

# Bee a Garden WILDLIFE HERO

This handy guide gives you tips and activity ideas to help you create safe and cosy habitats for wildlife in your garden.

Your adventure starts here.

**#GardenWildlifeHero**



# Thank you for signing up to be a Garden Wildlife Hero

## Wildlife needs you

Did you know that over 10,000 different wild species have been spotted across Birmingham and the Black Country? The list includes everything from mosses to mammals, and according to EcoRecord, our Local Environmental Record Centre, our 10,000th species was actually spotted last year! This news fills us with hope, but also despair, as we know some of our most cherished species are in decline. This is why we need everyone to become our Garden Wildlife Heroes. This guide will show you how to create safe and welcoming habitats for bees, hedgehogs, birds, pond dwellers, bats and creepy crawlies.

There are lots of things that you could do such as:

- Create a pond for newts**
- Provide a cosy dwelling for a hedgehog**
- Feed bees with spring and summer planting**

As you prepare your garden for spring, we would love you to focus on providing safe spaces and food for our urban wildlife. Doing so will go a long way towards helping our local wildlife nest and thrive during the warmest months of the year. We would also love to hear about your spring wildlife sightings!

For more information , events and news visit our website  
[bbcwildlife.org.uk](http://bbcwildlife.org.uk)

# Bee aware

There are 24 species of bumblebee in the UK. These fascinating insects have a huge impact on our lives.



All bumblebees shown are worker bees



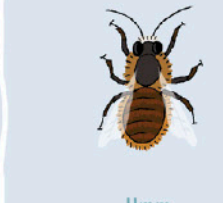
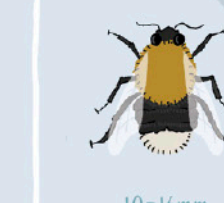

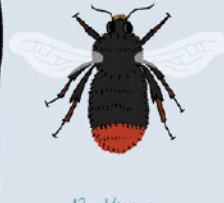




 14-17mm	 12-18mm	 11mm	 10-16mm	 12-18mm
<input type="checkbox"/> Buff-tailed bumblebee	<input type="checkbox"/> Willoughby's leafcutter bee	<input type="checkbox"/> Red mason bee	<input type="checkbox"/> Tree bumblebee	<input type="checkbox"/> White-tailed bumblebee
 13-14mm	 10mm	 13mm	 13mm	 14-15mm
<input type="checkbox"/> Red-tailed bumblebee	<input type="checkbox"/> Tawny mining bee	<input type="checkbox"/> Common carder bee	<input type="checkbox"/> Wool carder bee	<input type="checkbox"/> Hairy footed flower bee

Illustration: Corinne Welch © copyright: Royal Society of Wildlife Trusts 2017

## Bumblebees

collect pollen to take back to the hive in 'pollen baskets' on their back legs

How many colourful species will you spot this spring?

At its peak there are between **200-500** individuals in a nest of bumblebees

## Did you know?

*Bumblebees provide us with every third mouthful of food we eat!*

*Also, without bees buzzing around, we wouldn't be able to grow foods such as tomatoes, strawberries and green beans.*

*Their constant activity contributes over £650 million a year to our economy. They really do work hard.*

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# How to make a solitary bee nest

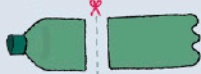
## The bottle method

You will need



- 2 litre plastic bottle
- Scissors
- Bamboo canes (of differing diameters)
- Strong twine

1 Cut off the top (lid) half of your plastic bottle.



2 Measure and cut your bamboo canes to the length of the bottle, and pack tightly inside.



3 Tie the twine around the bottle, and hang it in a sheltered, sunny, dry spot.



Ensure there are no obstructions inside the canes – you should be able to see all the way through!

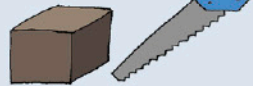
## The wood block method

You will need

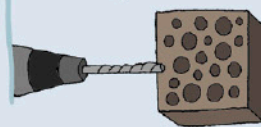


- An untreated block of wood
- Saw
- A drill with varied sizes of wood bit (2mm to 10mm)
- Hammer and nails
- Strong twine

1 Cut your block to 10cm x 10cm x 10cm.



2 Drill different sized holes, evenly spacing them across one side of the wood. The holes should be as deep as possible but not go right through the wood.



