



#TeamWilder Toolkit: Wildlife Actions - Yards and Small Gardens (Yardens)

Yards and small gardens provide an incredible opportunity for the creation of wildlife habitat and connectivity through urban areas. This toolkit explores some key ways in which you can achieve this no matter how small your outdoor space is.

Contents:

1. **Food:** wildflowers, flowers for all seasons, herbs, shade, berry/fruit bushes, feeding birds
2. **Shelter:** vertical gardens, deadwood, dead hedges, rock piles, bee homes, bird nesting boxes
3. **Water:** container ponds, hoverfly lagoons, bird baths, water dishes, rainwater planters
4. **Management:** peat free compost, compost bins, going organic, hanging baskets, stems and seed heads
5. **Connectivity:** hedgehog highways, porous boundaries, native hedgerows, climbing plants, helping others to grow wilder
6. **Resources**



1. Food

Wildflowers in pots, cracks and borders

Even the smallest of yards can accommodate areas of perennial wildflowers which regrow each year and provide a banquet of pollen and nectar for bees and butterflies, as well as providing an ideal habitat for many insects to lay their eggs and food for caterpillars. Sowing wildflowers in pots can be a great way to add colour and natural beauty to your outdoor space. Most wildflowers will grow happily in pots and if you choose perennial varieties, they will come back year after year with relatively little maintenance. They look great outside the front of your house too, even if space is limited.

Step by step guide:

1. Choose your seeds. Many wildflower seed suppliers sell mix packets of wildflowers to suit different conditions such as full sun, partial shade, and full shade (supplier details below)
2. Prepare your pot by making sure it has drainage holes in the bottom (you could also add rocks or crocks - broken crockery - to the bottom)
3. Fill the pot with soil (wildflowers don't need compost, but if you want to use it make sure you mix it with some low nutrient soil to create a growing medium that's not too rich for wildflowers)
4. Leave about 2.5 cm of space at the top
5. Scatter your seeds thinly and evenly over the soil, then cover with a thin layer of soil
6. Water your seeds being careful not to disturb them
7. Place your pot in a sunny spot and water regularly



Photo of wildflowers in pots: Robin



Wildflowers thrive in low nutrient soil so do well in **areas of gravel and grow in cracks between paving slabs and bricks**. If you have an outdoor grey space with some dusty soil or gravel just scatter some seeds and see what comes through. Or you could **lift a paving slab, break up the surface of the soil with a trowel or gardening fork, and scatter some seeds** there to create a mini-wildflower patch.

It's useful to consider your space and how tall you'd like your wildflowers to grow. If you'd prefer lower growing plants, select species that flower on shorter stems.

If you desire to create a more **instant impact**, you can **buy plug plants or perennial wildflowers** from a garden centre that are ready to flower – be sure to seek out garden centres and nurseries that sell plants in peat free compost.

Making it easier: If you find lifting and bending difficult, you can reduce the strain by planting in smaller pots which are easier to lift, place pots on raised surfaces like tables or benches and use raised beds for planting. Small 15L bags of peat-free compost are easier to handle.

Seed and plug plant supplier info:

- Emorsgate supply a large range of seed mixes:
<https://wildseed.co.uk/page/management-of-meadows-and-grassland>
- Cumbria Wildflowers sell a range of seed mixes and plug plants:
<https://www.cumbriawildflowers.co.uk/>
- Boston Seeds is another recommended supplier of seed mixes, plugs and bulbs:
<https://www.bostonseeds.com/>

Peat free plant supplier info:

- Mires Beck nursery at North Cave is an excellent nursery supplying plug plants of local provenance <https://www.miresbeck.co.uk/>
- Notcutts Garden Centre in Pontefract sells native perennial wildflowers in peat free compost <https://www.notcutts.co.uk/plants>
- The Little Green Plant Factory - Online sales of alpine, bulbs, climbers, herbs and veg, grasses, herbaceous perennials, roses, shrubs and trees <https://thelittlegreenplantfactory.co.uk/>
- Brunswick Organic Nursery in Bishopthorpe, York sell a wide range of plants in peat-free compost <https://www.brunswickyork.org.uk/>
- B&Q also now sells a range of plants in peat free compost – and details of peat content are displayed on all plant labels

Leave your weeds: So much of our native wildlife relies on native plants. Plants considered to be 'weeds' are valuable food for caterpillars, birds, and pollinators. Before reaching for your trowel, it's worth doing some research about the wildlife these plants support - this may make you find a space for them in your garden. You can transform your relationship with these plants overnight and start valuing their contribution to your yard!

Planting for butterflies: Butterflies are declining faster in urban areas compared to rural regions and this is largely due to lack of suitable habitat and food sources. Although most wildflowers with pollen will support butterflies, caterpillars often need specific 'host' plants to support their development.

Growing host plants in your outside space isn't a guaranteed way to attract specific species of caterpillar, but they will at least offer an extra source of food for pollinating insects. Here we've focused on the species you are most likely to see in your garden or yard.



some will spread as far as they can (e.g. mint and lemon balm) and some will self-seed far and wide (marjoram and fennel). To prevent herbs from becoming too large and spreading you can grow them in pots on a patio or plant in a pot or bucket (add drainage holes) and sink it into the ground if you wish to grow them in your garden.

Here are some herbs that are perfect for growing in pots, wonderful for pollinators and great for people too! Always seek advice before drinking herbal tea or tinctures when pregnant.

