

Win a Star! See how many points you score by ticking off these wildlife friendly gardening practices: Pond Bare earth (bank) Bog garden stumpery Bird bath Rock pile Bird feeder Log pile Pesticide free Hibernaculum Hedgehog box Nest box ____ Bug Hotel Wild area Compost heap Hedgehog gap Nectar-rich wildflowers Practise no-dig Scruffy hedge Fruiting plants Night-opening flowers Tin sheet

How many boxes could you tick?

20 or more = Gold star 15 or more = Silver star 10 or more = Bronze star We would love to hear how you have done. If you can get up to 10 ticks let us know by emailing wildlifebooklet@gmail.com and we will award you a bronze star certificate; 15 ticks and you get a silver star; more than 20 will get you gold!

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wild flowers

wildlife shelters

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A Very Important Notice

Pesticides include chemicals that kill insects (insecticides), plants (herbicides) and fungi/moulds (fungicides). Weed killers, slug pellets and insect sprays all affect many more species than just their intended target. Manufacturers may insist that their products are safe for nature but numerous scientific studies have demonstrated their harmful effects on everything from earthworms to humans. Many factors have contributed to the rapid decline of our wildlife but pesticide use has been a major cause, and wilderness areas, organic farms and chemical-free gardens have become much-needed sanctuaries for many creatures. Undoubtedly the best way to control the likes of slugs, snails and aphids in your garden is to encourage their natural predators; frogs, toads, hedgehogs, ground beetles, ladybirds, slow worms, thrushes and other birds, all of which will delight in eating them for you!

4 Encouraging Pollinators

Our gardens are the most wonderful resource for pollinators such as bees, beetles, moths, hoverflies and butterflies. As we have lost so many wildflowers on farmland and even in public spaces such as national parks, the haven we can offer these beautiful creatures becomes increasingly important. In return, they pollinate our flowers, fruit and vegetables. We simply can't live without them.

If we can fill our garden with flowers throughout the year it's beautiful for us and a life-saver for pollinators. Pollinators mostly visit perennial plants, which is great news for lazy gardeners, as they are much less demanding than annuals! Shrubs and trees are wonderful, too, and give us a supply of fruits and nuts into the bargain.

Some of our UK pollinators are very fussy! A few creatures will only feed on native plants. So it's good to include as many

early pollen sources

are essential

local wildflowers in your garden

as possible. There are so many beautiful ones to choose from, and letting the grass grow in a few areas can create a beautiful mini-meadow as well as supporting the pollinators. And why not grow some in a pot? Place it near your window or favourite garden chair and enjoy the bees and butterflies. But many pollinators don't care where their nectar comes from! Many of our favourite garden flowers, such as







rudbeckias or salvias, will give late blossoms when our native plants have gone to seed. So a mixture of native and world-wide plants is a great idea. Avoid double flowers as these are often sterile, which means they don't produce pollen, and even when they do, they have so many petals that insects can't reach inside.

Encouraging Pollinators 5



red soldier beetle beetles are important pollinators

Moths feed in the evening or at night and they are attracted by smell. So plant gorgeous, intensely-perfumed plants, such as evening phlox and honeysuckle and enjoy their evening fragrance.

The larvae of many pollinators are natural predators so they will eat aphids and other pests. But pesticides destroy this natural cycle by killing pollinators along with everything else. So if you can tolerate a few nibbled leaves and petals, your garden should establish a rhythm where the pests and predators are in balance. Also, you could try companion planting where pests are attracted away from precious plants.

Like all small creatures in the garden, pollinators need to drink, so ponds with a shallow edge are a great resource for them. But a shallow dish of water would also work well. Try filling it with stones so that there is a place for the insects to rest while they are drinking.

It's a good idea to leave as many plants as you can over the winter. Many plants can look stunning in the winter, creating



architectural silhouettes where insects will make their winter homes. Hedges also provide shelter as well as winter food. Bug hotels are a great idea for solitary bees, although some bees prefer to nest on the ground in bare soil or short turf where you might spot small mounds of soil deposited by the burrowing females.

Suggested plants
The RHS website has compiled a

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The RHS website has compiled a

Iist of nectar-rich plants grouped

list of nectar-rich plants grouped

according to the time of year they

according to the time

Jenny, Blackawton

Search for...

rhs plants for
Pollinators

gardenersworld plants
for evening scent

soilassociation
companion planting
wildlifetrusts how to
attract moths and
bats

6 Encouraging Minibeasts

These are a gardener's best friends. They can take over most of the boring jobs - if we just let them. There are millions of tiny creatures in our garden, above and below ground, and they perform a range of critically important tasks. Some of them are the planet's secret housekeepers; without them we would be buried under piles of dead trees and other plants. Many of them create the underground network that transfers nutrients around the soil, keeping everything fed and healthy. Others are at the very base of the food-chain, feeding slightly bigger mini-beasts which in turn are eaten by pollinator larvae which are then eaten by the birds visiting our gardens. And some of them eat the mini-beasts we don't want! Ground beetles, for instance, eat slugs' eggs and baby slugs, too. So, if

we stop using pesticides then more useful and enchanting creatures like ladybirds will return to eat the aphids on our roses and broad beans.

