

Wildlife Gardening Information Pack

Gardens are an important resource for our native wildlife. This information pack has been designed to provide you with the necessary information to garden in an environmentally-friendly way, which will benefit wildlife.

Contents

1. Introduction to Wildlife Gardening
2. Trees, Shrubs and Hedges
3. Wildflower Meadows
4. Ponds and Wet Areas
5. Pest Control
6. Homes for Wildlife
7. Compost
8. Feeding the Birds
9. Plants for a Wildlife Garden
10. Plants to Avoid
11. Wildlife Garden Calendar



For more information contact Denbighshire's Biodiversity Officer on 01824 708263 or email biodiversity@denbighshire.gov.uk

Denbighshire Countryside Service, The Old Gaol, 46 Clwyd Street, Ruthin LL15 1HP

www.biodiversityindenbighshire.co.uk



**Bryniau Clwyd
Clwydian Range**

Ardal o Harddwch Naturiol Eithriadol
Area of Outstanding Natural Beauty



1. Introduction to Wildlife Gardening

Gardens are an increasingly important resource for wildlife in the UK. As our open countryside is farmed intensively and land is developed, the opportunities for wildlife decrease. 84% of British households have a garden – that's about 15 million gardens or over 2 million acres. If managed in the right way, gardens can provide ideal habitats for animals and plants and make a significant contribution to wildlife conservation. Recent research has shown that an average sized garden, managed with conservation in mind, can support up to 3000 different species of plants and animals.

But close-mown lawns and carefully weeded borders offer few opportunities for wildlife. This series of wildlife gardening leaflets aims to provide you with the necessary information to turn your garden into a rich and varied habitat for native wildlife.

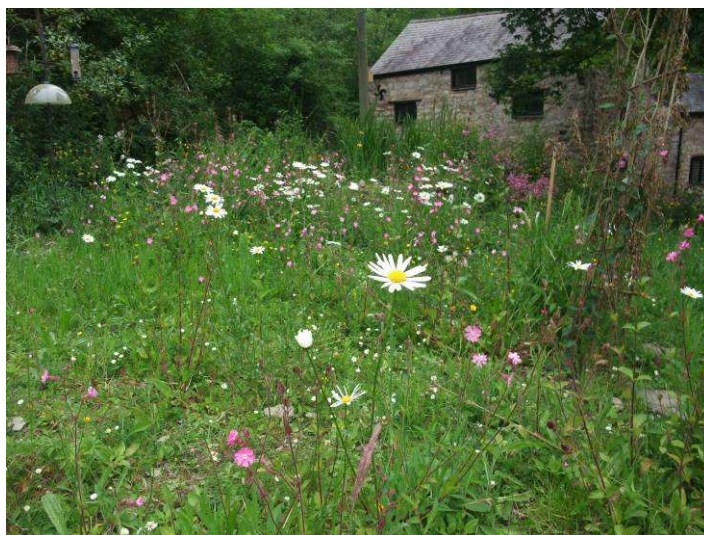
Wildlife needs food, water and a place to live and breed. These can be provided whatever the size of your garden. You may already have features in your garden that attract wildlife. In creating a wildlife garden we are trying to recreate some of the habitats that would be found in the wild, though on a smaller scale.

Variety is the key

The key to a successful wildlife garden is variety. Different plants attract different species – and native plants are best. We have a complex, mixed community of wildlife that has evolved together over the last eight to ten thousand years. Many plant-eating larvae only eat the leaves of one specific type of plant – always a native one. The greater the variety of natives you plant, the wider the menu you are providing and the greater variety of wildlife you are likely to attract. Most species will be eaten by more than one animal and tend to support hundreds of different species. In contrast, non-native plants usually only support single figures (though in their native countries they are too likely to feed hundreds).



Bumble bees feed on nectar in native flowers like thistles



Our wildlife garden at Loggerheads Country Park

The colour, fragrance and shape of flowers determine what insects can feed on them. For example only moths with long tongues can reach deep down into flowers with long narrow petal tubes, like evening primrose and honeysuckle, to feed on the nectar. But short-tongued insects feed on short flowers. Pale flowers are more easily seen in poor light, so are attractive species active at dusk. Purple flowers attract butterflies and bees. Fragrance also attracts different kinds of insects.

To attract many flying insects, like bees, butterflies and moths, you will need to provide nectar-rich flowers. Traditional cottage garden or wild flowers tend to produce more nectar than modern hybrid varieties. Avoid double-flowered varieties as these make it difficult for insects to access the nectar.

Plants that produce berries and seeds provide food for insects, birds and mammals. With all these different resources in your garden, you can build up a complex food-web involving a wide range of wildlife. Adding features like ponds, deadwood piles, bird and bat boxes will further enhance the habitat for wildlife.



Berries are enjoyed by a range of garden birds, like this thrush

More for the environment

A wildlife garden not only benefits the local fauna and flora – by gardening in a more environmentally-friendly way you can have a positive impact on the planet by conserving resources and reducing your carbon footprint.

Having native plants in your garden benefits the local wildlife because they can utilise the species far better than exotic varieties. But there are more benefits: native plants are used to local conditions such as the amount of rainfall, temperature and soil type. This means they don't need to be watered or fertilised and can tolerate dry spells in summer, so you save water and don't need to use inorganic fertilisers (the production of which emits large quantities of CO₂).

Growing your own vegetables, salad and fruit reduces your carbon footprint because your food only needs to travel from your garden to your kitchen table – rather than across Britain, or even the world. And there is no packaging. Growing your own food is also hugely satisfying and it tastes great! Keeping chickens is another good idea if you have enough space.



A water butt can be used to collect rainwater from your gutters, so you don't need to use mains water for your plants. Using rainwater in the garden conserves water levels in our reservoirs, which can become very low in periods of drought, leading to hosepipe bans. Collecting rainwater in a water butt is also a good way of using water that would otherwise be wasted.

A garden for everyone

A wildlife garden is not a garden left to run wild. It is a garden inspired by nature that both wildlife and people can enjoy.

We hope the guidance in our wildlife gardening information pack will help you to transform your garden into a haven for wildlife, providing plenty of enjoyment for people too.

2. Trees, Shrubs and Hedges

Many of our commonest garden inhabitants originally lived in woodlands, which have suffered huge declines in extent across the UK. And the loss of traditional management that created glades and dappled edges means that most remaining ancient woodlands are a tangle of impenetrable undergrowth. Garden shrubbery can create a mini-woodland edge, providing a home for a wide variety of wildlife, from foxes, badgers and squirrels in larger gardens to mice, hedgehogs, butterflies and a wide variety of birds. Hedgerows can provide a valuable scaled down version of this woodland edge and are a sheltered, safe corridor through which wildlife can move. A variety of birds will nest and shelter here and a good mix of shrubs will provide food most of the year. Some woodland edge flowers can be grown at the bottom of hedgerows. Native trees and shrubs will provide nectar-rich flowers, buds, berries, fruits, seeds and nuts and places to breed, shelter and hibernate.