Herb name	Description	Uses for people
Rosemary <i>Rosmarinus officinalis</i>	Rosemary can flower as early as February providing great early nectar for bees. Make sure you don't waterlog the roots.	Lovely on potatoes or with lamb. Add to a steam bath for colds and as a wash for your hair and scalp.
Caraway <i>Carum carvi</i>	A biennial which grows to 20 cm and sends 60 cm flower heads in the second year. Lots of white umbels, irresistible to pollinators.	Use the seeds or 'fruits' for indigestion and for breads, desserts, and pickling. Popular in eastern European cuisine.
Hyssop <i>Hyssopus officinalis</i>	Grows to 60 cm, with a very long bloom of blue flowers, perfect for short and long tailed bumblebees but also attractive to other pollinators.	A very strong scented herb, use sparingly in food, it was traditionally used for digestive and respiratory health.
English lavender <i>Lavandula angustifolia</i>	A favourite of bees! Trim back each year in autumn to encourage new growth the following spring. 'Dutch' Lavender 'Gros Bleu' (<i>Lavandula x intermedia</i>) is reported to be 4x better for pollinators than our native lavender.	A very pungent herb! Use sparingly in cooking. Great for helping calm the mind and a restful night sleep.
Common sage <i>Salvia officinalis</i>	A long season of wonderful purple flowers. You can experiment with lots of other types of salvias, with different leaf colours and scents.	Use as a tea for sore throats. Great for cooking and useful in many types of cuisine.
Wild thyme <i>Thymus polytrichus</i>	Produces densely packed heads of pinky-purple flowers from June to September.	A wonderful addition to lots of recipes. Helpful for coughs.
Fennel <i>Foeniculum vulgare</i>	Its tall yellow umbels are a favourite of hoverflies, and the seeds are a treat for birds in autumn and winter	A delicious tea that is great for the digestion. Useful for sweet and savoury cooking.
Chives <i>Allium schoenoprasum</i>	A wonderful purple ball of flowers loved by bees.	A wonderful addition to a cheese sandwich or salad.
Common mint <i>Mentha spicata</i>	Allowed to flower bees, butterflies and hoverflies will all visit, and the tall stems provide shelter for other animals.	Great for a cup of tea to aid digestion.
Wild marjoram <i>Origanum vulgare</i>	Attractive especially to our smaller butterflies.	Lovely for adding to a pizza or pasta sauce.
Borage <i>Borago officinalis</i>	Loved by bees, produces late season nectar for your garden, it will keep flowering until the first frost.	Borage supports your adrenal system, have a cup of tea when you are stressed and busy.
Parsley <i>Petroselinum crispum</i>	The little white flowers attract hoverflies. The curly leaf variety provides a perfect place for native ladybirds to shelter.	Delicious for a wide range of cooking.



Catmint <i>Nepeta cataria</i>	A member of the mint family, abundant flowers for pollinators.	Some cats love it! Dry some and use it to stuff a cat toy.
Lemon balm <i>Melissa officinalis</i>	Its Latin name 'melissa' translates to 'bee'! it needs some space so don't try and squeeze this wonderful plant in.	A wonderful tasting tea that calms you down and cheers you up.
Wood betony <i>Stachys officinalis</i>	A favourite of ours for sheer determination in shady spots and resilient to drought and waterlogged soil. Beautiful pink/purple self-seeding flowers all summer.	A herb with a rich folklore, called 'the life plant' in Gaelic, drink in a tea to support your nervous system.

Shade loving plants

Small gardens and yards are often shady and whilst this can be challenging, it can also create opportunities for shade loving wildflowers and perennials to thrive. Every bit of available space in your outside area can potentially be adapted to benefit wildlife – even the shady parts.

To help you get the most out of your space, we've put together a list of wildlife friendly plants you can grow in those awkward shady areas.

Plant	Description	When it flowers
Bugle	Often found carpeting damp grassland and woodland clearings, the blue flower spikes of bugle are very recognisable. A short, creeping plant, it spreads using runners.	April to July
Wood anemone	The wood anemone is a pretty, white spring flower that grows in the dappled shade of ancient woodlands.	March to May
Columbine	The bonnet-shaped, violet-blue flowers of Columbine can be spotted in damp areas in woodlands and in fens.	May to June
Primrose	A hardy, yellow spring plant that favours woodland clearings, hedgerows and grassland habitats.	December to May
Tufted vetch	A scrambling plant with violet flowers. It is a member of the pea family and can be seen along woodland edges, on scrubland and grassland, and at the coast.	June to September
Greater stitchwort	Also known as 'Star-of-Bethlehem' and 'wedding cakes', the greater stitchwort is a star-shaped, white flower often seen in woodlands and along hedgerows.	April to June
Common comfrey	The drooping, tubular, pink flowers of Common comfrey are a familiar sight to many gardeners. This hairy plant can be used as an organic fertiliser and a form of slug control.	May to July
Honeysuckle	A true wildlife 'hotel', Honeysuckle is a climbing plant that caters for all kinds of wildlife: it provides nectar for insects, prey for bats, nest sites for birds and food for small mammals.	February to November
Common dog violet	Our most familiar wild violet. Dog violet has pansy like purple flowers and can be spotted in a range of habitats from woodland to grassland.	April to June
Forget-me-not	A small, handsome plant with azure-blue flowers. In the wild forget-me-nots are found along woodland rides and hedgerows.	April to June
Bluebell	With deep blue, scented flowers that hang from an arching stem these woodland favourites do well in shady spots. Native bluebells have droopy heads, and flowers hang from one side of the stem.	April to June



Yellow Archangel	Yellow archangel is a hairy perennial with heart-shaped or oval, toothed leaves and yellow, 'hooded' flowers up the stem.	April to July
Sweet violet	A beautiful delicate blue-violet/purple wildflower which provides nectar for butterflies in early Spring and has heart-shaped leaves.	March to May

Berry & fruit-bearing shrubs for pots and small spaces

Introducing fruit trees and berry bearing shrubs and plants will increase available food. The best species to plant will depend on available space and which species you hope to support - native species which flower offer spring pollen and nectar for insects, summer fruit, and then autumn berries or seeds for birds and mammals.

Dwarf and miniature varieties of apple, pear, plum and cherry will grow well in large pots. Look for native UK species that are 'self-pollinating'. Self-fertile dwarf apple varieties include **Braeburn and Red Falstaff**. Pears grow larger than apples even on dwarf root stock - **Concorde** is naturally compact and self-fertile. **Prunus incisa (Kojo-no-mai)** is a delightful small cherry which is steady-growing and compact, making it suitable for growing in containers as is **Prunus cerasus (Sylvia)**.



Advice on buying dwarf fruit trees from Gardener's World Magazine:

- Make sure you have the right conditions to grow a dwarf fruit tree – most need a sunny, sheltered spot
- Look for a dwarfing rootstock such as M27 (patio tree) or M26 (cordon) for apple, 'Quince C' for pear and 'Gisela 5' for cherry – the label or product information should give details about the rootstock the tree is grafted onto
- Check whether your tree needs a tree in the same pollination group growing nearby. If you're short on space, go for a 'self-pollinating' variety that does not need a pollination partner
- For the best selection of plants, buy from a specialist tree retailer or fruit tree specialist

Berry-bearing shrubs like currant, gooseberry, pyracantha and berberis all do well in pots and will provide pollen, nectar and fruiting berries for birds. The benefit of bushes like currant and gooseberry is that you can eat the fruit too.

Espalier planting can be a useful technique if you are limited for space. This is where you train fruit trees and bushes to grow along walls - **sunny walls provide space-saving support for fruit trees**. Apples, pears, cherries and peaches grow well if trained flat against a warm, protected wall that will help fruit to ripen. To support the branches, run stainless-steel straining wires between vine eyes attached to the brickwork at 1.5-metre intervals. Fruit trees are available with one to three tiers already formed, ready to train to the wires, so you can attach branches as they spread.