3 Hammer a nail into the top of each side, and create a hanging loop with the twine.



4 Hang the the block in a sheltered, sunny, dry spot.



Illustration: Corinne Welch © copyright Royal Society of Wildlife Trusts 2017

# How to be a bumblebee wildlife hero

## Encourage natural predators

Try to avoid chemicals like pesticides or fungicides in your garden. Encourage natural predators instead. Log piles are great for beetles, as are compost bins, which will also take care of your food waste!



## Create potential nesting sites

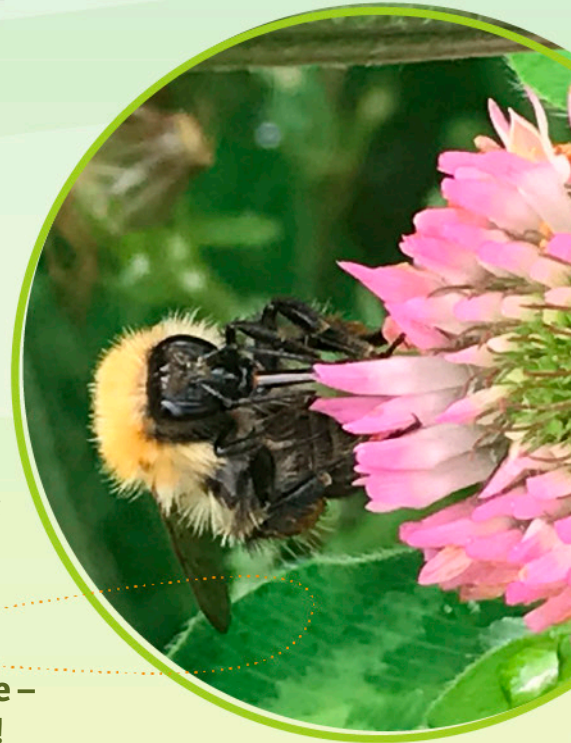
Different species choose a variety of places to set up home. Try making your own solitary bee home or leave a patch of long and short grass as both serve as potential nesting sites for different species of bee.

## Help out a tired bumblebee

If you see a bumblebee on the ground, it's likely to be tired and in need of food. You can help by mixing sugar with water, placing on a teaspoon and leaving it in front of the bee. Once it's eaten its fill, it will 'bee' on its way again.

## Provide a water source – bees need to drink too!

Can you create a wildlife pond? If not, you could use a pot sunk in to the ground or a bird bath containing a few submerged rocks that enables bees to reach the water.



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## Plant nectar and pollen-rich flowers

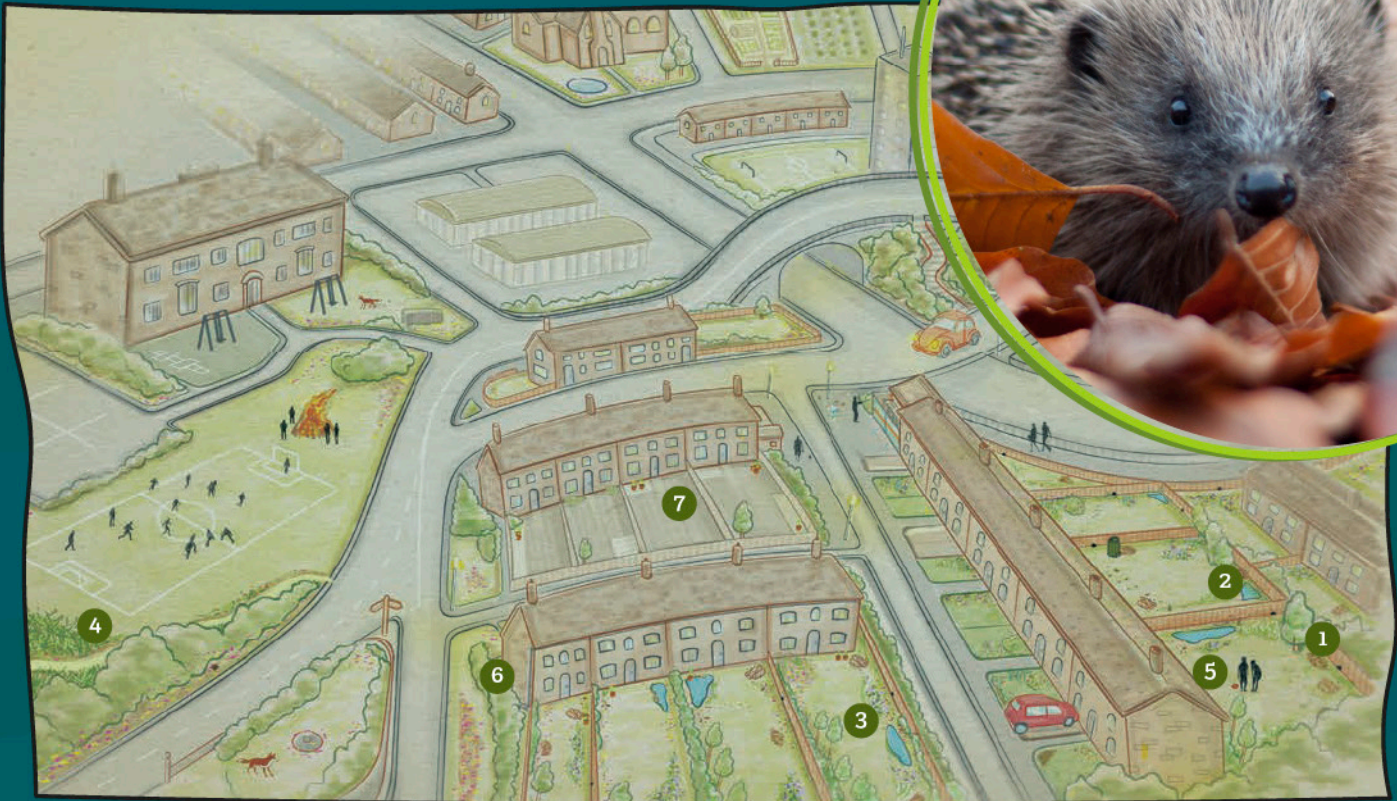
Have a look at this guide to the best plants to attract bees and other pollinating insects to your garden