Where:

- Plant trees and shrubs in a corner with a sunny edge. A shrubby border, meandering in and out of the sun will perfectly resemble the dappled shade of a woodland glade.
- Use hedgerows as a boundary instead of fences, to screen off an area of the garden such as a vegetable patch or wild area, to provide shelter from the wind or privacy.

How:

- Carefully plant to compress what you would find in a real wood into a mini reserve by developing several layers of plants, one above the other, from trees to wildflowers and include logs and leaf litter.
- Even in a small garden try to grow at least one tree. If you have space, plant small trees about 3m apart. Large trees will need a lot of space.
- Plant trees between November and March but not if the ground is frozen or waterlogged. Bare rooted plants are cheaper, but the roots cannot be exposed for too long, so prepare the ground before taking out the whips.
- Dig a hole deep enough to meet the soil mark on the stem. Break up the soil in the bottom and add some compost or well-rotted manure. Place the plant in the hole and spread out the roots.
- Replace the soil and firm in with your heel, making sure the tree is upright. Protect it with a guard if necessary and keep the base free of weeds with a mulch.
- Keep the sapling watered during its first year.
- To form the second layer, inter-plant the trees with shrubs. Plant at about 1m spacing and prune them hard to encourage dense, bushy growth.
- Once the shade begins to develop start adding the wildflower layer. This will mean there will be gaps for the first couple of years as the trees and shrubs develop; mulch these to avoid weeds taking over. Coarsely chopped tree bark is ideal as it will also begin to establish the dead wood and decaying matter vitally important to many small woodland creatures.
- Create a few log piles around the edges around which wildflowers can grow, to provide an important habitat for mini-beasts and fungi. Small mammals, amphibians and reptiles will also use these areas.
- Once trees and shrubs are strongly established plant some climbers which will grow through the layers. These can quickly take over though so will need controlling.

Hedgerows:

- A variety of species can be used. 70 – 75% hawthorn provides a thorny, dense base for nesting birds and plentiful blossom and berries. Intersperse with four to six other species that flower and fruit at different times, for example, 15% field maple and 2% each of holly, native wild privet, dogwood, guelder rose and dog rose. If it is a large hedge include a tree every 10 – 20m.
- Plant whips between November and March, using bare rooted plants apart from holly which is best pot grown.
- Dig a trench 30 – 40cm deep, removing weeds and roots and loosening the soil at the bottom. Add plenty of manure. For a thick hedge, plant shrubs 30 – 45cm apart, stagger in two rows 30 – 45cm apart. Plant up to the soil mark on the stem, ensuring the roots are straight and the plants are upright, backfill with soil and firm in with your heel.
- Water well in the first year and mulch for the first five years. Protect the plants from rabbit or livestock grazing if necessary.
- For the first prune, cut plants back to 45 – 60cm above the ground to encourage bushy growth. Replace any dead plants to avoid gaps. After several years keep in shape by cutting in an 'A' shape. This will encourage a bushy base, providing plenty of cover.
- Prune the hedge in the late winter once the berries have gone but before the start of the bird nesting season. Late January is the optimum time. To lessen the impact cut back one third each year in rotation.
- Once the hedge has become established, plant wildflowers at its base.

Tips:

- Try to plant native species as much as possible. The plant list in this pack contains suitable species to consider.
- Try to use a combination of plants that will provide food all year round, particularly including some winter-berrying varieties for when food is particularly scarce.
- When sweeping up autumn leaves, allow some to accumulate under the hedge as an organic mulch to provide food for mini-beasts and a hibernating area for hedgehogs.
- Do not cut hedges or shrubs during the bird nesting season. The disturbance will cause the parent birds to desert the nest.
- Improve an existing hedge with gaps by laying it. This is a skilled task which involves cutting half way through the stems, bending and staking them to create a thicker hedge.
- Don't cut hedges at the same height and width each year, this will make them too woody.
- If you don't have enough space for trees, shrubs or a hedge try introducing a climber such as ivy or honeysuckle up a wall or any other vertical structure. Plant at least 30cm away from the bottom of the wall or fence so that the roots aren't in the drought zone created by these structures. For ivy, chop the plant down to 10cm above the ground to stimulate the production of young side-shoots which will allow it to cling to the wall up which it is growing. If growing in a sunny spot, prop a piece of wood or similar against the wall to shade the young plant for the first few months. Make sure you water regularly in the early stages of its growth. Ivy provides excellent cover for wildlife throughout the year and its nectar rich flowers provide valuable food right into December, followed by berries, again appearing once most other fruit has disappeared. If you don't want a climber that clings to the wall then you will need to provide a support. Fix this slightly away from the wall so that the gap created can be used as a shelter.

3. Wildflower Meadows

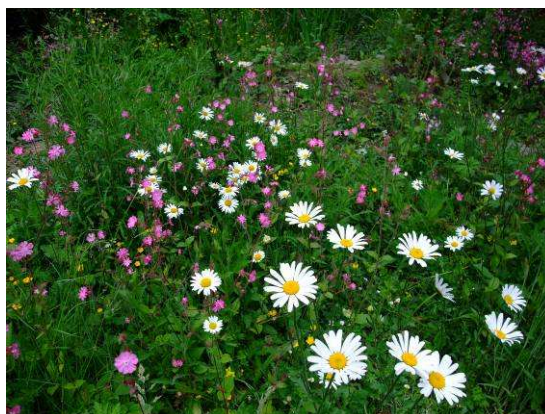
Wildflower meadows are now almost entirely a thing of the past. Only 2% remains of the unimproved pasture in the UK 60 years ago. We are never going to recreate this habitat fully in gardens, but it is possible to conserve many wildflowers and in turn help the myriad creatures that depend on them. Grassland wildlife developed as a side-effect of traditional hay meadow management. The change in this is what has led to their decline. A wildflower meadow can be re-created by following the same regime of mowing and removing 'hay'.

Where:

- Although they can never be exactly recreated, wildflower meadows can be grown from scratch, pretty much anywhere. They can be as large or as small as you want. All you need is an area in a sunny spot, a bit of hard work and patience!