Once established, keep trees pruned annually in late summer – the RHS has some great advice on pruning fruit trees here: www.rhs.org.uk/fruit/apples/pruning-made-easy

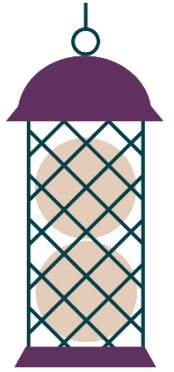
Feeding the birds

Feeding birds in your outdoor space is a fun, rewarding and easy way to connect with nature. Follow these simple steps to transform your garden, yard, or balcony into a buffet for birds. **Hanging feeders are best to deter disease – remember to wash them with soap and water regularly.**



Top tips!

- Remember to keep feeders and tables clean, so birds stay healthy and disease-free.
- Position your feeders in a relatively open area away from predators - birds will feel safer and visit more!
- Birds like to have somewhere to perch nearby so that they can hide in a safe space and watch to see if the coast is clear and exit quickly when there is danger. A tree, shrubs or hedges are great for this purpose.
- If you are worried about attracting rats, look for squirrel proof feeders to keep them away.



When to feed birds: Consistency is key. Give the birds in your neighbourhood a helping hand by keeping your feeders well stocked all year round. Birds are creatures of habit, so once your feeder is fully established your regulars will depend on it as a consistent source of food. Keep your diners happy by sticking to a feeding routine and making sure there's always something for them to eat and drink.

What should I feed birds?

Seed mixes: A blended mix of seeds will attract a greater number of species – look for one that contains plenty of sunflower hearts as these are popular with goldfinches, house sparrows, blue tits and great tits.

Suet: Lots of birds love suet. It provides a vital source of energy, especially during cold winter months.

Dried mealworms: Soaking dried mealworms in warm water for 20-60 minutes before putting out makes them easier to digest - especially for younger birds.

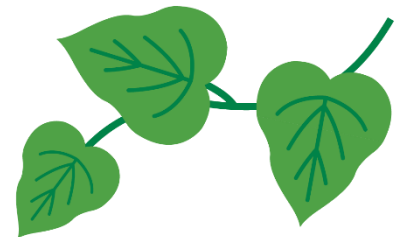
Fresh and dried fruit: Fruits such as apples and pears cut in half and put on a table, or the ground are excellent for many species of garden birds. Dried fruit like raisins and sultanas are great too.

For more information about feeding birds see **#TeamWilder Toolkit: Wildlife Actions – Food**

2. Shelter

Vertical gardens

Gardening doesn't need to be restricted to the ground! Vertical surfaces like walls, fences, sheds, and garages can be converted into green, wildlife friendly areas too.



Climbing plants like **ivy, wisteria, honeysuckle, and clematis** will scale up vertical surfaces, covering otherwise bare areas with lush green foliage and colourful flowers. These vertical gardens will offer wildlife in your outside space extra feeding opportunities and areas to shelter.

Climbing plants can be grown in pots and trailed up walls using a trellis, making them a perfect addition for yards or balconies where space and access to soil is limited.

Wooden pallets can be upended to create a 4-tier planter:

Step 1 - Stand your pallet upright where you want it to be situated.

Step 2 - Use a staple gun to secure anti-weed membrane/bulk bag in-between the slats, creating a trough for your compost

Step 3 - Paint or decorative your pallet



Step 5 - Add your plants - herbs will do well in a vertical pallet planter

- To give your vertical garden the structure it needs to grow, you'll want to add a trellis or wire to your chosen surface.
- Tie your climbing plants to your trellis and or wires. This will encourage them to grow in the right direction.
- Regularly check your ties to make sure that they're not cutting into the plant as it grows.
- Prune your climbing plants as needed to help them maintain encroaching on other surfaces.

Recommended climbing plants:

Plant	Description	When it flowers
Ivy	Ivy is one of our most familiar plants, seen climbing up trees, walls, and along the ground, almost anywhere. It is a great provider of food and shelter for all kinds of animals, from butterflies to bats.	Autumn
Honeysuckle	A true wildlife 'hotel', Honeysuckle is a climbing plant that caters for all kinds of wildlife: it provides nectar for insects, prey for bats, nest sites for birds and food for small mammals.	Spring, Summer and/or Autumn
Clematis	Clematis, (otherwise known as old-man’s beard) is a climbing plant that scrabbles over bushes in hedgerows, woodland rides and edges, and scrubby grassland on limestone soils. Leave the seed heads as they make good nesting materials for birds.	Summer to Autumn
Jasmine	Jasmine is a highly scented climber that is renowned for its fragrance. Different varieties flower at different times of the year. The flowers tend to be white or pale pink, although those of winter jasmine are bright yellow.	Spring, Summer and/or Autumn
Wisteria	A mature wisteria looks incredibly impressive when in full flower. They can be grown up walls or even mature trees. They like well-drained soil in full sun.	Late Spring to Summer
Climbing rose	Climbing roses (Rosa) are vigorous climbers and often bear scented blooms. Varieties with single open flowers are best for bees. They are great for covering walls and fences or growing over pergolas and arches.	Summer to Autumn
Golden hop	A strong growing climber with yellow, deeply lobed leaves to 15cm in length with drooping greenish-yellow flower clusters. It provides shelter for birds and the leaves are a food plant of the comma butterfly. Care is needed as hops can irritate skin (wear gloves when handling) and it is toxic to pets if eaten.	Summer



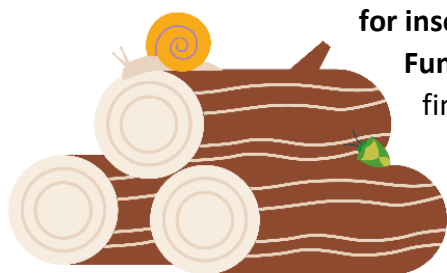
Passionflower	A vigorous, large, evergreen climber with beautiful bowl-shaped flowers up to 8cm in diameter. Passionflowers provide general shelter for insects and are great for ladybirds.	Summer to Autumn
----------------------	--	------------------

* Information with thanks to RHS

Log piles and dead wood

Big or small, some **deadwood** will provide food and shelter for many little animals and in turn provide a feast for bigger animals in your garden. Some rotting logs will bring so much diversity to your Yarden and provide a dark, damp habitat for hiding and sleeping. All-natural wood is useful; big logs, rounds of wood, or piles of sticks. **You can even just put a little log in the end of a planter!**

Creating dead wood habitat offers a way to dispose of natural waste and add texture and visual interest to your Yarden too. It also attracts fungi, increasing the biodiversity of your area while adding interest with new shapes and textures. Dead wood provides the **perfect hiding and hibernation places for insects**, providing a convenient **buffet for frogs, birds, and hedgehogs** too. **Fungi, wood-boring insects, woodlice, beetle grubs and wood wasps** all find homes and food in these logs or lay their larvae there.