No-dig gardening? How wonderful – gardening without the hard work! The best garden soil is full of microorganisms and mini-beasts such as worms which act like tiny underground tractors aerating the soil. At the same time there is a fantastic web of fungi living in harmony with all of these creatures, plugging nutrients right into the roots of plants. Every time we dig and turn the soil we destroy these creatures, their homes and their networks. So don't dig. It's

Wildoxfordshire minibeasts

a double-win! No backache and richer, more friable soil. But what about digging in compost and manure? Better still, the minibeasts will do all the work for you, pulling it underground, if you simply spread manure and compost on top of the soil. A good 10cm layer added in the autumn will also act as a mulch, protecting tender plants from frost as well as suppressing weeds. I think that's a triple-win! No need to dig out weeds either. You can just keep cutting them back. Without sunshine they will gradually get weaker and die. In fact

> it chops roots into smaller parts





Encouraging Minibeasts 7

- and with some weeds each piece can become another plant.

The joy of gardens is often the way we create different areas – even in a small garden. And these also offer a wonderful range of different habitats for all the life in our garden. Keeping most of the soil covered, even in the winter, allows small creatures to build nests and to hide from predators. It's very satisfying to tidy up the garden in the autumn, but leaving some of the plants can create a stunning winter scene as well as providing food and habitat. Many solitary bees make their nest in the grass, others prefer a patch of bare soil. So variety in the garden is beautiful for us and fabulous for our tiny helpers.

If you see a whole bunch of woodlice scurrying around your compost heap that's a sign that they are really getting to work breaking things down to create wonderful rich sustenance for your plants.

Enjoying wildflowers in the lawn is one of the many benefits of allowing the grass to grow a little longer, and it also gives the many creatures at the soil surface a bit of a breather. Leaving some areas long until much later in the year can also give a wonderful naturalistic look to parts of the garden while allowing wildlife to flourish. Really, it seems, the less we do, the better!





crab spider



ladybird



ruby tail cuckoo wasp



lesser stag beetle



Recommended

Charles Dowding has a fantastic range of books and you-tube videos explaining and demonstrating all the benefits of no-dig gardening.

/ink: charlesdowding.co.uk/start-here

8 Encouraging Birds

Helping out your local neighbourhood birds is easy and rewarding with an almost instant return on your effort. From hanging out feeders and installing nestboxes at one end of the scale to planning a woodland edge or creating a wildflower meadow at the other, these most visible representatives of our wildlife quickly appear to take advantage of your largesse and provide hours of entertainment. Provide food, nesting sites and shelter and they will come!

The easiest thing to do to instantly attract birds is to provide food. There are numerous feeders and bird tables on the market to choose from to suit every pocket, or you can make your own. Different species prefer different foods although there are some good all rounders that suit many kinds of birds, such as sunflower hearts. Similarly birds' tastes vary in their choice of nestbox and their location, but again there are a couple of styles that suit many species. There are lots of commercially available versions of these as well as some more specialist boxes, such as those for swallows and swifts.

For shelter blue tits will huddle together for warmth in an empty nestbox in the winter, or if you have incursions of ivy or overgown hedges, shrubs and trees, leave them - they make perfect roosting spots. Not







Did You Know?

Bird population

decline 1977-90:

Tree sparrow -95i

Corn bunting -88%

Willow tit -78%

Turtle dove -71%

Song thrush -56%

Bullfinch -53 %

Skylark -52%

Spotted

flycatcher -7-7%

Woodcock -74%

Starling -71%



Encouraging Birds 9



being a very tidy gardener is a plus for birds as these are the places bugs and insects thrive, a valuable food source for many birds. It is all down to how you garden.

Planting plants and trees that naturally provide seeds and berries is the most sustainable approach in a wildlife garden. These also attract insects which many species rely on, as do nectar-rich flowers. Many are attractive and useful additions to the garden in their own right,

and easy to grow. They also provide shelter and nest sites. Unkempt areas and scruffy hedges do the same, and keeping some grass long and some short benefits birds like robins, thrushes and blackbirds - who will also help keep pests down in the veg garden. An absolute must, if you do nothing else, is to avoid the use of pesticides and slug pellets, even 'organic' slug pellets.

Suggested plants that are particularly useful to birds: Holly Iny Guelder rose Hawthorn Honeysuckle Rowan Teasel Cotoneaster Sunflower Search for... Gardenersworld plants for birds BTO providing for birds

Richard, Blackawton





10 Encouraging Amphibians and Reptiles

Frogs, toads and newts are our common amphibians and are popular garden residents as they love to eat slugs. They will also be scoffing crane flies, mites, springtails, worms, spiders and a host of other invertebrates.

The best way of attracting them into your garden is to make a pond which they will use for courtship and breeding. It doesn't have to be big, even a mini pond made from an old sink will be enough, but it mustn't have fish living in it (they eat the eggs and tadpoles). In time you'll start seeing spawn appearing in late winter and in 3-4 months a new generation of tiny froglets and perhaps newts will spread out into your garden. Frogs and newts will sometimes even overwinter in the bottom of ponds.

Amphibians need food and shelter – log, leaf and stone piles are all sought out by them as places to hide and to keep cool and moist in summer. They also provide homes for the minibeasts they feast on and shelter in which they can overwinter.

Amphibians breathe and drink through their skin so they are particularly sensitive to toxic chemicals. Don't use pesticides in your garden and, since your amphibians will spend all night looking for slugs and snails to eat, you won't











Encouraging Amphibians and Reptiles 11

need those chemicals anyway!

The other great garden pest eaters are the reptiles, so here's how to attract lizards, slow worms and grass snakes (which are totally harmless) to your garden.