How:

- Wildflowers need soil that is very poor in nutrients. If you have an established 'traditional' lawn or rich, deep soil then you will need to reduce its fertility first, by regularly mowing closely and removing all the clippings. Or if you're happy for a drastic start remove all the turf and the first 5-10cm of topsoil. You could also plant greedy crops like potatoes or courgettes to strip away nutrients for a couple of summers.
- If the lawn is already low in fertility it may be ready straight away. Leave it to grow long in the spring and summer and see what comes up.
- Check the type of soil you have and select plants that are best suited to these conditions.
- Once you have reduced lawn fertility, cut very short in late summer / autumn and rake it vigorously to create batches of bare ground before sowing seed.
- If starting from bare earth, leave for a couple of weeks to allow weeds to germinate. These can then be removed by hand. When you are ready to sow the wildflowers, lightly rake and roll the soil to produce a seed bed. This should be fine, crumbly and firm so rake away all big lumps of earth, remove stones and firm the surface with feet or a roller.
- Sow seeds in late August (optimum time) or mid-April.
- The seeds should be a combination of low-growing, non-aggressive grasses and wildflowers suited to the mowing regime. Make sure seed mixes don't contain rye grass.
- Sow the seeds very thinly, grass seeds first at a quantity of 2g per square metre. You can mix the seeds with sawdust or silver sand to get a more even spread. Sow the wildflowers in drifts of one or two species to create natural pockets.
- When all the seed has been sown, run gently over the surface with the back of a rake to very lightly cover the seed with soil then re-firm everything with light treading or rolling.
- Ideal conditions for germination are dull, drizzly weather. If the weather is very dry, then it is worth watering with a very fine spray.
- Alternatively, you can buy and plant plugs or create your own. Sow seeds into pots or seed trays in late summer. Put the pots outside in a cold corner of the garden and leave them.
- Once April comes, keep the compost moist and the seeds should start germinating within a



Wildflowers at our Loggerheads wildlife garden

month. Not all will in the first year and may require two or three years of cold winters.

- Once the seedlings are big enough, transfer them to 6 or 7.5cm pots and leave them in a sheltered spot, watering them regularly for a whole summer. If they start to produce flower shoots, cut them off to encourage growth in the roots.
- At the beginning of October plant out these pot grown plants. Remove a plug of soil about the same size as the pot, remove the pot, put the plants in the hole and heel down firmly.
- If the grass gets any taller than 10cm cut it down to 5cm and firm with your feet to push back any loosened plants. In the first year there will not be any flower growth. Set the mower as high as possible and mow through the summer (probably every six to eight weeks) removing all clippings. Don't let it get below 5cm in length though. You should be able to adopt your permanent mowing regime in the second spring after sowing, but if the grasses still seem too dominant give it another year of the initial cutting regime.
- Once established, spring-flowering meadows are cut in July and for the remainder of the summer with the blades raised to 7 – 10cm and are then left from February until July.
- Summer meadows are left until late August / September or even October depending on when flowers have set seed. If needed, with this meadow you may want to consider a cut in late March or early April if thistles and vigorous grasses have taken hold over the winter.
- When you have cut the hay, leave it on the surface for a couple of days to allow it to dry and any creatures to crawl out before you remove it.

Tips:

- If your garden is large enough have different areas under different regimes – a closely mown area that is more practical for you, a spring-flowering meadow and a summer-flowering meadow.
- When planting, group single species together for a natural look and space the plants 20 – 40cm apart.
- Year on year, see which plants appear to do best to help decide what others should be added to the meadow.
- Buy seeds from a native source rather than European stocks. Don't dig up wild plants.
- Protect the newly sown seeds from birds by stretching lengths of cotton with twists of aluminium foil across the meadow or hang up old CDs or bottles.
- Leave two or three of the field margins un-cut as a refuge for wildlife. Rotate each year. Cut from the inside outwards to allow wildlife to escape to the margins.
- Meadows are traditionally grazed for a few months after cutting and the small areas of bare ground created from this creates sites for new plants to grow. You could mimic this by creating small bare patches with a rake.
- If the soil really is too fertile, you could create a cornfield patch instead. Sow a mixture of cornfield annuals such as poppies, cornflowers, corncockles and corn marigolds over bare soil. Some barley and wheat seed will add an authentic touch. After the flowers have set seed, rake over the soil so that there is open ground for them to grow in next year.
- If grasses become dominant try sowing yellow rattle (*Rhianthus minor*) which is semi-parasitic on grasses. Sow this in August and keep the grass mown until March.
- Meadow establishment can take two to three years as different plants have different germination requirements. You need a lot of patience before you will achieve a mature meadow!
- A wildflower area doesn't require any additional watering or feeding, this could upset the natural balance being established and will encourage vigorous grasses.
- Try to make the drainage as good as possible by digging a soak-away at low points.

4. Ponds and Wet Areas

Ponds and wet areas provide resources for a variety of animals, from dragonflies, frogs and toads which use it as a nursery ground, to the birds and mammals which need water to drink and bathe in. A staggering 75% of ponds have been lost from the wider countryside but ponds in gardens can provide some compensation. A large, perfectly situated pond will support a wide variety of wildlife, but a small, shaded pond still has value. Even an old sink or small container can be useful. The following guidelines show how to create the perfect wildlife pond, which can be adapted to suit your situation.

Where:

- In a relatively sunny spot, open to the south and with shelter from the prevailing wind.
- Away from trees which will over-shade it and drop their leaves in autumn. These will turn the water acidic and create an oxygen deficiency.
- If the garden has a natural hollow or dip, this is the obvious place for a pond. But avoid previously wet areas which benefit wildlife already. Try to avoid places where drainage could be an issue, if heavy rain washes debris and soil into the pond.
- Close to other wildlife areas such as marsh, meadow or long grass patches.
- Within range of a hosepipe as ponds can dry up in summer, preferably one attached to a water butt so rainwater can be used instead of tap water.
- In a safe area where it is not a danger to children.

How:

- A minimum of 4m² will create a good balanced environment. A gently-sided saucer or kidney shape will allow two zones of different depths. Mark out the shape of your pond with a rope or pegs before you start digging. Plan what you are going to do with the earth removed – a rockery is ideal for insects and amphibians using the pond.
- At least one side should be very shallow and planted up with marsh plants. The other sides should slope gently to provide shallow areas on which much wildlife depends – birds will drink and bathe there and amphibians will spawn in shallows. Gentle slopes also provide safe access for wildlife climbing in and out. The more varied the slopes and the longer more convoluted the shoreline, the better.
- At its deepest point, the pond should be at least 60cm for frogs to hibernate successfully and to prevent them from freezing solid in winter. A depth of 90cm – 1m is ideal.
- Shelves created in the slopes will give further ranges of habitat and will also help to hold containers of marginal plants. Alternatively, planting pockets could be created by edging them with stones.
- Excavate the pond about 15cm deeper than you want the eventual depth to be at each point, allowing for half a metre around the eventual pond edge to anchor the line to check it is the same level all the way round. After digging out the pond, remove all stones and make the base as smooth as possible, filling any holes with sand or soil.
- Line with 5cm of sand, newspaper or old carpet to prevent the pond liner from puncturing, including the edges.
- Lay the liner in the hole but do not stretch it too tight. Make sure it is large enough to overlap the edges and weigh it down with bricks or similar. This edge can either be covered by soil or stones, after the water has been added, and a combination of the two can work very well, offering different habitats.

- Add a further layer of the protective sand, carpet or newspaper over the liner and finish with a layer of soil to protect it further and prevent it from being broken down by sunlight.
- Fill the pond letting the water trickle in so the soil is not disturbed. If using tap water allow it to de-chlorinate naturally for at least 48 hours before stocking the pond.
- It is often best to allow your pond to stock itself. Give wildlife time to find it and move in. If you want to speed up the process, introduce a bucket of silt from a neighbour's wildlife pond – as long as you know it doesn't contain any invasive species. Do not take plants or spawn from natural ponds or streams.
- If you do want to introduce plants yourself, use native plants from garden centres or friends' ponds as much as possible. Avoid invasive alien species which will smother your pond and can cause harm to the wider environment. The best time to plant is in April or early May using a mixture of submerged plants, floating plants and emergent plants (rooted in water but foliage extends above the surface). A list of suitable native plants can be found in the separate plant list in this pack.