[bbcwildlife.org.uk/actions/plant-flowers-bees-and-pollinators](http://bbcwildlife.org.uk/actions/plant-flowers-bees-and-pollinators)

# Hedgehogs

©Tom Marshall

There are 15 different species of hedgehog around the world. The UK's hedgehog is found across Western Europe and Scandinavia.



## How to be a hedgehog wildlife hero

Our spiky friends are busy animals travelling up to 1-2km per night on the hunt for slugs, snails, beetles, earthworms and caterpillars. They seek safety in gardens, hedgerows, woodlands, grasslands, parks and churchyards.

- 1 Create 'hedgehog highways' in your fences to connect your gardens.
- 2 Provide an escape route out of ponds - hogs are great swimmers but often struggle to climb out.
- 3 Create a variety of habitats such as ponds, hedges, log piles and compost to attract food for hedgehogs.
- 4 Let a small section of your grass grow long to encourage hedgehog prey but check for wildlife taking shelter before mowing.
- 5 Set up a feeding station offering hedgehog food or meaty pet food with water.
- 6 Keep domestic drains covered. Hedgehogs can fall into them and get stuck.
- 7 Keep your gardens green. Paving, decking and plastic grass in gardens reduces hedgehog habitats.

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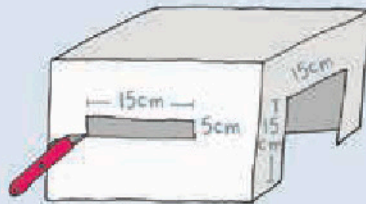


# How to make a simple hedgehog house

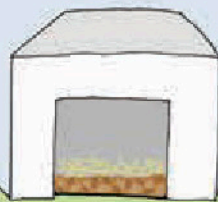
## You will need:

- Medium-sized plastic storage box 
- Stanley knife 
- Leaf litter 
- Dry grass or straw 
- Carrier bag 
- Twigs and dry leaves 

1 Cut two side air vents and an entrance into the plastic box.

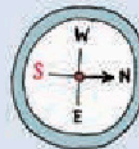
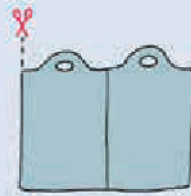


2 Put some leaf litter inside the box, with clean, dry grass or straw on top.



3 Tuck the box near a hedge (with the entrance facing south if possible).

4 Put an opened-up carrier bag over the top of the box, then cover with twigs, dry grass and leaves.



© corinne welch, copyright Royal Society of Wildlife Trusts 2015

## Hedgehog delicacies



Hedgehogs eat a variety of insects, molluscs and other invertebrates, often switching from one food type to the other depending on the time of year. How does your garden stack up as a hedgehog buffet?

