experiences are so important in influencing their care and gratitude for the natural world later in life.

Wildlife will earn its keep too. Many of the 'pests' that we spend hours trying to get rid of - slugs, snails, aphids etc. - are a tasty treat for many animals. The more of these pest-busting animals we have, the less time we need to spend, and fewer chemicals we need to spray, in trying to get rid of unwanted critters. Fewer chemicals also mean more pollinating insects, so if you're trying your hand at food growing this will help you achieve that bumper crop that you've been dreaming about.



GARDEN GUARDIAN

Will you Come Forth for Wildlife?

So, what is a Garden Guardian and how do you become one? We have set you some challenges that you can undertake throughout the changing seasons. When you complete a challenge, you will have earned yourself a badge - collect at least four and share your experience with Froglife and we'll send you a Garden Guardian sign for your wildspace. But even more importantly, you will have played an invaluable part in helping your

local wildlife and, hopefully, will have enjoyed the benefits of a wildspace bristling with native plants and animals.

Tick off four Garden Guardian badges and tell Froglife about your achievements by emailing us at info@froglife.org to receive your Guardian Sign. You could send us a photograph or a video, draw us a picture or even write us a poem or story - this is your chance to get creative!

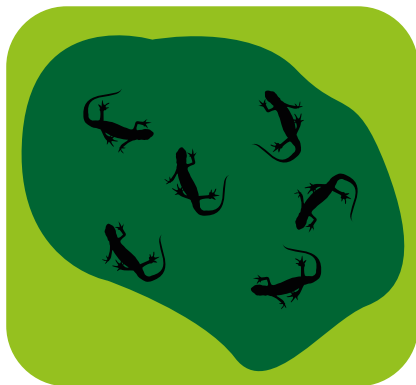


NEIGHBOURHOOD WILDLIFE CORRIDORS

As our towns and cities have expanded, and roads have become bigger and more widespread, wildspaces have shrunk and become cut off from each other leaving small pockets of greenspace - a process known as habitat fragmentation. Habitat fragmentation causes problems for wildlife because it restricts wildlife to small areas and movement between areas becomes trickier. The quality of these pockets of habitat is usually lower because more of the area is 'edge' habitat, which is less suitable for many species. Species are also likely to suffer from in-breeding if they aren't able to mix more widely.

It is rarely possible to reinstate large areas of habitat so the best solution is to link areas of habitat to allow animals to move more freely between them. This can be achieved by creating wildlife corridors or stepping-stones that provide safe passages for animals to move through. Gardens are ideal for this!

Use the tips in this booklet to become a Garden Guardian and your garden could become part of a great swathe of wildlife corridors emerging throughout the Forth Valley.





CREATING A POND

Ponds can be blissfully peaceful, yet exciting spaces to watch and

explore the natural world - they are sure to entice a medley of wildlife species including breeding amphibians. The thought of installing a garden pond may be worrisome for some, conjuring up ideas of back-breaking digging in rocky soil, endless maintenance and dangers posed to younger children. But there are simple solutions to each of these issues, and with careful design, little maintenance will be required.

Ponds come in all shapes, sizes and designs. Here are some things to consider when designing your pond:

» A pond of any size will attract wildlife, no matter the location, so don't let city living or limited outside space put you off. Ponds can be any shape or size depending on the space you have available.

» If space is limited, or if you want to start off small, why not try installing a mini pond? This can be achieved in a short time and will cost next to nothing. Your mini pond could be above or below ground level, and you can make it using plastic containers, old sinks or troughs. Just remember to provide ramps using rocks and logs so that animals can easily get in and out www.froglife.org/learning-zone/wildlife-at-home

» If you're worried about safety, why not install a raised pond? There are also various pond safety solutions on





the market, such as mesh that sits just below the water level, or ornamental metal covers that will allow wildlife through but keep children out!

» Variety is the spice of life - this is especially true when it comes to ponds. Think about incorporating a range of water depths by creating shelves in the sides of your pond to suit different plants and animals. If you have the space, why not install ponds of different sizes? Creating a range of habitats will have the knock-on effect of attracting the different plants and animals that favour those habitats.

» Most species live at the edges of ponds in shallow water so it's important to give your pond gradually sloping sides. This will also allow animals easy access in and out of your pond. Try

to make the edges of your pond wavy rather than straight.