If you've got branches, logs or stumps that have been cut over autumn and winter, here are some ideas of what you can do with them to help wildlife in your yard or small garden.

- **Scattered:** Scatter your logs in a flower border or under a hedge to keep plants apart and mulch soil.
- **Neat and tidy pile:** If aesthetics are important then logs can be piled on top of each other, e.g. as pyramid.
- **Higgledy-piggledy:** The 'natural' way to do it - great for architectural impact.
- **Organ pipes:** Standing deadwood sunk into the ground creates the most micro-climate possibilities.
- **Stumpery:** Setting logs and stumps in a shady area then planting around with **ferns, bulbs** and shade tolerant perennials e.g. **foxgloves, Solomon's seal, hellebores, fritillary, lungwort, forget-me-not, primrose, snowdrops and bluebells** can turn an unloved area where many plants won't grow into a magical space full of texture and life.



Photo of stumpery: Jo Rawson

Dead hedge

A dead hedge is an upright structure of woody cuttings woven between vertical stakes. Dead hedges provide shelter and nesting sites for a variety of creatures like insects, birds, small mammals, reptiles, and amphibians. The structure of the hedge with gaps and crevices provides hiding places for a wide range of creatures, especially invertebrates like beetles and spiders. **Dead hedges are also a great way to utilise garden waste** and create a diverse habitat without requiring significant maintenance, as unlike a living hedge it does not require regular trimming - making them perfect for small gardens where you may not have space for a living hedge.



A garden with a dead hedge along one side: Robin



How to make a dead hedge:

- Use straight wooden garden stakes or lengths of branch, 3 to 5cm diameter, cut from the garden.
- If possible, cut stakes/branches to a point to the end and hammer into the ground in two opposite rows about 45 to 60cm apart and at 1 to 1.5m spacings between stakes along each row.
- Push cuttings of woody garden material between the stakes. Over time, add more cuttings to the pile, weaving longer branches between the stakes and among the cuttings.

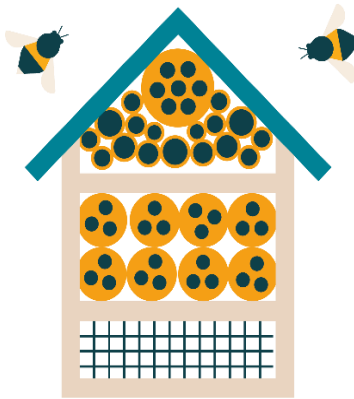


Rock piles

A simple pile of rocks in a corner of your garden provides nooks and crannies of various sizes between rocks offer shelter for small creatures including, amphibians, reptiles, insects and spiders.

Bee homes

Even in a small garden or yard there is space for a **bee hotel** - solitary bees like many of our bees are suffering massive decline because of habitat loss. By providing food and shelter for these bees in your garden and encouraging others to join you (buy them or make them as presents) then this collapse can be reversed. Solitary bees are not aggressive as they have nothing to protect - male bees don't even have a sting!

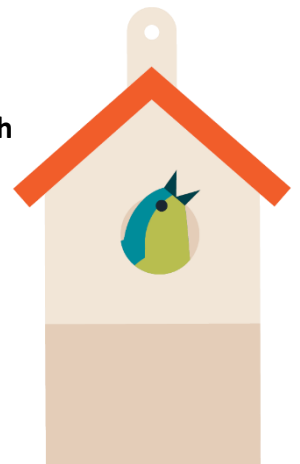


The best solitary bee homes have a range of sizes of wooden tubes between 3 – 10mm in diameter and can be taken apart for cleaning. Bee homes should be secured on a wall, fence or post at least 1 metre from the ground in a sunny spot facing south or southeast. Make sure there is no vegetation blocking the bees flight path to your bee home. If you'd like to build your own bee home, see our step-by-step guide on our [#TeamWilder](#) resources pages and [#TeamWilder Toolkit: Wildlife Actions – Building Shelter](#)

Bird nesting boxes

Even in a small garden or yard, a bird nesting box is a great addition. Observe which species visit your garden and choose a nest box that suits their needs.

Open fronted nest boxes will attract robins and wrens, while nest boxes with a hole are perfect for sparrows, great tits and blue tits. House sparrows like to nest close together so a terrace style box with 2 or more entrance holes each into its own cavity can attract a whole community of sparrows to your garden or yard!



Choosing the best location for your bird box:

Whether fixed to a tree or a wall, the height above ground is not critical to most species of bird as long as the box is clear of inquisitive humans and prowling cats.

If there is no natural shelter, it is best to mount a box facing somewhere between south-east and north to avoid strong direct sunlight and the heaviest rain. The box should be tilted slightly forwards so that the roof may deflect the rain from the entrance.

You can use nails to attach the box directly to a tree trunk or branch, or you can use rope or wire wrapped right around the box and trunk (remembering to protect the trunk from the wire cutting into it by using a piece of rubber underneath it). Both methods are satisfactory, but obviously annual maintenance is easier if the box is wired and can be taken down easily for cleaning.



- **Open fronted boxes** should be fixed less than 2 metres above the ground, surrounded by vegetation
- **Nest boxes with holes** should be situated between 2-4 metres above the ground on a wall or tree
- **Sparrow terraces** should be located high up under eaves of your house or shed

Do not place your nest box close to a bird table or feeding area, as the regular comings and goings of other birds are likely to prevent breeding in the box.

For more information about building your own bird box see our **#TeamWilder Toolkit: Wildlife Actions – Building Shelter.**

3. Water

Bucket or container pond

One of the best things you can do for wildlife in your yard or garden is to create a pond – it can seem like a huge task so if you are not quite ready for the challenge or you are lacking in space then a small container is perfect.

Even small container ponds provide a source of drinking water and a fantastic habitat that will increase the biodiversity of your outdoor space.

Why is it so important to introduce water to your garden or yard?

Water is an **important part of life cycle for many insects** (e.g. **hoverflies, mayflies, dragonflies, damselflies**). These in turn provide food for other species and before you know it, you'll have a fully functioning ecosystem in your garden. **Frogs and newts** (if you are very lucky) will find their way to your pond, so it's good to ensure you have enough hiding places in your yard or garden for them.

Pond snails, leeches, and worms will also find their way into your pond in time, and flying invertebrates such as **pond skaters and water boatmen** will love your new feature.

Mini ponds such as container ponds are incredibly valuable for wildlife, and a network of small ponds in a neighbourhood could be better than just a few large ones. Not only that but they are cheap, easy to create and even easier to take care of. Mini ponds can be constructed from a whole range of containers! Container ponds work well between **20 – 30cm deep** so plastic storage boxes are perfect.

Where to put your container pond:

Your pond will need light, but not full sunlight all day, and not too much shade.