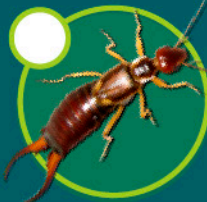
Tick off the menu items you've seen



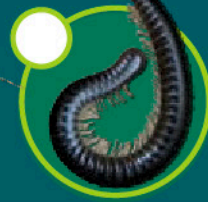
Earthworm



Leatherjacket  
(crane fly larva)



Earwig



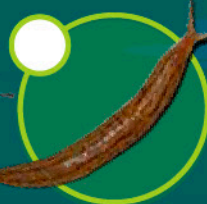
Millipede



Caterpillar



Snail



Slug



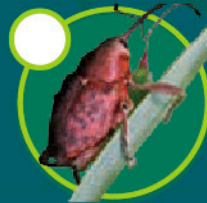
Ground beetle



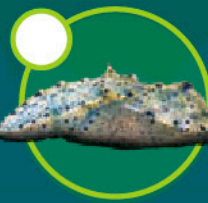
Beetle larva



Chafer beetle



Weevil

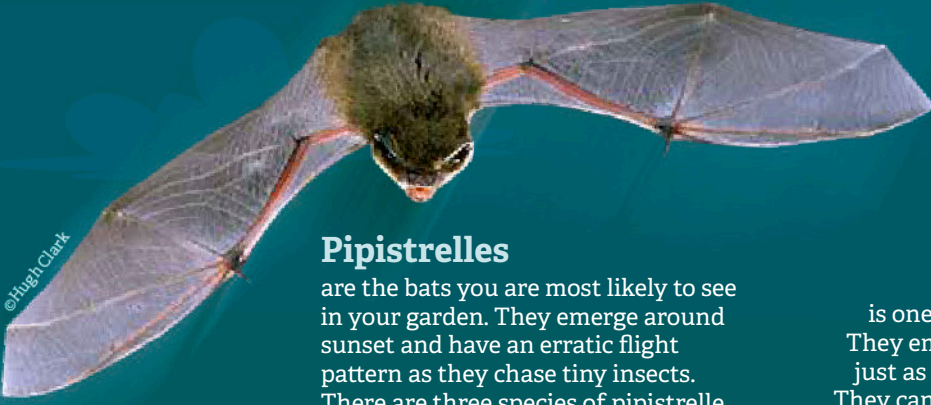


Butterfly/  
moth pupa



# Bats

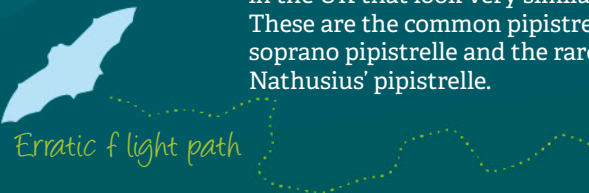
There are over 1300 species worldwide, 17 of which are known to breed here in the UK. They come in all shapes and sizes.



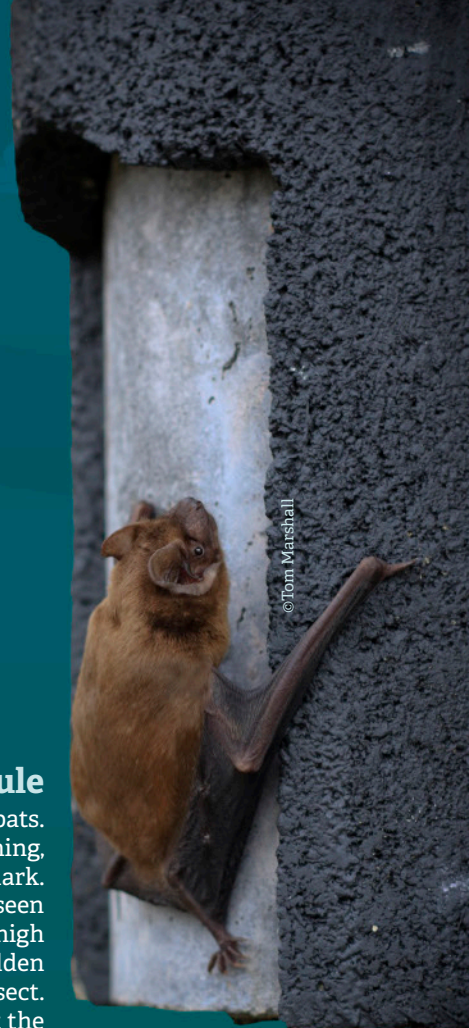
©Hugh Clark

## Pipistrelles

are the bats you are most likely to see in your garden. They emerge around sunset and have an erratic flight pattern as they chase tiny insects. There are three species of pipistrelle in the UK that look very similar. These are the common pipistrelle, the soprano pipistrelle and the rarer Nathusius' pipistrelle.