» Position your pond in a sunny spot away from overhanging trees, otherwise you'll forever be scooping leaves out of the water.

» Your pond doesn't need to be deep - anything up to one metre at the deepest point. Water is less likely to freeze at greater depths, which is great for amphibians overwintering in the water.

» Finally, you should allow your pond to fill naturally or collect rainwater - don't fill your pond with tap water as it contains a lot of nutrients, which will increase the chance of lots of unsightly algae growing.

» For detailed information on creating a wildlife pond take a look at Froglife's publication "Just Add Water".



HIBERNACULUM & BUG HOTELS

terrestrial habitat is just as important - they actually spend more time on land than they do in the water. Although amphibians don't fully hibernate in the winter, they still need a safe, dry spot where they can hunker down, safe from predators and extreme weather

We often think of amphibians as being water-loving creatures, but their

- a hibernaculum is a perfect place for them to do that.

A bug hotel is another great idea for any outdoor space. These simple structures make a safe environment for our insects and other creepy crawlies, looking after them in winter or just giving them a place to hide all year round. You can benefit too by keeping helpful species around that will aid your garden plants and soil!





How to make a hibernaculum

1. Choose your perfect spot - it should be quiet, out of direct sunlight and free from the risk of flooding.
2. If the soil is dry then you can dig down into the ground to create a dip. If the ground is wetter then create your hibernaculum by piling your materials on the ground.
3. Use rocks, logs, old PVC pipes and rubble to create a pile with lots of holes and crevices for animals to hide in. Avoid leaving any large holes as these will let a draught into the hibernaculum.
4. Create a cap with soil or compost so that it stays warm and dry inside, but remember to leave spaces for the animals to crawl in and out.
5. Finish off your hibernaculum with some turf and/or wildflower seeds. This will attract insects to the area, and help it blend into its surroundings.





BASKING SPOTS & ROCKERIES

Amphibians and reptiles are ectothermic, meaning they

can't make their own body heat. They rely on heat from their surroundings to warm their body - when they're cold their movements are very sluggish and bodily functions, such as digestion, occur very slowly too. Reptiles in particular love a sunny spot to bask to

get their vitamin D boost and warm their body, ready to catch food, escape from predators and get their digestive system fired up.

Lizards will love a south-facing rockery with nooks and crannies to hide in, plenty of sunbathing spots and oodles of creepy-crawlies to feast on. Why not add in some native alpine plants for burst of colour in your reptile palace.

Some small pieces of carpet, felt or tin placed in a quiet and sunny spot will provide a toasty hiding place for many animals. Position them near to thick vegetation so they can visit without being seen by predators.





N

IGHBOURHOOD CONNECTIVITY

It's great to make a fantastic outdoor space to suit our wildlife visitors but it's equally important to think about how they will get in and out again. Many animals like to travel far and wide - easy if you have wings, but what about our ground-dwelling wild friends? Great-crested newts, for example, have a wide range, travelling distances of up to a kilometre. You can help them by thinking about how well connected your garden is to the outside world - could a newt range freely through your garden?

You can do really simple things to connect your garden to the outside world, like creating gaps at the bottom



of fences. These little doorways will allow larger animals, like adult amphibians, or hedgehogs to easily come and go.

Or you can go even further by planting hedges. Hedges offer fantastic habitats in their own right, but they can also act as thoroughfares for wildlife. Many creatures prefer to travel under the safe protection of a bushy hedge, keeping them away from the prying eyes of predators.





WILD AREAS

Amphibians, lizards and slow-worms feed on an array of creepy crawlies like insects, spiders and slugs, making them

the experts of the pest control world. On the other hand, there are plenty of predators, such as birds, cats and foxes, that consider our pest controllers a tasty snack. But there are things we can do to help amphibians and reptiles enjoy a peaceful dinner without being gobbled up themselves. Birds hunt by sight, flying overhead looking for critters - this is a simple task when your prey has nowhere to run or hide. We can help amphibians and reptiles by leaving patches of long grass and other plants, and bolt holes where animals can take cover and protect themselves from aerial and terrestrial predators. Why not try planting a wildflower patch? This will not only provide cover for ground-dwelling creatures, it will also provide food for pollinating insects and a spectacular riot of colour for you and your family in the summer months - win, win, win!