Both slow worms and grass snakes love a compost heap. They are cold-blooded and seek out the warmth the heaps produce - and it's also a good place for them to lay their eggs. They both favour going under 'tins' which

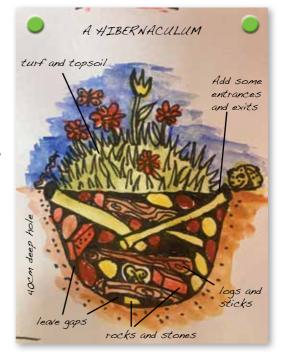


warm up under the sun (corrugated roofing sheets or similar left purposefully in a patch of rough grass they can rest under), as being cold-blooded they love the heat. Roofing slates are a smaller and more decorative alternative. Lizards prefer a bit more space, as they have legs, and for them the ideal is a log or stone pile, preferably one that gets some sun so they can warm up. They love to bask in the sun, too, but will only do it if there is some long grass or hedge cover very close by.

The other habitat that draws grass snakes is a wildlife pond, as they are good swimmers and ponds are a favourite hunting ground.

To create the perfect overwinter home for frogs and toads, dig a hole 40cm deep in a quiet spot, put in a layer of stones with lots of gaps between them, put a rough pile of twigs and logs on top of the stones extending above ground level and then put earth and turf on top of that, leaving holes and gaps around the edge.





John, Capton

12 Encouraging Mammals

Most gardens will be visited at some time or other by wild mammals, even in urban areas, although the closer you live to wilder areas, the more likely it is. Mammals generally have a territory much larger than the average garden and can overcome most barriers to wander hither and thither, but leaving openings in your boundaries increases the chances of a visit.

Mice, grey squirrels, hedgehogs, foxes and bats are the mammals most often seen. Shrews and voles may be present but less often glimpsed, and some gardens may get visits from badgers and deer and perhaps weasels and stoats that predate on



hedgehog

smaller rodents. Mammals are mostly nocturnal or active at dusk so are more rarely seen, often revealing their presence only through their tell-tale droppings,

remains of prey, marks on the ground or hairs.

brown hare

As for most wildlife, key to encouraging a visit is to keep some of your garden a little less tidy and undisturbed – cut back shrubs and trees less often, allow some grass to grow long to provide shelter, nesting material and a home for shy creatures like voles and shrews.

Water and food sources are invaluable – many garden plants and trees provide flowers and fruit as food for

mammals throughout the year anyway, but to include native hazel, crab-apple, hawthorn, privet, guelder rose, a wayfaring-tree or spindle will benefit many small mammals as well as a host of other creatures as an added bonus. Some bramble and ivy is excellent too, for cover and berries. Buds and fruit blossoms provide food in the spring, berries and fruits in the autumn – so a range of plants with different fruiting times will help provide food all year round. Stocks, evening primrose and nicotiana attract moths and other insects, which in turn provide food for visiting bats.

Encouraging Mammals 13



badger print left in soft mud.

Gardens are a very important habitat for bats. These nocturnal creatures, perhaps seen at dusk, acrobatically swooping and diving as they chase insects, depend a great deal on garden spaces as the wooded areas, ponds and wild grassy places left in the countryside where they can feed and roost increasingly dwindle. Fortunately, simply by following advice on how to encourage other wildlife into your garden, especially insects, you automatically improve the chances of supporting a thriving bat population.

A pond, however small, or basin of water placed near cover (to help them

avoid cats and other predators) is hugely beneficial. Make sure the water source has a shallow sloping end so creatures can get in and out easily.

Invertebrates make up a large part of the diet of many small and large mammals, so do not use chemicals in your garden, or slug pellets (even those marked 'wildlife friendly'). These are poisons and can accumulate within the creatures that ingest them and in the bodies of those that predate further up the food chain - with dire results.

Many mammals keep house underground or in trees. Compost heaps and and log piles provide alternative housing and a board or piece of corrugated iron placed on the ground in a quiet spot encourages small mammals to nest safely underneath, if you don't mind sharing a little space with our fellow mammals.



Richard,	Blackawton
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	pond (p.28)
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	wildlife shelters (p.20)
	Wilding Constant

14 Encouraging **Hedgehogs** - a special case

If you are out in your garden in the dimpsy of an evening you may hear some strange noises coming from the undergrowth. Do not be afraid! It may be nothing but amorous hedgehogs! The rut occurs in May and June. Males attempt to woo females in lengthy encounters that involve much circling and rhythmic snorting and puffing.

Hedgehogs are known as 'the gardener's friends' as they eat slugs, beetles, caterpillars etc and do no harm – but you can do harm to them if you use pesticides and slug pellets (even if they claim to be wildlife friendly). They will



rescued hog (Prickles in a Pickle)

appreciate some extra food – dried cat biscuits are best put in a simple feeder to prevent it being eaten by other creatures. Also, fresh water is welcomed, especially in the summer. If you have a pond ensure that there is a means of escape – they can swim – but not forever!

Hedgehogs are nocturnal and spend the day sleeping in a variety of places, including hedgerows/dense shrubs; long grass/overgrown areas; under sheds and decking; and in piles of cuttings that may be destined to be burnt. You may want

to put a hedgehog house in your garden. Put the house where it won't be disturbed, against a wall, bank or fence if possible and under or near plant cover. Face the entrance away from cold north or north-east winds and you're more likely to encourage a guest. They appreciate 'wild' areas in a garden, so if these need to be strimmed please check for hedgehogs first; also move the 'bonfire' pile before it's burnt, or even better put the cuttings somewhere out of the way so they create a safe haven for all sorts of creatures.