Erratic flight path



©Tom Marshall

## The noctule

is one of our biggest bats. They emerge early evening, just as it starts to get dark. They can sometimes be seen flying in a straight line high overhead, with sudden swoops to catch an insect. The noctule looks about the same size as a starling, and has long narrow wings.



Flies in a straight line with a sudden swoop



©Tom Marshall

## The brown long-eared bat

is much more difficult to spot. It comes out after dark and usually flies very close to trees, sometimes in and out of the branches. Its flight is slow and hovering, like that of a big butterfly.



Flies close to trees

## Did you know?

### Bats are mammals

Like us and many of our pets, they give birth to live defenceless young that feed on their mother's milk.

### Bats are not blind

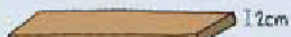
They can see, but at night their ears are more important than their eyes. They use echolocation, a system of locating things by sound to find their way and catch their food in the dark.



# How to make a bat box

## You will need

- an adult to help you
- untreated, rough-sawn timber



- tape measure and pencil



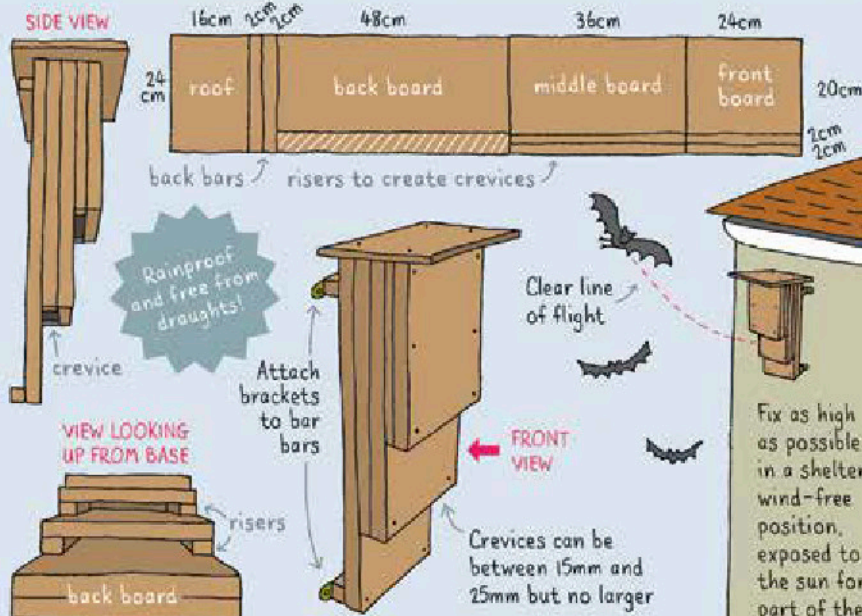
- saw



- hammer and nails



Do not use wood stain or preservative on your box



It is illegal to disturb bats without a license - do not inspect boxes if you think bats are using them. Look for droppings below to check for occupancy.

© Corinne Welch, copyright Royal Society of Wildlife Trusts 2015  
Produced in collaboration with Kent Bat Group wildaboutgardens.org.uk

# How to be a bat wildlife hero

## Avoid using pesticides

Bats rely on a diet of insects such as beetles, centipedes, hoverflies, ladybirds, lacewings and ground beetles.



## Put up a bat box for next years roost.

Remember that all bats are legally protected species, so you cannot disturb the nest once it's up.

## Reduce light pollution

Artificial lights such as garden security or decorative lighting can have a detrimental effect on bats by confusing the time they roost and come out to hunt. If you need to have some lighting on, you could use a dimmers or fit hoods over them to limit light pollution.

## Growing flowers to attract insects can help bats find food

Daisies, umbellifers, herbs and aromatic flowers alongside aquatic plants, trees, shrubs and climbers can provide plenty of opportunity for bats to feed.