You can **dig a hole and sink your container pond to be at or just above ground level** or simply place it in your garden or yard. This way you'll need to create a ramp up to it so frogs can access your pond – a mini-log or stone pile will be ideal for this. Plus, you get the bonus of two habitats in one!

If you have trees in your garden, it is best to put a **net or wire mesh over your pond in Autumn** so that it doesn't fill with leaves. As leaves decay in the water, they release harmful byproducts, such as nitrates which can upset the natural balance of the water. This can lead to algae blooms and green water in the spring and make your container pond undesirable to pond life (and smelly!)

Creating your container pond:

1. **Scoop a layer of gravel into the bottom of your container.** This will provide a habitat for freshwater invertebrates that make your pond their home. It also provides a place for you to anchor your oxygenating pond weed.



2. **Choose a ramp and add this to your pond.** A ramp is important to enable creatures to climb in and out – particularly **newts and frogs** who need to get in and out of the water easily, and **hedgehogs** who may fall in when getting a drink. **Birds** will also perch here to drink. A ramp could be a log, a large rock, a stone pile, or timber with grooves to enable creatures to get a better grip.
3. **Add some large pebbles** – varying sizes of pebbles or rocks will provide varying depths of water and nooks and crannies for invertebrates and amphibians to hide amongst.
4. **Fill your container pond with rainwater or let it fill up naturally** – tap water is more susceptible to algae and less attractive to creatures, but if you do need to use tap water let it stand for over 3 days, so the chemicals have dissipated.
5. **Add some plants** - growing pond plants in aquatic baskets works well for small ponds as it stops them spreading. These pots have lattice sides to allow water, air & other gases to flow through.

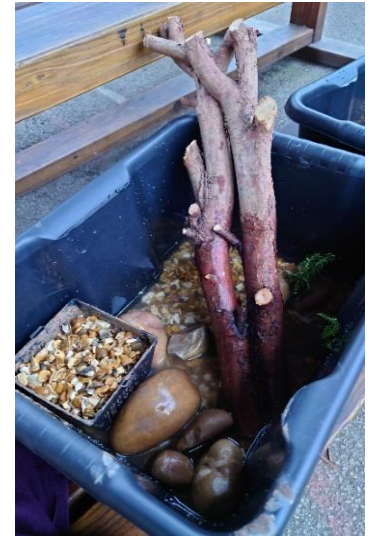


Photo of container pond: Jo Rawson

Plants for container ponds:*

- **Mares Tail (*Hippuris vulgaris*)** - Shallow water marginal native pond plant which is useful both as a marginal and can act as an oxygenating aquatic plant. **Oxygenating plants are vital because they produce oxygen through photosynthesis, which is essential for the survival of aquatic life** – they keep water conditions favourable for all life in your pond. Its stems are covered in linear, blue-green foliage - some are submerged, whilst some grow upright above the water surface. It provides useful cover for aquatic wildlife and should be planted at a depth of 6-20 cm (3-8 in). This plant will send **roots** off on vine like stems and absorbs nutrients from the water. It's easy to maintain will become dormant during the winter with new growth during late spring.
- **Pink Flowering rush (*Butomus umbellatus*)** - a beautiful native water plant with heads of pretty, rose pink flowers in July and August which are higher than the leaves. You can plant pink flowering rush in any depth of water from 5-45cm (2-18in). Tall, emergent plants like these provide habitat for pond insects, especially emerging dragonflies. It spreads with creeping rhizomes (underground stems) and needs to be planted in fertile mud and situated where it will get the sun. Cut back after flowering and trim just above the water after the foliage dies back in autumn.
- **Miniature waterlily (*Nymphaea 'Pygmaea helvola'*)** - a very small water lily with wonderful yellow flowers. It is an ideal lily for a container pond and its leaves provide shade and shelter for pond inhabitants. The roots of water lilies absorb excess nutrients preventing excessive algae growth.
- **Lesser spearwort (*Ranunculus flammula*)** – a native shallow water, marginal pond, plant with bright yellow flowers, and bold blue-green leaves. An attractive small plant with masses of small golden yellow flowers. The leaves are spear shaped giving it its common name. It has a long flowering period which make this plant very attractive to bees and other pollinators.
- **Starwort (*Callitriche stagnalis*)** - native, oxygenating plant. The pale green leaves are linear where submerged and form pretty, starry masses where they reach the surface. Callitriche is good for improving water quality, absorbing nutrients and maintaining a clean and healthy pond. It provides a sheltered habitat for wildlife and is particularly favoured by newts as a place to lay their eggs. After it dies off in Autumn, the seeds remain dormant over winter, and it will start to germinate once the weather gets warmer. Spring is a good time to buy plants.



- **Marsh marigold (*Caltha palustris*)** – a native shallow water plant also known as king cup with large golden flowers in March. It gives an early boost of colour to your gardens letting you know that spring is truly here. Suitable for planting in all types of ponds, it is happy in wet mud or up to 10cm (4 in.) of water. It prefers to be positioned in full sun and will make a clump of up to 45cm (18 in) across and 30cm (12 in) tall.

* Information from www.wetland-plants.co.uk and www.naturescape.co.uk

Where can I buy pond plants?

Many garden centres sell native pond plants, or you can order them online from suppliers such as those mentioned above.

What if my container pond gets full of duckweed?

Remove duckweed using a small net or your hands. Blanketweed can also be pulled out in small amounts at a time, but be careful to check for trapped newts, water boatmen, or other creatures. Swill the weeds in a bucket with pond water before adding the wildlife back to the pond, or pile up your removed duckweed at the side of your pond so creatures can find their way back. Then compost the duckweed before it blows back into your pond.

What if my floating weed takes over my container pond?

You can cut back vigorous plants and compost any excess. Just leave them in a pile at the side of your pond for a few days to make sure any pond creatures can find their way back into the water.

Hoverfly lagoon:

Hoverflies are 'incidental' pollinators - whilst the flies feed on nectar, pollen is transferred to their bodies and passed from flower to flower. They visit lots of flowers, making them great pollinators. Many species of hoverfly such as the common drone fly lay their eggs in water and this is where their larvae (rat-tailed maggots) live before emerging from the water, entering the pupa stage of their life cycle, and then emerging as hoverflies. **To make a hoverfly lagoon, you can use a container filled with water, leaves, grass, and twigs.**

What you need:

- A watertight container, such as an old bucket, plant pot or milk bottle (with top cut off)
- Sticks, leaf litter and/or grass cuttings
- Something to make holes with
- Water

How to make a hoverfly lagoon:

1. Poke or drill some holes around the top of your container approx. 2cm below the rim to allow excess water to flow out
2. Add a thick layer of grass cuttings and/or leaves to the bottom of the container
3. Fill the container with water
4. Add more leaves and vertical twigs so the larvae can climb up when they're ready to pupate (ensure these stick up above the surface and down to the bottom of the container)
5. Add extra clippings or leaf litter to the surface
6. Place the container in a shady spot on or near leaf litter for the pupa



Photo of a hoverfly lagoon: Jo Rawson



Bird bath: Even small spaces have room for a bird bath – this can provide vital water for birds to drink and wash. They are the ideal spot for them to rest and offer the chance of a quick dip to keep their feathers nice and clean. Providing a watering hole for birds may help to improve the volume of birds in your outdoor space as well as giving them a safe and clean area to bathe.