Hedgehogs can travel around a mile every night, so they may need help to get into and out of your garden. Try cutting holes in fences, removing bricks from walls, or digging tunnels under the garden boundary – 13x13cm gaps are large enough. Talk to your neighbours and create hedgehog highways!



Encouraging Moths - a special case 15

Stop! Don't skip past this section. Thinking about moths in your garden is really, really important, even if you think you don't like moths. Both adult moths and their caterpillars are vital food for a wide variety of wildlife. Night-flying adult moths form a major part of the diet of bats. Many birds eat both adult moths and their caterpillars, but the caterpillars are especially important for feeding the young. In the UK most of your favourite

Did You Know?

NONE of the moths you might find in your garden on a warm Devon evening are likely to eat your jumpers. There are 2500 species of moths in the U.K. and the larvae of only two of them will commonly seek out the animal fibres in your clothes.

garden birds rely on moth caterpillars to rear their nestlings; blue tits alone need an estimated 35 billion a year!

And stop working so hard! Moths and their caterpillars need fallen leaves, old stems and other plant debris left to help them hide from predators, and especially to provide suitable places to spend the winter. If you want your garden

elephant hawk-moth

to look tidy in the summer, try leaving some old plant material behind the back of borders or in other places out of sight. Many moth caterpillars feed on the native plants we consider weeds, so tolerating some weeds and long grass in your garden can be very beneficial.

Impress visiting children with the incredible pink

and green elephant hawk-moth by leaving a patch of willowherb in the garden. Privet or lilac bushes may bring you our largest native moth, the spectacular privet hawk-moth and for the exquisite pale yellow swallow-tailed moth, you need to leave plenty of ivy. If you have a large garden, leaving a patch of brambles will bring you the very pretty peach blossom moth. An apple or crab apple tree will bring you the huge fluffy puss moths but for smaller gardens, think along



the same lines as for bees. Grow lavenders and verbenas for moths such as the

silver Y, and add in pale, night-scented plants such as honeysuckle and nicotania for a variety of pollinating moths, leave longer and more varied grasses for the lappets and drinker moths – then sit out there on an evening in June with your favourite tipple and watch the show.

privet hawk-moth

Search for...

rhs moths in your garden
butterfly conservation org

Sarah, Blackawton

16 Project: small gardens and balconies

Perhaps you feel your outdoor space is too small to be of use to wildlife but this is almost certainly not the case. A bare wall can be turned into a mini wildlife haven by simply letting ivy grow there, which will give a home to numerous beneficial insects and birds as well as providing a vital nectar source at the end of summer. Add some bird feeders, a nest box and an insect hotel and that bare wall will become a busy little ecosystem. A small courtyard or just a doorstep can be home to wildflowers in pots and planters, while window boxes filled with herbs such as marioram, chives and thyme are not only great for your cooking, but brilliant for bees,



butterflies and other pollinators. A mini pond can be anything from a washing up bowl to an old sink. Pile some stones at one end, add a few flowering pond plants and position it where it gets a bit of sun and it'll soon become inhabitated. Sink it into the ground, or provide a way to get up to it, and you'll find all sorts of animals gratefully taking a drink from it. However small your space, if you make it wildlife friendly then nature quickly moves in.

So here's what you can do:

Add a bug hotel

You can buy one of these or make one. It can be any size – basically a collection of hollow tubes – canes or stems for instance, bundled together and given a roof to keep out the rain. They can be hung on a wall or be freestanding. Solitary bees and numerous other bugs will make these a home for sheltering, hibernating or nesting.

Wall Space

Think about using your wall space – for hanging a nest box, planters with flowers for pollinators or for growing climbing plants up to create a 'green wall'. An ivy-clad wall is great for food, shelter and nesting.

Growing Space

Window boxes and patio pots planted with insect-friendly flowering plants can be a great pollen food source all-year round. The RHS has lots of advice on what to plant to provide a rotation that fills in the 'hungry' gaps.

Untidy and undisturbed

A wilder, more neglected corner even in the smallest garden, especially if planted with a few wild flowers, will be well appreciated by insects, small animals and birds as a source of food and shelter.

Wild flowers

And why not plant a patch of flower meadow instead of a lawn, or create a 'mini' meadow in a window box? Wildflower seed mixes are easy to find now, and create an attractive and

Project: small gardens and balconies 17

colourful feature much appreciated by insects and birds.



Bird feeders

Hang a bird feeder or two. There are many to choose from – hanging, wallhung, freestanding, and for balcony rails.

Water

Drinking water is a must – just a simple shallow dish with a few pebbles in so insects can drink, or a traditional bird bath will do the job. A mini-pond bought ready made or an old basin, sink or recycled pot will be most

welcome. Add stones in the bottom and a shallow way in and out together with a couple of aquatic plants and create your own oasis.

Log pile

Some old logs piled in a corner will attract all sorts, especially if they are rotting – insects and even reptiles and amphibians will find shelter there and create a mini ecosystem.

Hedge over fence

If your small garden has a fence, why not plant a hedge instead? This will create a real haven for wildlife, especially if you use indigenous planting.

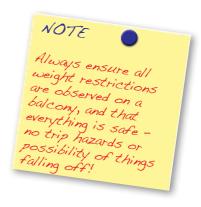
Mini veggie garden

Grow a few veg or pots of herbs – a delicious crop for yourself can be had, plus a bonus for wildlife, especially if you allow some to flower and go to seed.

What you can do is only limited by your imagination!

Victoria, Dittisham





18 Project: wild patch

It doesn't matter what size your garden is, there's always room for a wild patch! Set aside an area of lawn, part of a border or even a large container, and watch as nature takes control.