**Oxeye daisy**  
Leucanthemum vulgare



**Wild angelica**  
Angelica sylvestris



**Lavender**  
Lavandula x intermedia



**Lady's smock or cuckoo flower**  
Cardamine pratensis



**Mountain ash or rowan**  
Sorbus aucuparia



Create a pond or marshy area to attract small flies. They're a real treat for pipistrelle bats

# Spring Birds

Now spring is upon us and summer approaches, you'll see some new birds in town.

Tick off the birds you've seen



© Janet Packham

## Chiffchaff

**Diet:** Insects

**Habitat:** Heathland and moorland, freshwater, farmland, wetlands, woodland, towns and gardens

**Status:** GREEN



© 2020VISION

## Swallow

**Diet:** Insects

**Habitat:** Grassland, coastal, heathland and moorland, freshwater, farmland, wetlands, woodland, towns and gardens

**Status:** GREEN



© Margaret Holland

## House Martin

**Diet:** Flying insects and aphids

**Habitat:** Freshwater, farmland, coastal, wetlands, towns and gardens

**Status:** AMBER



© Stefan Johansson

## Swift

**Diet:** Flying insects and airborne arthropods

**Habitat:** Grassland, heath and moorland, freshwater, farmland, coastal, wetlands, woodland, towns and gardens

**Status:** AMBER



© Amy Lewis

## Blackcap

**Diet:** Insects in summer, fruit in winter

**Habitat:** Heathland and moorland, farmland, wetlands, woodland, towns and gardens

**Status:** GREEN



© 2020VISION

## Willow Warbler

**Diet:** Insects

**Habitat:** Heathland and moorland, freshwater, farmland, wetlands, woodland, towns and gardens

**Status:** AMBER

A whole host of spring migratory birds from Africa, Central and North-East Europe will grace us with their presence. Species such as chiffchaff, swallows and blackcaps arrive in large numbers.

Most arrive in April and you'll notice their presence in different ways. Chiffchaffs, blackcaps and willow warblers by their song, swallows and swifts by their aerial displays and house martins by their nesting habits. Our resident species of song thrush, blackbird and starling are bolstered by this beautiful influx of spring birds.

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Let us know what birds you've spotted in your garden this spring and summer

This will help us assess local bird population trends.

Download our garden recording sheet here:  
[www.ecorecord.org.uk/index.php?q=wildlife/forms](http://www.ecorecord.org.uk/index.php?q=wildlife/forms)

# How to make a bird feeder

## What you need:

- dry ingredients
  - bird seed
  - cooked rice
  - grated cheese
  - dried fruit
  - breadcrumbs
  - chopped nuts

- hard cooking fat (lard or suet)

- a pine cone, coconut shell or yoghurt pot



Use an old yoghurt pot for this, and always recycle after it's been used

- string



- 1 Mix all the dry ingredients together in a bowl



- 2 Add the fat and give it a good mix around

- 3 Choose your feeder



plaster all over a pine cone



put it round the inside of a coconut shell



press into a yoghurt pot

You can hang this upside down like a bell or turn it out like a cake

- 4 Hang your feeders with string (you may need to make holes and tie the string in before adding the mix)



Hang your feeder where you can watch birds without disturbing them

If you need to melt the fat, ask an adult to help

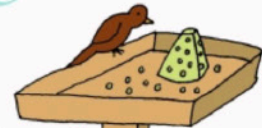


Illustration: Corinne Welch © copyright Royal Society of Wildlife Trusts 2015

# How to be a bird wildlife hero

## Attract migratory birds into your garden by adding food and water

It's important to keep bird feeders and tables clean so birds can stay healthy. You can provide food in lots of different ways by hanging bird seed, fat balls or peanut feeders, using ground and table feeders or making something home made.



Vine House Farm Bird Foods has been working with The Wildlife Trusts since 2007 and have donated **over £24,000** for The Wildlife Trust for Birmingham and the Black Country. Visit [www.vinehousefarm.co.uk](http://www.vinehousefarm.co.uk) to buy bird food and help support us.

## Six Top Tips:

- 1 Keep feeders clean
- 2 Put food out regularly
- 3 Keep feeding stations away from predators
- 4 Plant food sources such as fruit and berry trees, holly, hawthorn, ivy and honeysuckle
- 5 Only put out what gets eaten as you don't want unwanted guests
- 6 Don't forget water for drinking and bathing

## Did you know?

Chiffchaffs sings its name out loud in a simple 'chiff chaff chiff chaff' song from the tops of tree canopies

Swifts are always flying. They rarely touch down and feast on small flying insects.