You will need:

- A watertight, shallow bowl or dish (some good examples of these include plant pot saucers, a bin lid, old frying pans)
- A sturdy base for your bowl or dish (this could be an upturned pot or planter, a pile of stacked materials such as bricks, an old barrel or even a tree stump – endless possibilities!)
- Stones
- Water



Creating your bird bath:

1. **Choose the ideal spot for your bird bath!** We recommend somewhere where the base and saucer will sit sturdily without the need for glue.
Top tip! Select somewhere open where prying paws don't have any hiding places to pounce from and visiting birds have a good vantage point.
2. **Place down your sturdy base.** If you're using a pile of stacked materials such as bricks, lay them in a square large enough to hold the bowl or dish on top.
3. **Now put your bowl or dish on top of your base.** Make sure it's durable enough for larger birds such as wood pigeons to land on without tipping over.
4. **Gather your stones together and arrange them so that birds can perch to drink without sliding around.** Bees may also use the bath to drink from so these stones are important for them.
5. **Fill with clean, fresh water and see who comes to quench their thirst!**
6. **Dependent on how popular your bird bath is, you'll need to wash it out regularly, scrub it and disinfect with vinegar diluted with water (we recommend 1 part vinegar to 9 parts water).**

Ground Level water dish: Animals need access to water all year round and this can be in short supply because of drought and the loss of ponds and wetlands. Put a bowl of water on the floor of your garden or yard, you can put some stones in so that smaller animals can perch and drink. Make sure you keep it fresh and defrosted in the winter.

Rain garden planter: A rain garden planter creates the opportunity to manage rainwater runoff from hard surfaces like your roof by planting an attractive, low maintenance, wildlife-friendly space. Rain garden planters provide habitats for insects and wildlife, capture excess rainwater to prevent flooding and filter out pollutants to keep our water clean. With so many benefits, it's easy to see why they are becoming a lot more popular in our towns and cities.

How to create your rain garden planter:

1. **Buy or make a planter** – the size of your planter will depend on the space you have available. There are many slim rain garden planters available that will fit well in a small garden or yard. Check there is room for it to be positioned to drain into the existing drain.



2. **If you are making your planter yourself**, make sure it is watertight – you could use a pond liner for this. Drill a hole in the side or end of your planter using a flat head bit or hole-saw. The plastic drainage pipe will need to go through this hole so position it accordingly.
3. Add a **drainage pipe to the bottom of the planter** – this should be connected to the overflow pipe and lead out the bottom to allow excess water to flow down the drain (see illustration)
4. **Cover the pipes with gravel** to create a base layer (storage layer) with the drainage outfall pipe running through – about 150-200mm gravel works well.
5. Then add a **permeable membrane** (geotextile) to prevent soil from washing into and clogging the storage layer/outfall pipe, then add a thin layer of sand.
6. **Fill your planter with a mix of sand/soil/compost** at least 350mm deep for plant health.
7. Use a **drainpipe to funnel rainwater** into the planter.
8. **Add your plants** - species such as purple loosestrife, yellow flag iris, meadow vetchling, greater birds foot trefoil, sneezewort, common valerian and hemp agrimony will grow well in your planter.
9. **Cover bare soil with surface mulch** - stone, bark etc. retains moisture and reduces erosion to the soil.
10. **Allow extra space at the top of the planter** in case it fills up in severe rainfall events – this will allow water to escape through the overflow (usually 50mm – 100mm recommended).

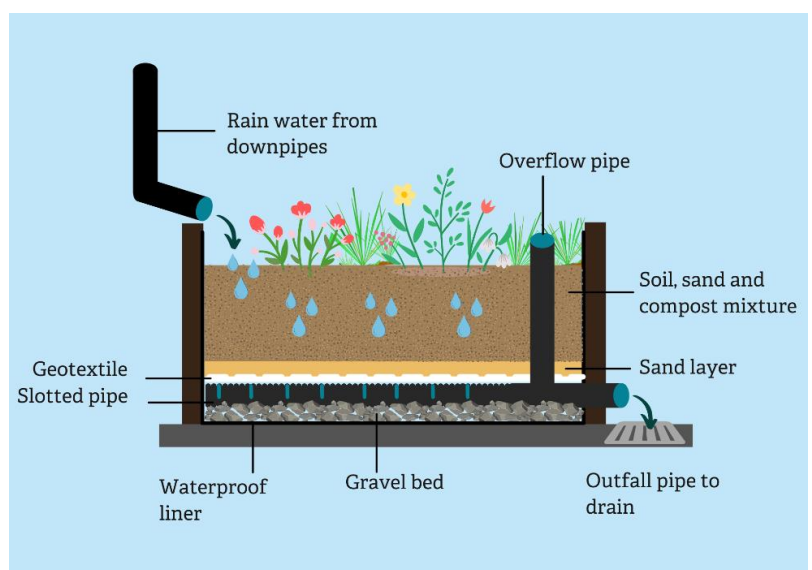


Illustration of a rain garden planter with thanks to Gloucestershire Wildlife Trust.

For more information download a copy of the UK Rain Garden Guide here:

www.gloucestershirewildlifetrust.co.uk/sites/default/files/2022-02/UKRainGardenGuide.pdf

Or visit: www.groundwork.org.uk/how-to-create-a-rain-garden-planter/

4. Management

Peat-free compost

Peat has been a major ingredient of the compost used in gardening for many years. This peat is dug out of wild places, damaging some of the last remaining peatlands in both the UK and overseas in places like Eastern Europe. This process also releases carbon into the atmosphere, accelerating climate change. Sadly, more than 94% of the UK's lowland peat bogs have been destroyed or damaged, and a wealth of wildlife has disappeared along with it. This vital habitat isn't easily replaced - see our Yorkshire Peat Project and the amazing work they are doing to restore Yorkshire's peatlands.

<https://www.yppartnership.org.uk/>

Peat-free growing media, including compost and soil conditioners are commonly available and it is essential that all wildlife gardeners make the move to be peat-free.