Whether it's a flowerpot, a flowerbed, a wild patch in your lawn or an entire meadow, letting nature do as it pleases will provide a vital habitat and food source that can support a wide range of insects and other animals.



The easiest way to let nature take control of a patch in your garden is quite simply, to do nothing. No mowing, no weeding, no digging.... nothing.

Long grass, peppered with flowers (some of which we might consider weeds), is one of the rarest habitats in our well-tended gardens, yet it is incredibly beneficial for wildlife. Patches of long grass encourage different plant species to grow, help insects to thrive, create feeding opportunities for birds and provide shelter for small mammals. In fact, the less pristine the lawn, the more promising it is for wildlife.

If you are able to set aside a large area of lawn, cutting a path through the wild patch can instantly make it look more cared for and it allows you to wander through your patch to see what wildlife it has attracted.

Log piles made of old dead wood create an inviting home and feeding ground for insects, toads, newts, bees and hedgehogs.

You can create a 'dead' hedge (see page 21) if you need to partition a wildlife patch off from the rest of the garden. These make ideal wildlife homes, and provide a use for all your garden debris.

If you have hedges bordering your wild patch, allow them to grow out, and maybe cut them one year in three rather than every year, but please, not during the bird-nesting season! This will allow the hedging plants to flower and fruit more profusely, providing food for birds and other wildlife.

Sue, Blackawton





The simple way to encourage wildflowers into your patch is to stop mowing. Say 'no to the mow'!

Adopt a two-cut approach to your lawn, mowing once in autumn and then again in spring, removing all of the cut grass. This will lower fertility and give perennial wildflowers a chance to push through the grass.

You'll soon see species such as rough hawkbit, yarrow and selfheal coming through, depending on your soil type. Your once sterile lawn will soon be buzzing with life – and you'll have the time to enjoy it, now you're not doing all that mowing.

You might want to give your area a bit of a hand by planting some wildflower plug plants. Plugs are available online – don't forget to check they're from a UK source and check that your soil type is compatible by doing a simple pH soil test. Plant plugs directly into your lawn after your autumn or spring cut. Planting plugs of the semi-parasitic yellow rattle can help to reduce the vigour of your grass.

If starting from seed raise plug plants yourself by planting the seeds into pots

a marmalade fly

or a small nursery bed. If you don't have much space, you can grow wildflowers in pots or window boxes.

For a display of wildflowers in a bed or border, lay a couple of inches of sand and simply sow direct at a sowing rate of 2g per square metre. Sand helps to keep competing grasses at bay and your wildflowers will thrive in these nutrient-poor conditions, creating a garden that the bees will love you for.

Sue, Blackawton







20 Project: wildlife shelters

Log piles

Creating a log pile is quick and simple and will rapidly start to attract wildlife to your garden. It's the perfect use for a shady, damp bit of ground that's not good for much else. Paradoxically a tree will support more life when it's dead than when it's alive and the longer you leave your wood pile, the



more life it will bring to your garden. Insect life will move in very quickly, particularly in the lower, damper part, with woodlice, centipedes, beetles and worms soon taking up residence and spiders and small mammals moving into the upper, drier areas. Naturally the animals that like to eat these little critters, like lizards, slow worms, frogs, toads, newts and hedgehogs, will soon follow and birds such as wrens and dunnocks will also start taking an interest. These insect-eaters won't restrict themselves just to the log pile but will soon be happily hoovering up slugs, snails and other insects from the rest of your garden. Look out too for mosses, lichens and fungi growing on the decaying wood, many of which can be quite beautiful. If you dig a few inches of soil away before you start the pile it will ensure that the bottom layer never dries out. Planting

a climber such as a honeysuckle to grow over it will help it stay cool and moist, make it look more attractive and provide flowers for visiting pollinators. Almost any wood can be used, though avoid timber that has been treated. A mix of thinner branches and thicker logs, ideally with the bark still on, will mean it will start to rot quickly but will still last a long time, and it can be added to whenever you find some unwanted wood. Adding leaf litter to the pile will even make it attractive to hedgehogs and toads as a hibernation spot.

Stumpery

If you want to take your log pile to the next level then you can create a stumpery. These look fantastic and create the ideal habitat for many creatures, especially stag beetles. To make a stumpery you will need a range of logs of different sizes, anywhere from 10 to 60 cms thick and varying in height from 60 to 180 cms. Ideally have a mix of different hardwood species like oak, beech and ash. Choose your spot - again you want it at least partially shaded. and it's a bonus if it's a bit damp and mark out a square big enough to fit in all your logs on end. Dig it out



at least 30cm down, with areas 45 to 60 cm deep for your taller logs. Now jam in as many logs on end as you can, with all different heights next to each other. Use some of the soil you dug out to back-fill between the trunks so that you end up with a really solid stand of logs. You can also add more soil between stumps to plant ferns in, which look great and will benefit from the rotting wood. Drilling a bunch of horizontal holes into the taller logs will give places for insects and solitary bees to breed.

Stone piles

If you've ever lifted up a stone and marvelled at the range of different creatures living under it, and the network of tunnels they create, then you'll know why a stone pile in your



garden creates such a great ecosystem. The stones in contact with the ground provide one habitat and then the drier levels

above become home for an entirely different set of small mammals and reptiles. If some of the stones catch the sun then you'll soon spot lizards and other reptiles sunning themselves and soaking up the warmth.