# Pond Dwellers

A small or big pond in your garden acts as a much needed home for a whole host of mammals, amphibians and insects. All of which are needed to keep biodiversity across the region alive and well.

## Did you know?

- 1 Low bushes provide cover for birds
- 2 Long grass or pots provide shelter for frogs
- 3 Ramps allow wildlife access and escape
- 4 Plants add oxygen to the water
- 5 Ponds create feeding grounds for bats
- 6 Bees rest on floating plants to drink
- 7 Plants provide places for wildlife to cling to and lay eggs
- 8 Rocks create hiding spaces for newts

*Pond amphibians include frogs, toads and newts.*

*Pond minibeasts include water snails, diving beetles, dragonflies and water boatman.*



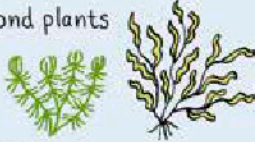

*Aquatic plants that happily live in your pond include water mint, water lilies, purple loosestrife and flag-iris.*



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# How to build a mini wildlife pond

**You will need:**

- a watertight container\* 
- old bricks, rocks and pebbles 
- pond plants 
- spade 

\* Is there anything that you can upcycle? It could be an old washing-up bowl, sink or even a plant pot. Aim for 20-30cm deep.

- 1 Choose a spot. Your pond will need light, but not full sunlight all day. You can dig a hole and sink your container, or just have it sitting on top.
- 2 If the container isn't watertight, eg. an old plant pot, then add a piece of pond liner.
- 3 Add a layer of gravel and rocks.
- 4 Fill your pond with rainwater (tap water contains chemicals).
- 5 Start planting... you only need two or three plants.
- 6 Now watch and wait! Wildlife will come to your pond of its own accord.

One vertical growing plant that reaches out of the water e.g. flowering rush

Use logs or stones to create a range of depths and a slope for creatures to climb in and out

One submerged plant e.g. hornwort or spiked water milfoil

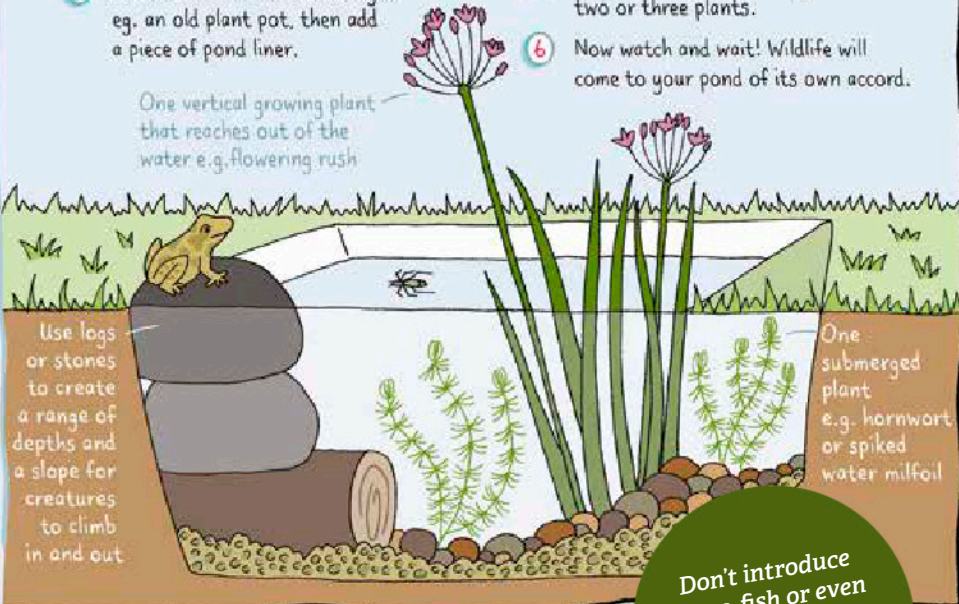


Illustration: Corinne Welch © Copyright Royal Society of Wildlife Trusts 2019 and Royal Horticultural Society 2019

Don't introduce frogs, fish or even water from another pond as this can spread disease.

Your pond doesn't need to be big. If space is limited, you can be creative and use things like a washing-up bowl, a large plant pot or an old sink as a mini pond. You just need to make sure that any creatures you attract are able to get in and out of the pond with ease. It is definitely worth going to the effort of making a water area as a healthy garden pond will support a greater range of wildlife more than any other feature in your garden.