Top tips for using peat free compost:

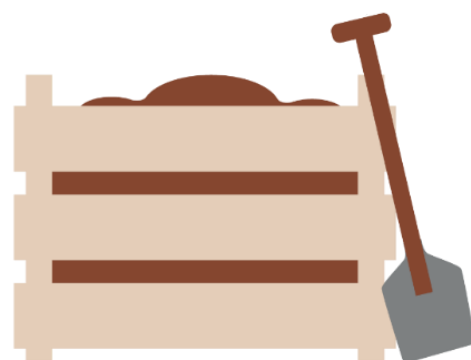
Making the switch from peat is not always straightforward as peat free compost will not function in the same way that your old peat-based product did.

- To start seeds off, look for specific peat free seedling compost or riddle/sieve your compost to get rid of any larger material. You can **create your own peat-free potting mix for seedlings by mixing 50% Coya, 30% composted bark and 20% perlite**.
- Your peat free compost will require a **new approach to watering**. Peat-free compost can be very free-draining, so watering little and often is key. Your plants may look dry at the top or may look a dark colour and seem wet, but they may not be! Check your water levels in your pots by sticking your finger in to feel for water all the way down and lift pots up to feel their weight.
- Your seedlings and potted plants may need a bit of **liquid food** earlier than they used to so check your compost instructions to see how many weeks of food your plant has with your new compost.
- **Mixing pelleted 6-month feed into your peat-free compost** can really help to give your plants the nutrients they need (Approx 20g pelleted feed to 30 litres of compost)
- Committed peat free gardeners have done lots of trials with different composts and published them online so read up on their favourites and tips to using them successfully. Some peat free composts are rated better for growing than peat composts, when you know how to work with them, so don't see the move as being negative for your gardening success.
- **Use your own compost** that you have made in your garden, just be aware that some of your homemade compost **may need diluting with soil or bought compost before use**.

Compost bins: Garden waste and food waste from fruit and vegetables can be composted to provide nutrients for your garden, improve your soil, and reduce your need for buying compost and fertilisers. Although your local council may collect your green and brown waste it is better for your soil and therefore for your local wildlife to keep it in your garden.

How to get started:

All you need for a successful compost heap is waste, air and water! A simple heap covered with old carpet or plastic is just as effective as a 'bin'. The only advantage of a container is they look tidier and can be easier to manage. You can buy or make a narrow compost bin if you are short of space. Try to pick a shady spot to keep things moist, and water any dry ingredients you may be adding.



What to put in your compost bin	What not to compost in a bin
<ul style="list-style-type: none">• Grass cuttings and dead leaves• Fruit and vegetable scraps and peel• Plain cardboard (not glossy)• Old cut flowers and bedding plants• Prunings and dead plants• Pet droppings from any healthy veg-eating pets, (gerbils, rabbits, hamsters, birds) along with any bedding made from natural material or newspaper• Coffee grounds• Tea bags (check they don't contain plastic first!)	<ul style="list-style-type: none">• Cooked food (this can be composted in a wormery)• Coal ash• Meat and fish (this can be composted in a Bokashi bin)• Bones• Cat litter and dog poo• Nappies or human poo• Glossy paper or card



- Eggshells (helps stop the heap from smelling)
- Newspapers or shredded paper can help to soak up excess moisture in a heap
- Weeds (try making some liquid feed)
- Diseased plants

How to make simple compost



You will need

- A compost bin, with a lid*
- A well-drained, easy to access area
- Green compostable ingredients
- Brown materials, like straw and scrunched-up paper
- A gardening fork

Compost worms are brilliant recyclers so put them to use on your green waste. The finished compost will enrich your garden soil, benefiting even more earthworms! This rich soil also boosts flowers, veggies and other plants.

1 Carefully make holes in the base of your bin if it doesn't have any. Then place it on or close to bare soil to let worms wiggle in.

2 Start putting stuff in... mix brown materials, like straw and paper, with nitrogen-rich ones like veggies and tea bags.

3 Stick a fork in and turn over the contents of the bin (ideally once a month) to let more air in. The more you turn it, the quicker you make compost.

4 It can take from six months to two years, but when it's ready you'll find rich, dark, fabulous compost. Use it!

Don't worry if there are lumps, bumps and bits of eggshells.

Check out the worms that have moved in!

	tea leaves	raw fruit and veg peelings	grass cuttings	straw	scrunched newspaper	soft prunings & dead plants	coffee grounds
	woody stems	cooked food scraps	cat or dog poo	meat or bones	weed seedheads	perennial weed roots	diseased plants

www.wildaboutgardens.org.uk *An old recycling tub or a smaller ready-made compost bin (recycled plastic ones are available) could save space.

Worried about attracting rats? Then see our **#TeamWilder Toolkit: Wildlife Actions – Management** for information about wormeries and bokashi bins instead.

Going organic – no 'icides': Not using insecticides and slug pellets is the most important thing you can do to help wildlife in your garden. There are some brilliant ways to change your gardening habits to **get rid of chemicals** from your garden and help wildlife all at the same time. Knowing that there are so many animals in desperate need of help from gardeners is a good way to motivate you to start thinking differently about gardening. Out with the old, in with the new ... you will never look back!

Hanging baskets: Increase the footprint of your garden by using hanging baskets and wall mounted planters and baskets. It's important to choose drought tolerant plants for this and species such as verbena, lavender, geranium, salvia, coneflower, and lobelia. Trailing fuchsias are beautiful in hanging baskets but do require regular watering. Be sure to use biodegradable and non-sphagnum moss-based liners.

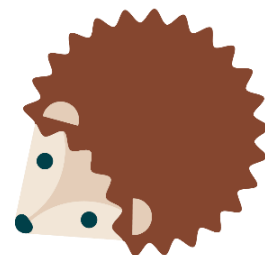
Leave seed heads and stems uncut over winter: Don't be too tidy – leaving stems and seed heads uncut over winter is beneficial because they provide food for birds and other wildlife during the colder months when food is scarce and offer shelter for overwintering insects within the hollow



stems. Leave it until the weather starts to warm up before you cut your plants back. When you do, leave cuttings in a pile for a few days for any creatures to crawl away before adding to your compost heap or green waste bin.

5. Connectivity

Collaborating with your neighbours to make a **hedgehog highway** is a great way to start a wildlife friendly community in your local area. A hedgehog roams on average 2km each night and needs a gap of 13cm by 13cm (5") to get in out of your garden. You can cut a hole in a fence or dig a tunnel under it: ask your neighbours to join in and create a hedgehog highway.



Porous boundaries allow wildlife to move between gardens and can benefit many species, including birds, mammals, and amphibians. **Here are some ways to incorporate them into your yard:**

- **Use hedges:** Hedges can provide shelter, food, and nesting places. You can plant hedges from scratch or grow them through existing fences.
- **Cut holes in fences:** Small holes in the bottom of fences can help small animals move between properties.
- **Open trellis and fences:** These are made to be porous as there are plenty of gaps. If you desire more privacy, then consider simply replacing one panel at the bottom of your garden.