Bogs and marshland:

- These can be created in much the same way as ponds, just dig a shallower, saucer shaped hole and fill with liner and water as before. They can be a good extension of a pond or as a substitute if safety around small children is an issue.
- Many pond margin / emergent plants will grow here as long as it stays permanently wet. It is also important to maintain water levels to avoid nettles and docks from taking over.

Tips:

- Do not introduce fish – they will eat all the wildlife!
- Give your pond a season or two to reach a natural balance. Phosphates in the pond may cause an epidemic of blanket weed at first. You can carefully rake this out and compost (leave on the waters edge for a day or so first to allow any creatures to crawl back into the pond) but this is natural and will correct itself over time.
- In a new pond the shortage of dead plant material slows the development of the wildlife community. Encourage invertebrate activity by chopping an armful of clean straw into short lengths and floating them on the pond surface. The straw will then sink.
- Do not work in the pond between February and October as wildlife will be active and breeding. The best time is late October after tadpoles have emerged but before adults start to hibernate. Disturbing ponds in mid-winter might expose hibernating amphibians to severe cold.
- Once plants start to become overgrown remove them on a rotational basis, one third each year in late October. This ensures there is enough cover for wildlife during clearance. Allow pondlife to get back into the pond by leaving plants you have removed on the edge for a while before composting.
- Provide some shelter in the form of log piles, stone piles or long grass nearby the pond into which amphibians or hedgehogs can retreat.
- Keep the water level topped up, with rainwater if possible, but don't worry if it drops a bit in the summer. This is quite natural and most plants can cope with it.
- Try to keep a hole open in the winter ice so birds can wash and drink. Rather than smashing the ice, place a tub of hot water on it to melt a hole.

5. Pest Control

In a wildlife garden it is really important to avoid using chemicals to control pests and weeds. Often pesticides will kill much more than the target organism you are trying to get rid of. You can inadvertently kill beneficial insects, reduce the food available for birds and generally reduce the quality of the habitat for wildlife. But this doesn't mean that your garden will be overrun with aphids and slugs munching away at your precious plants! There are plenty of other ways to keep pest numbers low without damaging the environment.

Encouraging predators

Predatory invertebrates are an important link in the food chain in gardens. They prey on many pests, keeping their numbers at lower levels, as well as being food themselves for birds, mammals, frogs and toads.

- For a healthy garden ecosystem it is important to encourage predators like ladybirds, lacewings and hoverflies, by providing them with the conditions they need to thrive.
- This includes somewhere to shelter, which could be an artificial 'insect home', either bought from a garden centre or made by drilling different sized holes partway through a log.
- A log pile is ideal for many predatory larvae to live.
- Set aside a wild, unkempt corner of the garden for weeds like nettles to grow, which will attract beneficial insects.
- Birds, hedgehogs, bats, frogs and toads will eat lots of pests if you provide suitable habitat.

Non-chemical methods

There are alternatives to chemical pesticides that can be very effective at controlling pests. Slugs can be a real problem, but avoid using slug pellets, as birds and hedgehogs can be killed by eating slug pellets or poisoned slugs. Try these instead:

- Make a barrier around susceptible plants from scratchy or sharp materials, like crushed egg shells, sand or gravel, which slugs don't like sliding over. Ashes or soot can be used instead as they dry up their slime. They also have an aversion to copper. You will need to maintain the barriers otherwise slugs will find a way through!
- Sink containers of beer or milk into the soil, with 1-2cm sticking out above ground. These need to be placed every metre or so. Slugs will crawl up and into the liquid and drown.
- Slugs come out in the dark, so go out at night with a torch and collect slugs. If you keep chickens, they make an excellent snack! Otherwise you'll have to kill them yourself, either by covering with salt or cutting in half with a pair of old scissors.

Some other options for non-chemical pest control include:

- Hand-pick larger pests off plants.
- Pick off infested leaves to stop the spread of pests and diseases, or remove the whole plant if necessary. Don't compost it or leave it near other plants.
- Choose plant varieties that have been bred for resistance to pests and diseases.
- Grow plants suited to your soil type, sunshine and moisture levels. Plants will be healthier and less likely to succumb to pests and diseases.
- Enrich the soil with compost or manure. It helps plants to grow healthily and increases microbe activity in the soil, which is important for a healthy ecosystem.

Companion planting

The idea of companion planting is to use combinations of plants to reduce pests, or confer some other benefit. Some plants emit odours which repel the pests of crop plants. Others are so attractive to pests that they won't bother with your crop. Companion planting can be used to protect fruit and vegetables as well as ornamental plants.

The general principles of companion planting are:

- Plant a variety of plants.
- Mix together fruit and vegetables, herbs and ornamental plants.
- Don't plant large areas with the same type of plant, as it will be a bigger target for pests.
- You may have to sacrifice some plants to protect others, but with a large variety of plants the damage by pests and diseases will be reduced.

As well as reducing pests, companion planting has other benefits. For example, growing beans or peas fixes nitrogen in the soil which can be used by other plants to grow.

Companion Planting Guide		
Plant	Benefits	Why
Asparagus	Tomatoes	Kills nematode that damages tomato roots
Carrots	Beans, peas, leeks, lettuce, turnips, onion family	Reduces rust and thrips
Chives	Carrots, tomatoes	Combats fungal disease in carrots, keeps aphids away from tomatoes
Dill	Cabbage family	Attracts beneficial wasps that prey on cabbage pests
Garlic	Roses	Keeps aphids away from roses
Hyssop	Cabbage	Diverts cabbage white butterfly
Leeks	Beans, peas, carrots, turnips	Improves growth and repels carrot fly
Lettuce	Carrots, strawberries	Deflects slugs, snails and rabbits
Marigolds	Cabbage family, peas, potatoes, tomatoes, lettuce	Kills nematodes, repels whitefly and aphids, attracts hoverflies, diverts slugs
Mint	Cabbage	Scent repels cabbage white butterfly
Nasturtium	Radishes, cabbage, cucumber, beans	Attracts many insects, particularly cabbage white butterflies. Flowers repel aphids and cucumber beetle
Onion family	Carrots, beetroot, tomatoes, lettuce	Strong smell deters pests, especially carrot fly
Parsley	Beans, carrots, asparagus, turnips, tomatoes	Repels a number of problem insects, improves vigour of tomatoes
Radish	Spinach	Attracts leaf miner away from spinach
Sage	Carrots, cabbage family	Scents drive away each other's pests
Sweetcorn	Beans	Attracts beneficial insects that prey on bean pests
Thyme	Cabbage family	Repels cabbage moths
Tomatoes	Asparagus	Protects against asparagus beetle

Remember that diversity is the key. In a healthy garden ecosystem, pests and diseases are kept under control by predators, like beneficial insects, mammals and birds. Avoid using chemical pesticides and adopt alternative pest control measures to keep your plants healthy.