Leaf piles

If you've got a sheltered corner in your garden a leaf pile can be a great source of protection and food for small mammals and ground-feeding birds. It's also a perfect hibernation spot for hedgehogs and other wildlife that like to sleep away much of the winter. Ideally leave a leaf pile alone for two years, and by then it'll be ready to dig

into your flowerbeds.

Dead hedge

This is a great structure for dividing up parts of the garden and is much loved by birds and a host of small wildlife. When I had to cut down some roadside ash trees I used



the branches to create a dead hedge and it's become a centre of the action for an ever-growing flock of sparrows, along with wrens, robins

and other birds. I simply dug in two rows of 15cm-thick uprights a metre apart, with a metre gap between the rows. I wanted a living hedge to grow out of this dead hedge so I planted little hawthorns, willow, sycamore, hazel, dog rose, spindle, honeysuckle, and anything else I had lying around, before piling all the branches on top. I kept adding more stuff until it had reached a height of around a metre and a half. The young trees and shrubs are growing up through, protected by the ash branches, and as the twigs rot they feed the young hedge plants. In the meantime numerous insects and small mammals have moved in and birds are constantly flying in and out.

John, Capton



22 Project: **bug hotel**

A bug hotel can be an essential habitat for many creatures, whether built off the ground or wall-hung. These are safe spaces for a multitude of minibeasts to shelter, lay their eggs, raise their young and seek refuge from predators. You can buy one ready made, or you if wish to use up unwanted scrap materials you can create your own design!

1 Wooden pallets

4 Hay/Straw

7 Woodchips

some with holes

through them

11 Pipes

5 Moss

pots

2 Offcuts of wood

Planks of wood

Bits you can build a shelter with... 12 Dead hollow stems cut from shrubs and herbaceous plants 13 Pinecones 14 Turf 15 Hollow bamboo 6 Dry leaves/grasses canes 16 Rotting logs 8 Terracotta/plastic 17 Bundles of sticks 9 Roofing tiles/slates 18 Bark 19 A sheet of roofing 10 Bricks, preferably felt or similar, to provide a waterproof for the larger creatures and rotting wood for wood-boring beetles. The different materials in the layers provide suitable habitats for various creatures: beetles, centipedes and spiders will love dead wood and bark; ladybirds will choose dry leaves, straw or bundles of sticks; rolled up corrugated cardboard will draw in lacewings. When complete, add a roof made from old slates. tiles or planks covered in roof felt.

A wall-hung bug hotel of bamboo sticks bundled together and holes drilled into wood will attract bees and solitary wasps. Holes of between 2mm and 10mm diameter will provide shelter for different species. It should ideally be at a height of about 1 metre, in a position that catches the sun in the morning but is then in dappled shade for the rest of the day.

Sally, Dartmouth

To build a large shelter at ground level that can accommodate frogs and toads as well as insects, you need to find a flat area in a cool, damp spot

roof

in your garden. One way to start is to lay some bricks, stones or blocks to make a base, then pile on three layers of pallets or planks separated by bricks. Stuff the various different materials in between the layers - make it up as you go along. The lower section should have bigger holes

Search for ... wildlifetrusts how to build a bug mansion



If gardening is a conversation with nature, then composting is a master-class where the gardener sits and listens for a while. The gardener need only deliver the raw materials and leave nature to deploy a vast and diverse army of composting organisms - the hard work in the composting process is done by bacteria and fungi.

A single teaspoonful of soil can contain up to 100 million bacteria and hundreds of metres of fungal threads. If in any doubt about the magnificence of composting, consider what a deep mess the world would be in without it; gathering our organic detritus into a heap allows the gardener to produce free soil improver/mulch and put all that goodness to work in a targeted fashion.

The size and detail of the composting operation will vary from garden to garden and a little care is required to keep the ingredients balanced, but there are plenty of useful sources of composting advice on line.

Robin, Cotterbury



a minibeast paradise (above) and it produces fantastic free compost, full of life, for the garden (below)



Top Tips



Instead of a bonfire, or carting carloads of twiggy material to the recycling centre, pile up rose prunings etc in a separate heap behind the compost heap. It helps to chop up the twiggy thorny stuff and press it down from time to time. It will rot down much more slowly than the composting heap, but in time provide further soil enrichment and, in the meantime, provide a home for garden wildlife.



24 Project: vegetable patch

All the articles in this booklet apply also to making a wildlife-friendly vegetable garden – provide for insects to pollinate your crops, encourage minibeasts aplenty to enrich your soil and keep it healthy, and create habitats for toads, hedgehogs and birds which will feed on all your garden pests.

The biggest contribution you can make is to say **NO** to *any* kind of chemical pesticide or slug pellet (even 'wildlife friendly' ones). These kill off pests, yes, but also their natural predators and pollinators. Instead, try to attract and encourage beneficial insects that predate on pests, such as lacewings, ladybirds and hoverflies whose larvae feed on pests like aphids



and red spider mite. You can attract these with so-called 'welcome mat' plants – angelica, dill and fennel are good examples – and encourage flowering plants in the veg patch to keep up a supply of pollen the year round. Let a few plants, like parsnips or carrots, flower and go to seed. They are beautiful, popular with insects and birds, and their dead stems provide hibernation roosts for overwintering insects.

Healthy soil encourages strong, healthy growth, which is more pest resistant, whereas artificial high-nitrogen fertilisers can encourage sappy, leafy growth that's more vulnerable to pest attack. So, grow green manures and make sure you have a compost heap to provide you with plenty of your own free animal-friendly, all-purpose soil improver.