Native hedges:

Hedgerows are one of the most important garden habitats for wildlife and, with the right management, they will support a good variety of birds, small mammals, insects, and plants. As well as being vital refuges for native species, hedgerows are key to transforming our urban outdoor spaces into wildlife corridors, allowing animals to travel between dwindling habitats.

These '**green corridors**', allow wildlife to move about between gardens and other spaces to reach feeding and breeding opportunities - this makes them a much more wildlife-friendly choice of boundary than fences or walls, especially if they're made up of native trees and shrubs.

Living hedgerows make a vital contribution to halting biodiversity decline and tackling climate change – so if you have a small garden with enough soil and room for a hedge to grow then read on.

As well as offering food for insects, small mammals, and birds, hedges provide important shelter and protection for many species - particularly nesting birds and hibernating insects.

Hedges make natural windbreaks, creating sheltered areas, which is particularly important for butterflies. They also create areas of shade, increasing the range of wildlife habitats in our gardens - as well as creating pleasant places for us to sit and rest. In terms of their benefit to the wider environment, they also soak up carbon, contribute to reduce rainwater run-off and flood risk, and filter dust and pollution from nearby streets – **overall, as a garden feature, it's fair to say hedges are pretty hard to beat!**

Informal hedges and trees are more natural and much better for wildlife than those that are regularly clipped, as they will create a denser, richer creature habitat and highway if allowed thicken out and produce flowers and berries.

Allowing **leaf litter** to lay naturally at the base of your hedge also creates a good hideout for small mammals, hedgehogs hunting for worms and beetles, and ground-nesting bees.



Choosing your plants:

Native shrubs and trees like hawthorn, field maple, blackthorn, beech, hornbeam, and holly make an ideal mixture of hedging plants.

Growing rambling plants, such as wild rose, bramble and honeysuckle through your hedge will offer even more shelter (and food) for wildlife. Ivy is particularly beneficial in providing cover for nesting birds - and it flowers in the autumn when few other nectar sources are available to insects.

Suggested hedge plants for small gardens:

Blackthorn - *Prunus spinosa*

Bramble - *Rubus fruticosus*

Common Beech - *Fagus sylvatica*

Common Hawthorn - *Crataegus monogyna*

Common Hornbeam - *Carpinus betulus*

Crab Apple - *Malus sylvestris*

Dog-rose - *Rosa canina*

Field Maple - *Acer campestre*

Guelder Rose - *Viburnum opulus*

Hazel - *Corylus avellana*

Holly - *Ilex aquifolium*

Honeysuckle - *Lonicera periclymenum*

Ivy - *Hedera helix*

Traveller's-joy (aka Old Man's Beard) - *Clematis vitalba*

Wayfaring tree - *Viburnum lantana*

Planting your hedges:

The best time for planting is between November and March but be careful to avoid planting into waterlogged or frozen ground. Bare rooted plants are usually cheaper and more environmentally friendly (remember to buy from a peat-free nursery) but take care not to expose the roots for long when planting. Until they are established, we recommend keeping the base of your hedge plants free from weeds with a thick layer of garden mulch.

For a mixed native hedge, try to include three plants of the same species per 1m (3 ¼ ft). How you space your hedge will depend on how thick you want it to be when it is mature. We suggest using the spacings below as a guide.

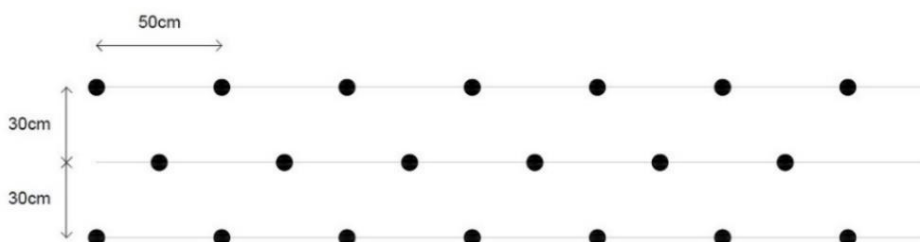
Single Row Hedge - approx. 30cm spacings



Double Row Hedge - approx. 50cm spacings with rows set approx. 30cm apart and staggered



Triple Row Hedge - approx. 50cm spacings with rows set approx. 30cm apart and staggered



Maintaining your hedges:

Hedges are best left to do their own thing throughout most of the year, with pruning recommended in late winter or early spring - this ensures that nesting birds are not disturbed (hedges definitely need to be left well alone March to August for this reason!) - and that wildlife can take advantage of the pollen and nectar provided during the summer, and the fruits on offer during the winter months.

Top tips!

- Angling your plants at around 45 degrees as you plant them will help you to establish a hedge which is not too thin at the bottom.
- In the first spring after planting, cut your shrubs back to 45-60 cm (18-25 in) above the ground to encourage bushy growth in following years.
- Try to cut sections of hedge at different times, so there is always an undisturbed place for wildlife and do not cut at all during the bird-nesting season (March to July)

Climbing plants like ivy, wisteria, honeysuckle, and clematis are perfect for growing over walls and fences – creating connectivity for wildlife between gardens. See further details in the shelter section of this toolkit for more information. Climbing plants can be grown in pots and trailed up walls using a trellis, making them a perfect addition for yards or balconies where space and access to soil is limited.

Chat to your neighbours about what you are doing in your garden - you might inspire others and find new ways to collaborate. Talking about what you are doing in your garden for wildlife can inspire other people to try new things, together you can have an even bigger impact for local wildlife.

Ideas for things that you can collaborate on:

- Create a wildlife corridor through numerous gardens, or along a street, path, alley, or snicket
- Creating a wild border on a shared boundary
- Planting a continuous hedge
- Arranging a seed swap
- Take part in an open garden event
- Grow trees for local tree planting schemes
- Apply for Yorkshire Wildlife Trust's Wildlife Gardening Award - www.ywt.org.uk/wildlife-gardening-award



Having conversations about your garden is a great way to find out what types of plants might flourish on your specific soil-type and swap cuttings and seeds. Sharing stories about your garden wildlife spurs others to adapt their gardens accordingly. With enough enthusiasm you may be able to **start a formal or informal wildlife gardening group**.

Join #TeamWilder for more tips on how to take collective action: www.ywt.org.uk/team-wilder

6. Resources

The Wildlife Trust and RHS have created some amazing booklets on different topics, follow this link <https://www.wildlifetrusts.org/gardening> or click on the word for more information about:

[Butterflies](#) [Ponds](#) [Hedgehogs](#) [Worms](#) [Bats](#) [Bees](#) [Swifts](#) [Beetles](#) [Lawns](#)

[Molluscs](#)

This toolkit has been created with credit to The Wildlife Trusts.