6. Homes for Wildlife

Providing dedicated homes for wildlife is a great way of encouraging species into your garden. Birds, bats, insects, reptiles and amphibians can all benefit from shelter provided in gardens. Lack of suitable homes for wildlife has contributed to the decline of some species, so providing artificial homes in your garden is important for conservation. There are lots of different options for providing homes, so try a few and see what species you attract to your garden. The more different things you do, the more species you are likely to see.

Nest boxes

Nest boxes for birds provide a safe place for eggs to be laid and chicks raised. Different species require different kinds of nest boxes, which mimic the natural places they would choose to build their nests.

Where:

- You should position the nest box 1.5 – 5m above ground level to protect from predators.
- Nest boxes should be sited so that they are sheltered from the wind and rain. They should be out of full sunlight, otherwise chicks can overheat and die.

How:

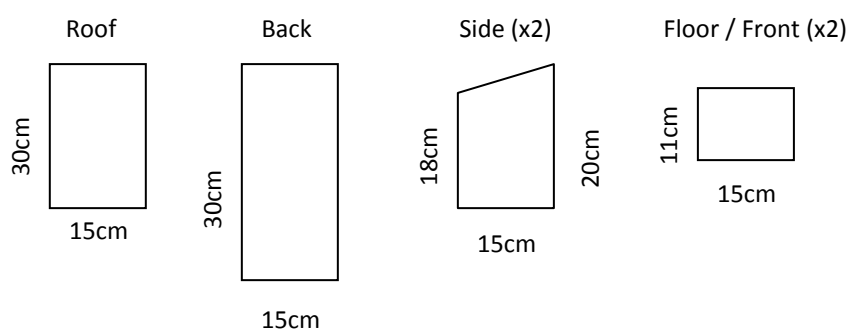
- You can buy ready-made nest boxes or make your own following the instructions below.
- Nest boxes need cleaning out annually to prevent the spread of disease. This should be done in autumn when there is no chance of disturbing breeding birds.

Small open-fronted nest box

Species: robin, wren, pied wagtail, spotted flycatcher, black redstart

What you need: any suitable wood, roughly 2cm thick, nails or screws to fix together, small piece of roofing felt (optional)

- Cut out the pieces of wood to make up the box as follows:



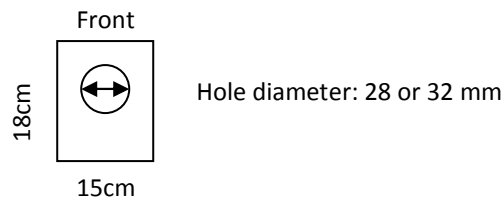
- These need fixing together using non-ferrous screws or nails. There is no need to hinge the roof as the box can be cleaned out through the open front.
- Attaching a small piece of roofing felt to the roof will improve longevity.

Nest box for small hole-nesting birds

Species: blue tit, great tit, coal tit, tree sparrow, pied flycatcher (28mm hole); house sparrow, nuthatch, lesser spotted woodpecker (32mm hole)

What you need: any suitable wood, roughly 2cm thick, nails or screws to fix together, hinge (e.g. rubber or leather), small piece of roofing felt (optional)

- To make up, this is almost the same as the open-fronted nest box. Cut out the roof, back, sides and floor as above and the front as follows:



- Fix the pieces together using non-ferrous nails or screws, apart from the roof. Attach the roof to the back piece using a hinge.
- Again you can cover the roof with a small piece of roofing felt.

Bat boxes

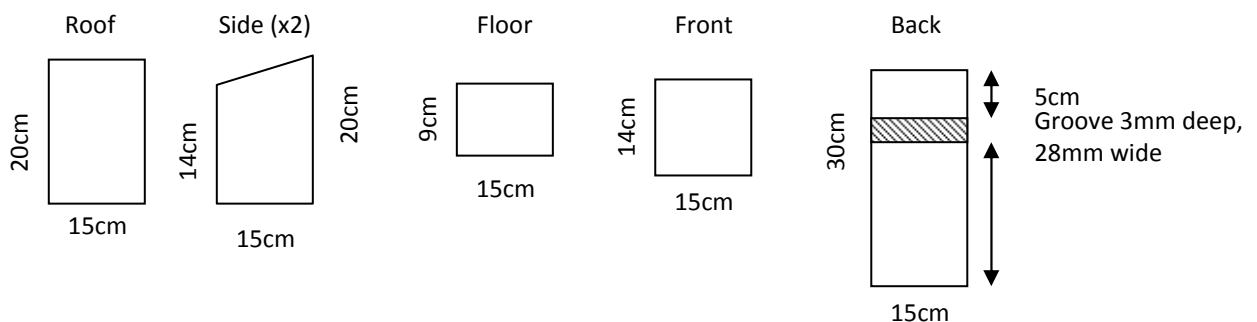
Bat boxes provide artificial roost sites for bats, which is important as natural roost sites are being lost. The construction is similar to a bird nest box, but the entrance is via a narrow gap at the bottom.

Where:

- Bat boxes can be attached to walls or trees, at least 2m above the ground.
- The box should be clear of obstructions so that bats can fly in directly.
- The site should be sheltered and receive sun for several hours a day.

How:

- You can buy a bat box or you can build your own following the design below.
- Make sure that the wood you use is roughly sawn so that the surface of the box is uneven and bats can crawl over it easily.
- Use only untreated wood, about 2cm thick.
- Cut out the pieces as follows:



- Fix the pieces together so that there is a 2cm slit at the join between the floor and back. This is the entrance hole for the bats.
- Bats are protected under the Wildlife and Countryside Act 1981, which means it is an offence to disturb, handle or kill bats without a licence. If you know bats are using your box, you cannot take it down – even if bats aren't present at the time.

Insect homes

You can provide beneficial insects, like solitary bees, ladybirds and lacewings, with a home in your garden. Bees are important for pollination and ladybirds and lacewings eat pest insects like aphids.

Encouraging these insects into your garden by providing homes makes gardening easier too. Insects may use the home to shelter, breed or over-winter.

Where:

- Place your insect homes somewhere dry and sheltered.
- If you want to make a 'bug hotel' (see below) you should build it somewhere damp in dappled shade.

How:

- You can buy a range of insect homes from garden centres or online.
- But you can easily make an insect home from waste materials and things around the house and garden.
- Drill holes into an old log. Make the holes different sizes to suit different insects.
- Tie together a bundle of hollow garden canes.
- As in the picture, you could combine the log and the canes and enclose in a wooden case to give even more protection.



- If you are feeling adventurous, why not make a 'bug hotel' which will attract even more mini-beasts? Use your imagination to build a stack of different materials, such as bricks, logs, hollow garden canes, planks of wood, stones, pine cones, corrugated card, plant pots, pipes, straw, dry leaves, moss and roof tiles. Re-use things you have lying around the house and garden. Make sure the bug hotel is stable and on flat ground. You can plant the roof with drought tolerant plants.