Another project to consider is creating a bog garden. It might not sound particularly glamorous, but bog gardens can be very beautiful and are fabulous spaces for amphibians, particularly during the summer because they are moist and attract a multitude of invertebrates to feed on. Check out the Froglife activity sheet to find out how to build one: www.froglife.org/learning-zone/wildlife-at-home



WILDLIFE HOMES

Natural homes for wildlife are increasingly tricky to find, making

competition high for places to nest, overwinter and hide from predators. Humans have become very efficient at clearing old trees and fixing holes in buildings that would have once provided nesting spots for birds. Thankfully, this is one problem with a very simple solution. Wildlife homes come in all shapes and sizes, and can be designed and positioned to suit the specific needs of lots of different animals. Let your imagination run wild when

creating your wildlife homes - an old teapot fixed to a fence post can provide a snug spot for a blue tit to build its nest in, or you could create a hedgehog home with some logs and moss, or why not try creating a Toad Abode and keep your eyes peeled to find out who comes to visit.

www.froglife.org/learning-zone/wildlife-at-home





WILDLIFE SIGHTINGS

Looking for wildlife and recording your sightings is vital for the conservation

of all of our species. Recording can help inform relevant organisations about the health of populations by answering crucial questions like: Where are they? How many are there? Are there more or less than there used to be? They can also help identify dead or dying animals, and alert to possible threats like disease or alien species. If you come across any dead or diseased animals in your garden please do report them to the Garden Wildlife Health project (www.gardenwildlifehealth.org) who rely on help from the public to monitor the health of British wildlife. For these reasons, having an engaged group of the public reporting all this information can be vital.

So, what might you do if you spot a creature of interest? For amphibians and reptiles, Froglife has developed the Dragon Finder app. Available to download on all mobile devices, Dragon Finder will allow you to report your sightings and help you identify species by sight or sound, report your sightings, and provide information about what your wildlife has been up to! Of course, wildlife recording isn't limited to reptiles and amphibians and all sorts of species can be recorded. Your local record centre is a great resource, where you will be able to log any other fascinating beasts you discover along the way!



COMPOST HEAPS

Could you already have a wildlife haven in your garden without even knowing it? Perhaps! Compost heaps can provide fantastic spaces for amphibians and reptiles to shelter and forage. They can also be ideal egg incubators for grass snakes because the decomposing plants create a lot of heat, which is vital for their development, and the eggs are well protected from predators and disturbance.

There are a few rules to follow when creating your amphibian and reptile-friendly compost heap. An open sided design is preferable to a closed-off plastic bin as the open sides will allow animals to move in and out easily. Using a pallet at the base is also



ideal so that they can access it from underneath. Please don't put anything on your compost heap that has come into contact with pesticides or other chemicals as it will be harmful to any creatures living there and may cause problems further up the food chain.





P LANTING FOR WILDLIFE

Plants are extremely important as they will strongly influence the animals that visit and colonise your wild space. It's usually best to choose locally sourced native plants whenever you can as they tend to be better food sources for wildlife.

If you've decided to put a pond in your wild space, then it will do just fine if you let it colonise naturally, or you may want to give it a boost by planting it up with a few native species. It's really important to purchase your pond plants from a reputable source so there is less chance that your pond will become troubled by invasive non-native species.

Plants are an important part of any wildlife pond because they support a variety of aquatic invertebrates, which will provide food for animals, including amphibians and reptiles. Newts lay their eggs on the surface of submerged

plants so include some of these species if you'd like newts to breed in your pond.

Having a variety of different types of plants in your garden will attract more animals:

Wildflowers will feed bees and other insects with pollen and nectar.

Trees and shrubs will offer shelter and nesting sites for birds in the spring and some varieties will provide berries for them to feed on in the autumn and winter. Tree blossoms are also a great source of food for insects in the spring.

Climbing plants, such as ivy and honeysuckle, will also support an enormous variety of wild species.

Planting grasses and allowing areas of lawn to grow long will provide cover for many species, allowing them to move around your garden unnoticed by predators.





WILDLIFE GARDEN MANAGEMENT

» Here are some final tips to help you become a wildlife gardening guru:

» Avoid using pesticides wherever possible. These chemicals are specifically designed to kill living things. Pesticides applied to plants may be eaten by animals, which can cause them problems directly and be passed further up the food chain, causing problems for other animals.

» Avoid using plastic netting or plastic covered wire as animals can become entangled in these. Also keep your garden free from litter, which could trap animals or become an undesirable item of food.