©Anna Williams

## How to be a pond wildlife hero

**Autumn** is a good time to complete maintenance work such as removing silt and fallen leaves from the water in addition to cutting back overhanging branches. Doing these jobs will ensure your pond gets as much light as possible.



**During winter**, you may find your pond freezes over. This is normal and a good healthy pond will be fine. To maintain a drinking source for wildlife, you can leave a ball in the water to stop a section of your pond from freezing. Try not to smash any ice as shards could cause damage. Finally, brush off any fallen snow to allow more light to reach the water.



### Timed splash

You can start your pond at any time of the year, but if you do it in autumn or winter it will be ready for the flurry of activity in the spring.



# Insects

There are more than 1,500 insect species known to pollinate plants in the UK, and almost any insect that visits flowers will aid pollination.

Tick off the species you find in your garden

## Butterflies



Small white



Small tortoiseshell



Gatekeeper



Common blue

## Moths



Hummingbird hawk moth



White ermine



Hebrew character



Garden tiger

## Flies



Dark-edged bee-fly



Drone-fly



Hoverfly



Hornet mimic hoverfly



**We all need to show insects in our region more love.**

Sadly, insects are dying out up to eight times faster than larger animals. Some even face extinction. This is terrible news as insects pollinate our food crops and are the main food source for many birds, small mammals and fish. Without them, life as we know it would dramatically change. In addition to reducing our food choice, the decline of these tiny creatures will cost society millions of pounds in lost revenue due to broken ecosystems.

**You can make a real difference by taking simple action.**

The most common insects we find in our gardens include beetles, worms, ants, spiders, centipedes and millipedes, woodlice, crickets and grasshoppers in addition to butterflies, bees, hoverflies and wasps.

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# How to make an insect hotel

## the express way!

**What you need:**

- hollow plant stems, like bamboo canes
- twigs and sticks
- string

- 1 Collect handfuls of stems, twigs and sticks.
- 2 Tie the bundles quite tightly in two places.
- 3 Post into a hedge / bush or hang in a sheltered place.

## the deluxe way!

**What you need:**

- Small logs or untreated timber
- hollow plant stems, like bamboo canes
- twigs and sticks

**An adult to help with tools:**

- woodsaw
- nails and hammer or screwdriver and wood screws
- drill and 5mm wood bit

- 1 Make a wooden frame, fixing the wood with screws or nails.
- 2 Fill the frame with stems, twigs and sticks.
- 3 Fix a wire loop to the back of the frame and hang somewhere sheltered.


Illustration: Corinne Welch © copyright Royal Society of Wildlife Trusts

# How to be an insect wildlife hero

## Ten simple ways you can help insects survive and thrive in your garden


- 1 Let some weeds flourish (even if it's just in one corner!). One person's weed is another person's wildflower
- 2 Grow more flowers, shrubs and trees
- 3 Cut grass less often
- 4 Avoid using pesticides
- 5 Be considerate to dandelions and nettles – these are crucial for many egg-laying pollinators
- 6 Plant a mixture of species to provide year-round food
- 7 Grow plants that are rich in pollen and nectar
- 8 Leave patches of long grass - pollinators can overwinter here
- 9 Leave perennial plants uncut over the winter - their hollow stems are the perfect shelter for overwintering insects
- 10 Leave small log, leaf litter and pebble piles – great places for breeding and nesting insects






Thank you for signing up to be a **wildlife hero** for bees, hedgehogs, birds, bats, insects and pond dwellers. We hope you've found this guide helpful to make your garden a wildlife haven this spring and summer.

A wildlife friendly garden will bring more and more nature into your daily life for you to enjoy and benefit from. Together, the UK's gardens are larger than all of our National Nature Reserves combined, making them as important for wildlife as they are for our own wellbeing.



We are passionate about doing all that we can to protect and value our local wildlife. Our vision for a greener future starts with reconnecting everyone to nature. And the best place to start is in our own gardens. Even if you have the smallest of spaces, there are lots of wildlife hero actions you can take that will make a big difference.

You can support the Wildlife Trust for Birmingham and the Black Country in different ways – become a member from £3 per month or get involved with one of our events.



Find out more by visiting:

[bbcwildlife.org.uk/support-us](https://bbcwildlife.org.uk/support-us)



**Birmingham &  
Black Country**

[bbcwildlife.org.uk/gardenwildlifehero](https://bbcwildlife.org.uk/gardenwildlifehero)