Log and stone piles

Leaving a loose pile of logs or branches provides habitat for all kinds of mini-beasts – including centipedes and beetles that eat slugs! Young frogs and newts may spend the winter within the log pile, as well as hibernating toads. Log piles are ideal for fungi, which break down the wood over time. Stone piles are used by invertebrates, as well as amphibians and reptiles. Toads may shelter in damp crevices and reptiles may bask on the stones in the sun. Both log and stone piles provide food for the birds and mammals which visit your garden.

Where:

- Make a log or stone pile in a quiet corner of your garden, so wildlife won't be disturbed.
- Log piles are best somewhere shady and damp, like under trees or bushes.
- Stone piles can be placed somewhere shady or sunny. They will attract different species depending on their position.

How:

- Making a log or stone pile is simple.
- Just loosely pile logs/branches or stones and wait for wildlife to start using them.

7. Compost

Adding compost to your soil or using it as a medium for growing seeds and plants is very useful. It provides important nutrients for your garden, helping plants to grow strong and healthy. But do you know where your compost comes from and what it contains? Some commercial compost contains peat which is cut from lowland peat bogs, causing the damage and destruction of wildlife habitats – as well as releasing CO₂ which can contribute to climate change. This guide will show you how to make your own compost and help you to buy environmentally-friendly peat free compost.

Making your own compost

Making your own compost has lots of benefits – it's free, it reduces the amount of household waste going to landfill and it doesn't require any peat, so precious peat bogs are protected.

Where:

- You can make compost in a compost bin or in a pile covered with a polythene sheet.
- Site your bin or compost heap in a sunny or semi-shaded position where you can access it easily. In a sunny position the compost will develop faster.
- It should be away from any watercourses or ponds as run-off from the compost can pollute the water.
- Your bin or compost heap should be placed directly on bare ground, rather than on concrete or paving. This is so that worms and other creatures can get in to break down the waste and turn it into compost.



A typical compost bin

How:

- To make good compost you need to use a mixture of 'green' and 'brown' items, otherwise your compost won't develop properly.
- 'Green' items include: grass cuttings, kitchen waste (fruit and vegetable peelings, tea bags, egg shells etc), old flowers, annual weeds before they have gone to seed and coffee grounds.
- 'Brown' items include: cardboard, egg boxes, fallen leaves, twigs/branches, scrunched up paper and sawdust.
- Some things should never be added to your compost: dairy products, meat, cooked vegetables, dog or cat waste, diseased plants and perennial weeds.
- You'll need to get the right mix of 'green' and 'brown' items otherwise your compost will be too wet or too dry.
- Young nettles or grass cuttings should be added to kick start the composting process.
- Turn your compost with a fork every few months to speed up the process by adding more air. Be careful when you do this because the heat of the compost can attract animals such as hedgehogs and slow worms.
- Depending on conditions your compost will be ready to



The finished product

use in any time between six months and two years. You'll know it is ready when it is brown, crumbly and sweet-smelling.

- Homemade compost is very rich in nutrients and best used as a soil conditioner.
- If you want to use your compost for potting, you will need to mix it with other materials like soil or sharp sand.

Buying peat free compost

Traditionally the composts that are available to buy contain peat. Peat comes from lowland peat bogs, which support rare wildlife communities. Once peat is removed from the bogs for compost, the habitat is severely damaged. Peat takes thousands of years to form so the habitat cannot recover quickly. In addition peat bogs act as huge carbon stores: as peat is formed it locks away the carbon dioxide that is absorbed by plants as they grow. But when the peat is extracted CO₂ is released back into the atmosphere, contributing to climate change.



Peat bog habitat

- Peat free compost performs just as well as – or even better than – compost containing peat.
- Instead of peat it uses recycled materials such as coir (from coconut husks), garden waste collected by the local authority and waste bark from the timber industry.
- And because peat free compost contains recycled material, it reduces the amount of waste going to landfill.
- Peat free compost is widely available at garden centres, DIY stores and online.
- Multi-purpose compost and grow bags are available, as well as specialist composts for growing particular types of plants.
- Check the ingredients carefully to make sure it is 100% peat free as packaging can be misleading.
- You can also buy seedlings and plants grown in peat free compost.

Leaf mould

Leaf mould is easy to make and is useful around the garden. It can be used as a soil improver, mulch and lawn treatment. It's good to add some dried fallen leaves to compost as 'brown' material, but too many would make it too dry. Making leaf mould is also a more environmentally-friendly way of getting rid of fallen leaves in autumn, compared with burning.

Where:

- In a shady corner of your garden.

How:

- Collect up fallen leaves in autumn and place into a black bin bag.
- Use a fork to make holes in the bag so air can circulate and, when full, sprinkle in some water, shake and tie up.
- Leave the bag somewhere shady for a year and you'll be able to use the leaf mould as a mulch. If you wait another year the leaf mould is suitable as a soil conditioner.

8. Feeding the Birds

Feeding the birds in your garden can be very rewarding. Putting out a variety of different foods can attract a wide range of species, which you have the opportunity to see up close. The food you provide can be valuable for birds, especially over the winter when food is scarce, but at other times of year too to supplement their natural diet. Food can be provided on a bird table, in hanging feeders or on the ground. It is also important to provide a fresh, clean supply of water for birds.

Where:

- You can put hanging feeders on trees, brackets attached to a wall or special posts designed to hold bird feeders.
- A bird table can be placed anywhere, but it is a good idea to place it away from the house as more birds are likely to visit.
- If you are providing food on the ground, keep it away from areas of cover where cats can hide.
- Put your feeders or bird table somewhere they can be easily seen from inside the house, giving you a better opportunity of seeing what birds visit your garden.

How:

- Feed peanuts in a wire mesh feeder. They are a great source of fat for energy in the winter. Never put out whole peanuts on a bird table as birds can choke on them.
- Sunflower seeds and seed mixes will attract a range of species. Black nyjer seeds are good for attracting siskin and greenfinch.
- Remove fat balls from any mesh containers as birds can get their feet stuck in the mesh.
- Make your own by mixing lard with bird seed, grated cheese, raisins, peanuts or other suitable bird foods. You can fill an empty coconut shell or yogurt pot with the mixture. Refrigerate for about an hour before hanging outside.
- Mealworms can be bought live or dried and are ideal for insectivorous birds.
- Lots of food scraps are ideal for feeding to birds, but avoid putting out lots of bread as it has low nutritional value. Bacon rind, grated cheese, cake or biscuit crumbs and over-ripe fruit (e.g. apples) are good left-overs for birds. Never feed mouldy food to birds as it could cause respiratory infections.
- Leaving seed heads on plants in your garden will provide another source of seeds for birds in late summer and autumn. The higher number of insects in your wildlife garden will benefit birds too.