Deal with your garden cuttings and brash by making a deadwood hedge, which will provide extra space for wildlife as the material slowly rots down.

Create physical barriers such as crushed eggshells, coarse bark or sharp gravel around veg beds to help deter slugs and snails. If you have a big slug problem, best to spot slugs at night with a torch and pick them off by hand - a couple of sessions seriously reduces the slug population!

Get to know which pests attack which crops and when - you can use nets and fleeces to protect crops at crucial times in their development to protect your yield. See Charles Dowding's YouTube video Pest prevention - reduce damage on different vegetables, through understanding the pests.

Sue, Blackawton





In the South Hams we have fairly high rainfall with torrential downpours at times; lots of cats, and here in central Dartmouth jackdaws and herring gulls which, in cold weather, will raid and clean out a bird table and consume a fat ball in minutes.

So, although there are many different types available I have found that cylindrical feeders work best. The gulls and jackdaws can't get to the food and they don't generate too much waste. Some form of rain cover is almost essential to avoid most foods turning to soggy sludge and to avoid toxins like aflatoxin developing in peanuts. Like all feeders they must be cleaned regularly to avoid the spread of disease.

They can be hung under a generous eave, placed on a pole or swung from a tree. Squirrels stealing the food can be a problem – one inventive friend has even slung one from a pulley on the end of twenty feet of rope to

defeat her very determined squirrels! But there are 'squirrel baffles' available commercially, and there are 'squirrel- proof' feeders on the market also. Make sure cats can't get near!

Beware – cheap bird feeders tend to go brittle in the sun, but feeders like those sold by the RSPB do last, are easy to clean and can have a tray added that catches any food dropped so it gets eaten by birds and not anything else.

Goldfinches, often seen in the South Hams as a feeding visitor, find nyger seed very attractive, and sunflower seeds attract all kinds, but what you aim to attract will not necessarily dictate what you see feeding! I have blackbirds, robins, chaffinches and both rock doves and wood pigeons clearing up the morsels dropped by their smaller friends.

Food shortages can happen any time, so feed regularly all year – and always provide a source of water. In the autumn and winter birds need high energy foods; black sunflower seeds, sunflower hearts and fat balls (always remove the mesh they come in). In spring and summer avoid fat and bread as these can be harmful if fed to chicks. Never put out loose peanuts. These should only be served in suitable mesh feeders that will not allow sizeable pieces of

peanuts to be taken, reducing the choking risk to chicks.

Jon, Dartmouth Essential reading

rspb.org.uk/
birds-and-wildlife/advice/
how-you-canhelp-birds/feeding-birds/safefood-for-birds/

26 Project: nestboxes



Gardens are becoming a major habitat in Britain, and together our gardens cover more square miles than all our nature reserves. Being uniquely mobile, birds are particularly suited to exploit this fact. We can help by providing nesting opportunities in our otherwise often over-tidy gardens.

There are basically two types of nest box – those with a hole entrance and those with an open front. The size of the entrance in the latter is not particularly important – one size fits all – but the diameter of the hole in the former dictates which species you might attract. These birds like a hole just big enough for them to fit through, which means larger predators can't follow. A 25mm hole will attract blue tits, a 45mm hole starlings. Blue tits, great tits, nuthatches and tree sparrows prefer hole entrances. Birds that like thick undergrowth such

as robins, blackbirds, song thrushes and even flycatchers prefer the open-fronted variety.

However, some species require specialist nest boxes. Swifts have

declined drastically, partly due to lack of nest sites as buildings have fewer of the nooks and crannies they need. If you can fit something under the eaves of your roof, consider putting in a swift box – the RSPB have a product and advice.

Positioning a box is also important. Make sure it is out of continuous direct sunshine to avoid overheating - so never face a nest box directly south. Between north and east in a sheltered spot is preferable. Westfacing boxes may be blasted by wind and rain. Position at least 1.5m above the ground on a wall, tree or fence post with some cover around or near the box. Open-fronted boxes should be hidden in vegetation, such as on an ivy-covered wall, to keep them out of sight of predators.

Small birds such as blue tits, great tits and wrens will snuggle down together in a nest box to get through long winter nights, so putting boxes up in the autumn or early winter is beneficial. Also many species start prospecting for suitable nest sites as early as January.

It is not unusual for a nest box to be left empty in the first season, but if the same happens in the second year try moving it to a different site. Clean out old nests in early autumn and brush out with a stiff brush to remove parasites and other invertebrates. If the old nest is left in place blue tits and great tits,

for instance, won't use the box again.

Richard, Blackawton



There are many nest boxes available, like this open-fronted example - or you could build your own.



A house sparrow box where several families can live next to each other.

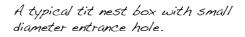


Specialist nest boxes - the above are purpose-made for house martins and swallows.



ose-made

A variation on the openfronted theme.



28 Project: pond



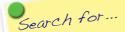




Possibly the most valuable thing you can do for the wildlife in your garden is to create a pond. Over the last century nearly 70% of ponds have been lost from the British countryside, which is a huge loss of a habitat so vital to so many creatures. Whether large or small - and even a washing-up bowl pond is enough – adding water to your garden makes an immediate and extraordinary improvement. All manner of creatures from insects. and birds to frogs, hedgehogs and bats will use your pond to drink, lay their eggs and bathe. A whole range of plants will also thrive in and around your pond, adding a big splash of colour to your garden and a treat for your pollinators.