» Keep cats indoors at dawn and dusk when many animals are active to reduce the chance of them catching wildlife. You could also attach a bell to

your cat's collar to warn animals of an approaching predator. Providing areas of long grass and plenty of hidey holes will give animals a safe place to run away to.

» Animals will hide in areas of long grass so it's important to walk through these areas to scare them out before mowing or strimming. This is particularly important in the early summer when there are lots of newly emerged froglets, toadlets and efts (baby newts) making their way in the world.

» Please don't transport plants or animals (including frogspawn) from the wild into your garden as this can spread disease.



GUERRILLA GARDENING

Wildlife gardening is much easier for those of us lucky enough to have our own garden, but what if this option isn't available to you? There are still plenty of things you can do to help wildlife in your local area.

Why not have a look for any volunteer groups near you. There are a fantastic array of charities and community groups all across the country. Get in touch with Froglife or your local council for details of local 'Friends of' groups - these are an amazing way to do your bit for wildlife and your local community, whilst getting out into the fresh air, getting some exercise and making friends.

If you're looking for something more immediate why not try your hand at some Guerrilla Gardening (but with landowner's permission of course!)?



Seed bombs are fun to make and are a great way to sow seeds quickly and easily.

Take a look at the Froglife website for further ideas of things you can do at home: www.froglife.org/learning-zone/wildlife-at-home



BIRD FEEDERS • BUG BELL • BUG BOX • BUG STICK BUNDLE • HANGING BASKET • WORMERY • NEWT'S TEA-BUG HUNT • POND DIPPING • WORM CHARMING

WILDLIFE POND VISUALISER APP

If you're tempted to put a pond in your garden but still aren't sure how it'll fit in, then Froglife has the ideal solution for you - the Wildlife Pond Visualiser app (available on Android devices). The app uses augmented reality technology to help you see what different types and sizes of wildlife pond might look like in your wild space. Once you've designed your pond you can use the app's 3D Wildlife Pond Advice section to add features such as log piles, wildflowers and rockeries.

To download the app search for "Froglife" on the Google Play Store!



COME FORTH FOR WILDLIFE PROJECT

This booklet has been brought to you by Froglife's Come Forth for Wildlife project, funded by the National Lottery Heritage Fund. Through this project, Froglife are running events and activities throughout the Forth Valley (Falkirk, Stirling and Clackmannanshire) and would love you to get involved. The project's purpose is to connect wild spaces across the valley to help conserve amphibians, reptiles and other wildlife.

Wildlife Gardening Workshops are being offered in therapeutic gardens, allotments and community gardens, and will show people how to garden in a wildlife-friendly way.

Pop-up Wildlife Gardening Workshops are taking place in busy centres throughout the Forth Valley - come along to get some more wildlife gardening tips.



Neighbourhood Wildlife Corridors - these corridors will provide safe passages for wildlife to move through, connecting nature reserves and country parks across the valley. Use the tips in this book to create your own wildlife stepping stone. You can help these corridors become a reality by becoming a Garden Guardian and complete the activities in this booklet!

Mapestry - be part of the team creating a giant map-tapestry of the Forth Valley, with a tapestry for each month of the year. Once complete, the mapestry will go on a tour of the Forth Valley and will be on display at various public venues.

Training Courses - come and learn about amphibian and reptile survey methods & ecology, or habitat management for reptiles and amphibians at one of Froglife's free training courses.

Pond Doctor - do you have a pond problem or are you wondering why newts don't seem to want to visit your pond? Then you'll want to visit one of Froglife's Pond Doctor stalls where experts will be on hand to answer any pond conundrums you have.

Virtual Reality Exhibitions - this is your chance to get a toad's-eye view of the everyday dangers faced by our warty friends.

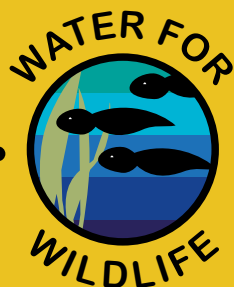
Practical Conservation - Froglife will be working on larger-scale habitat projects



to create and restore ponds at key sites within the Forth Valley. There will be plenty of volunteer opportunities and Froglife would love to see you there!

For further details on the project and to find out about upcoming events, please visit: www.froglife.org/what-we-do/education/come-forth-for-wildlife





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Send your photos, videos or other creations to info@froglife.org



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