Tips:

- If you have problems with grey squirrels eating your bird food, try using squirrel-proof feeders. These allow small birds to access the food but keep squirrels off.
- Use a bird bath or place a bowl of clean water on your bird table. Change the water regularly to prevent spread of disease. In winter be careful that it doesn't freeze over.
- Clean out bird feeders and remove uneaten food regularly to prevent diseases spreading.
- Birds come to rely on a food source, especially in winter. So you'll need to keep up feeding once you start.

9. Plants for a Wildlife Garden

Trees and Woodland Plants

Medium trees and large shrubs

Alder (*Alnus glutinosa*)

Aspen poplar (*Populus tremula*)

Bird cherry (*Prunus padus*)

Buckthorn (*Rhamnus cathartica*)

Crab apple (*Malus sylvestris*)

Elder (*Sambucus nigra*)

Field maple (*Acer campestre*)

Hazel (*Corylus avellana*)

Holly (*Ilex aquifolium*)

Rowan (*Sorbus aucuparia*)

Silver birch (*Betula pendula*)

Spindle (*Euonymus europaeus*)

Yew (*Taxus baccata*)

Large trees

Ash (*Fraxinus excelsior*)

Balsam poplar (*Populus balsamifera*)

Beech (*Fagus sylvatica*)

Common oak (*Quercus robur* / *Q. petraea*)

Elm (*Ulmus procera*)

Hornbeam (*Carpinus betulus*)

Small leaved lime (*Tilia cordata*)

White willow (*Salix alba*)

Wild cherry (*Prunus avium*)

Hedging plants

Alder buckthorn (*Frangula alnus*)

Blackthorn (*Prunus spinosa*)

Crab apple (*Malus sylvestris*)

Dog rose (*Rosa canina* agg.)

Dogwood (*Cornus sanguinea*)

Elder (*Sambucus nigra*)

Field rose (*Rosa arvensis*)

Goat willow (*Salix caprea*)

Guelder rose (*Viburnum opulus*)

Hawthorn (*Crataegus monogyna*)

Hazel (*Corylus avellana*)

Holly (*Ilex aquifolium*)

Flowers for under hedgerows

Betony (*Stachys officinalis*)

Birds foot trefoil (*Lotus corniculatus*)

Common dog violet (*Viola riviniana*)

Cuckoo pint / lords and ladies (*Arum maculatum*)

Garlic mustard / Jack-by-the-hedge (*Alliaria petiolata*)

Greater stitchwort (*Stellaria holostea*)

Hedge woundwort (*Stachys sylvatica*)

Lesser celandine (*Ranunculus ficaria*)

Primrose (*Primula vulgaris*)

Red campion (*Silene dioica*)

Self-heal (*Prunella vulgaris*)

Sweet cicely (*Myrrhis odorata*)

Woodland edge plants

Bluebell (*Hyacinthoides non-scripta*)

Bugle (*Ajuga reptans*)

Foxglove (*Digitalis purpurea*)

Greater celandine (*Chelidonium majus*)

Lily of the valley (*Convallaria majalis*)

Lords and ladies (*Arum maculatum*)

Snowdrop (*Galanthus nivalis*)

Stinking hellebore (*Helleborus foetidus*)

Sweet woodruff (*Galium odoratum*)

Wild daffodil (*Narcissus pseudonarcissus*)

Wood anemone (*Anemone nemorosa*)

Yellow archangel (*Lamium galeobdolon*)

Climbing plants

Black byrony (*Tamus communis*)

Climbing brambles (*Rubus fruticosus*)

Dog rose (*Rosa canina* agg.)

Field rose (*Rosa arvensis*)

Honeysuckle (*Lonicera periclymenum*)

Ivy (*Hedera helix*)

Quince (*Cydonia oblonga*)

Wild clematis / old man's beard (*Clematis vitalba*)



A bee feeding on the nectar of apple blossom

Aquatic Plants

Pond Plants

Submerged / oxygenators

Common water starwort (*Callitriche stagnalis*)
Rigid hornwort (*Ceratophyllum demersum*)
Water crowfoot (*Ranunculus aquatilis*)
Whorled water-milfoil (*Myriophyllum verticillatum*)

Curled pondweed (*Potamogeton crispus*)
Spiked water-milfoil (*Myriophyllum spicatum*)
Water violet (*Hottonia palustris*)
Willow moss (*Fontinalis antipyretica*)

Floating

Broad-leaved pondweed (*Potamogeton natans*)*
Fringed water lily (*Nymphoides peltata*)
Ivy-leaved duckweed (*Lemna trisulca*)
White water lily (*Nymphaea alba*)*

Floating sweet grass (*Glyceria fluitans*)*
Frogbit (*Hydrocharis morsus-ranae*)
Water crowfoot (*Ranunculus aquatilis*)
Yellow water lily (*Nymphaea lutea*)*

Emergent

Amphibious bistort (*Persicaria amphibia*)
Branched burr-reed (*Sparganium erectum*)*
Mare's tail (*Hippuris vulgaris*)*
Water forget-me-not (*Myosotis scorpiodes*)

Bog bean (*Menyanthes trifoliata*)*
Common reed (*Phragmites australis*)*
Purple loosestrife (*Lythrum salicaria*)
Water mint (*Mentha aquatica*)*

Marginal

Arrowhead (*Sagittaria sagittifolia*)
Flowering rush (*Butomus umbellatus*)
Marsh marigold (*Caltha palustris*)
Water mint (*Mentha aquatica*)

Brooklime (*Veronica beccabunga*)
Lesser spearwort (*Ranunculus flammula*)
Water forget-me-not (*Myosotis scorpiodes*)
Water plantain (*Alisma plantago-aquatica*)*

Marsh and bog plants

Bogbean (*Menyanthes trifoliata*)
Water cress (*Nasturtium officinale*)*
Sedges (*Carex* spp.)*
Yellow flag iris (*Iris pseudacorus*) *
Meadow buttercup (*Ranunculus acris*)
Water plantain (*Alisma plantago aquatica*)

Rushes (*Juncus* spp.)*
Water forget-me-not (*Myosotis scorpioides*)
Marsh St John's wort (*Hypericum elodes*)
Lady's smock (*Cardamine pratense*)
Greater birds foot trefoil (*Lotus pedunculatus*)
Sneezewort (*Achillea ptarmica*)

* Only really suitable for large ponds as can become invasive



Marsh marigolds show a flash of early colour and provide shelter for frogs



The pinky-white flowers of bogbean emerge above the water to provide nectar to insects



Yellow flag iris is useful to dragonflies and damselflies

Wildflower Meadows and Borders

Spring flowering meadow (mow from July onwards)

Common birds foot trefoil (*Lotus corniculatus*)
Cowslip (*Primula veris*)
Daisy (*Bellis perennis*)
Herb Robert (*Geranium robertianum*)
Lady's smock (*Cardamine pratensis*)
Meadow buttercup (*Ranunculus acris*)

Primrose (*Primula vulgaris*)
Red clover (*Trifolium pratense*)
Ribwort plantain (*Plantago lanceolata*)
Snake's head fritillary (*Fritillaria meleagris*)
White campion (*Silene alba*)
Yellow rattle (*Rhinanthus minor*)