Very quickly a pond will attract the most important visitors to your garden: insects. In fact pond skaters seem to find their way to a new pond at a remarkable speed! These insects will attract the many creatures who feed upon them and you will enjoy them using your garden. Of course birds will come to visit, but also frogs, toads and hedgehogs, who will in turn devour your slugs and snails while they wander around your garden. Before long you will have dragonflies and damselflies, and of course their larvae living in the water, all providing food for other creatures. As the food web in your garden grows, so too will the variety of birds and mammals who visit.

rspb stocking a pond nhm pond life facts wildlifetrusts how to build a pond



Certain things are important to bear in mind when making a pond. Ideally it should be positioned in partial shade - too much sun can lead to excessive algal growth, but in full shade it'll take a long time to warm up in spring. It's important that there's an easy way in and out of the pond, so at least one side should have a gentle slope or you can pile stones up from the bottom. Equally, if it's a container sitting on the ground, give a way for frogs and newts to get up to it. It's good to have a shallower shelf, around 30cm deep, on other sides to position marginal plants on. Aim for having around half the surface shaded by plants. As the water level in your pond fluctuates it's great if it creates damp areas on the sides, which many insects love.

The best way to make a natural-looking pond is to dig a hole in the ground and put in a liner. The depth can vary across the pond from 15cm to 60cm, which will suit most inhabitants, and a partially submerged rock will be appreciated. The bigger it is, the more wildlife it will attract but if you don't have the space for anything bigger, even a mini pond will give a much needed home or a drink to a whole range of insects, amphibians, mammals and birds.

Providing other habitats near your pond will also make creatures feel more safe and become another source of food for them. A pile of stones and a little stack of logs will mean that your amphibians have got the land-based habitat they need as well as the watery one, and reptiles like lizards and slow worms will love a waterside home!



An established wildlife pond made using a liner



30 Project: **bog garden**

Does your garden have a waterlogged area you're thinking of improving? Are you thinking of putting in a pond, but worried about your young children's safety? Would you like to attract different wildlife from your normal pond dwellers? If the answer is "Yes!" to any of these questions, you need a Bog Garden.

Planning a Bog Garden: Keep it small. Research the plants suitable for your particular soggy area: they will differ from pond plants. Combine plants of differing heights and flowering times.

Establish Your Bog Garden: Choose a level spot away from overhanging trees. Dig a hole about 30cm deep. Lay a liner, making sure to cut drainage slits. Replace the soil, and water thoroughly. Leave to settle for a week before planting.

Maintaining Your Bog Garden:

Water when dry, preferably with rainwater. If a large site, put in stepping stones.

Alan, Totnes

Top Tips:

When digging into turf, upend the sods and place around the edge of the bog garden to create a nutrient-rich medium for plants.

If you don't have a suitable spot in your garden, a container can be used but will need more watering.

Palustris and uliginosus mean bog or marsh in Latin, so look out for these words when choosing your plant species.







Siuggested plants -

Creeping Jenny - Lysimachia nummularia Hemp-agrimony - Eupatorium cannabinum Marsh-marigold - Caltha palustris Meadowsweet - Filipendula ulmaria Plantain lily - Hosta Spp. Purple-loosestrife - Lythrum salicaria Snake's-head-fritillary - Fritillaria meleagris Water Avens - Geum rivale Yellow Iris - Iris pseudacorus

Project: holiday home gardens 31

Holiday home gardens can make a real difference to the biodiversity in our parishes as they have periods when they are left completely undisturbed. This is particularly so in winter when many creatures need to be left in peace to survive the cold. If you can add into that garden some of the habitats that creatures love, such as a little pond, log, stone and leaf piles and plenty of nectar-rich flowers then your garden will quickly become a haven. All of these require minimal, if any, maintenance.

Create an insect-rich environment and the frogs and lizards soon follow, along with shrews, voles and hedgehogs. You won't need feeders as birds will come to search among the leaves and wood piles to find a winter feed. As spring appears, slugs and snails won't stand a chance as many of your now-resident wildlife will be spending their nights seeking them out to eat.

Wildlife loves a habitat-rich garden, and leaving the grass to grow long enables wildflowers to emerge which attract bees, butterflies, moths, hoverflies and other vital pollinating insects. If you feel that the longer grass is looking messy then mow a strip around the edge of your lawn, and perhaps a path across it, and immediately it'll look fantastic. There'll be insects living in there that you'll never see but that will become an essential food source for many small animals including bats, house martins, swallows, warblers, thrushes and numerous other birds whose numbers have been falling year on year.

Victoria. Dittisham



How to make your garden wildlife friendly

The Habitat Group is a collection of people from different parishes in the South Hams who are concerned by the loss of biodiversity that we are seeing all around us but are convinced that we can turn it around by creating wildlife friendly habitats. Whether it is a garden, a verge, a field or a windowbox, if we simply refrain from using pesticides and make our patch welcoming to wildlife, then nature quickly starts to move back in.

We're working on our own gardens and fields and spreading ideas as far and as wide as we can of how we can reverse that loss. Whether it's planting wildflowers, making ponds, feeding birds, creating log piles or simply not mowing our lawn so often, it's all helping to turn the tide.

Our mission statement is "To improve the biodiversity of our parish and the surrounding areas through the gradual development of a variety of sustainable habitats", and that says it in a nutshell.

The People's National Park

With so many of our national parks in a nature-depleted state we are building our own 'People's National Park' of nature-friendly gardens and farms to show what can be done. If your garden is wildlife friendly and you'd like to add it to the People's National Park go to www.thehabitatgroup.uk to learn more.