Summer flowering meadow (mow 'til June and again late September)

Common knapweed (*Centaurea nigra*)
Common poppy (*Papaver rhoeas*)
Devil's bit scabious (*Succisa pratensis*)
Foxglove (*Digitalis purpurea*)
Harebell (*Campanula rotundifolia*)
Meadow buttercup (*Ranunculus acris*)

Meadow cranesbill (*Geranium pratense*)
Ox-eye daisy (*Leucanthemum vulgare*)
Thyme (*Thymus drucei*)
White clover (*Trifolium repens*)
Yarrow (*Achillea millefolium*)
Yellow rattle (*Rhinanthus minor*)

Grasses

Common bent (*Agrostis capillaris*)
Crested dog's tail (*Cynosurus cristatus*)
Crested hair grass (*Koeleria macrantha*)
Meadow barley (*Hordeum secalinum*)
Meadow fescue (*Festuca pratensis*)
Meadow foxtail (*Alopecurus pratensis*)

Red fescue (*Festuca rubra*)
Sheep's fescue (*Festuca ovina*)
Smooth meadow-grass (*Poa pratensis*)
Sweet vernal-grass (*Anthoxanthum odoratum*)
Timothy (*Phleum pratense*)
Yellow oat-grass (*Trisetum flavescens*)

Wildflowers for borders

Chives (*Allium schoenoprasum*)
Common poppy (*Papaver rhoeas*)
Cornflower (*Centaurea cyanus*)
Cowslip (*Primula veris*)
Forget-me-not (*Myosotis* spp.)
Foxglove (*Digitalis purpurea*)

Globe thistle (*Echinops ritro*)
Goldenrod (*Solidago virgaurea*)
Greater knapweed (*Centaurea scabiosa*)
Hemp agrimony (*Eupatorium cannabinum*)
Hollyhock (*Althaea rosea*)
Viper's bugloss (*Echium vulgare*)

Candytuft (*Iberis sempervirens*) †
Ice plant (*Sedum spectabile*) †
Michaelmas daisy (*Aster novi-belgii* agg.) †
Perennial sunflower (*Helianthus decapetalus*) †

Purple coneflower (*Echinacea purpurea*) †
Tobacco plant (*Nicotiana affinis*) †

† Plants which are hybrids or exotics but may still be useful in the garden.



Ladybird on crested dog's tail
(Tim May)



Cowslips are a valuable early nectar source
(Emily Meilleur)



Devil's-bit scabious is an important late nectar source and the food plant of the marsh fritillary butterfly

Plants for...

Butterflies (sunny, sheltered positions)

Buddleia (*Buddleja* spp. not *daurica*)[†]
Lavender (*Lavandula angustifolia*)[†]
Ice plant (*Sedum spectabile*)[†]
Ivy (*Hedera helix*)
Thistle (*Cirsium* spp.)

Clover (*Trifolium* spp.)
Michaelmas daisy (*Aster novi-belgii* agg.)[†]
Common knapweed (*Centaurea nigra*)
Honesty (*Lunaria annua*)[†]
Hebe (*Hebe* spp.)[†]

Moths

Night scented catchfly (*Silene noctiflora*)
Evening primrose (*Oenothera biennis*)[†]
Tobacco plant (*Nicotiana affinis*)[†]
White jasmine (*Jasminium officina*)[†]
Ivy (*Hedera helix*)

Honeysuckle (*Lonicera periclymenum*)
Night scented stock (*Matthiola bicornis*)[†]
Barberry (*Berberis vulgaris*)
Ragged robin (*Lychnis flos-cuculi*)
Common knapweed (*Centaurea nigra*)

Bees (avoid double flowers)

Hemp agrimony (*Eupatorium cannabinum*)
Spiked speedwell (*Veronica spicata*)
Teasel (*Dipsacus fullonum*)
Viper's bugloss (*Echium vulgare*)
Foxglove (*Digitalis purpurea*)

Mint (*Mentha* spp.)
Ivy (*Hedera helix*)
Purple loosestrife (*Lythrum salicaria*)
Broom (*Cytisus scoparius*)
Primrose (*Primula vulgaris*)

Other beneficial insects

Ivy (*Hedera helix*)
Fennel (*Foeniculum vulgare*)
Rock rose (*Helianthemum nummularium*)
White alyssum (*Lobularia maritime*)
Poached egg plant (*Limnanthes douglasii*)[†]

Stinging nettle (*Urtica dioica*)
Angelica (*Angelica sylvestris*)
Rosemary (*Rosmarinus officinalis*)[†]
Houseleek (*Sempervivum tectorum*)
Marigolds (*Tagetes* spp.)[†]



Spiked speedwell is ideal for attracting bees (Tim May)



Common rock rose is a good source of nectar for bees and several beetles feed on the leaves (Tim May)



A burnet moth on knapweed

A note on native plants:

Don't take plants from the wild – please note that under the Wildlife and Countryside Act 1981 it is an offence to intentionally uproot any wild plant. To find suppliers of native plants and seeds use the Flora Locale website (www.floralocale.org). Ask about the provenance of plants to make sure they are from British stock.

10. Plants to Avoid

There are some species of plants that should be avoided in your wildlife garden. Invasive non-native species in particular cause many problems in the wider countryside and often spread from gardens. Other plants should be avoided because they have no value to wildlife or are problematic for another reason. Beware that many problem species, including invasive non-native species, are sold in garden centres under a variety of names. You should avoid planting all of the plants on this list in your garden. It is prohibited by law to cause some plants, like Japanese knotweed and giant hogweed, to grow in the wild and any waste containing them must be disposed of at licensed sites. New problem species are identified from time to time and legislation can change. If you are unsure it is worth checking at www.nonnativespecies.org.








































































Pond plants:

Brazilian watermillfoil (*Myriophyllum brasiliense*, *M. proserpinacoides*)
Canadian pondweed, Canadian waterweed (*Elodea canadensis*)
Curly waterweed (*Lagarosiphon major*, *Elodea crispa*)
Duckweed (*Lemna minor*)
Fanwort, green cabomba, Carolina watershield (*Cabomba caroliniana*)
Floating pennywort (*Hydrocotyle ranunculoides*)
Giant salvinia (*Salvinia molesta*)
Green seafingers (*Codium fragile*)
Lesser duckweed (*Lemna minuta*, *Lemna minuscula*)
New Zealand pygmy weed, Australian swamp stonecrop (*Crassula helmsii*, *Tillaea helmsii*)
Nuttall's pondweed, Nuttall's waterweed (*Elodea nuttallii*)
Parrot's feather (*Myriophyllum aquaticum*)
Water chestnut (*Trapa natans*)
Water fern, fairy fern (*Azolla filiculoides*, *Azolla caroliniana*)
Water hyacinth (*Eichhornia crassipes*)
Water lettuce (*Pistia stratiotes*)
Water primrose (*Ludwigia grandiflora*, *Jussiaea grandiflora*)

Terrestrial plants:

Buddleia davidii
Canadian goldenrod (*Solidago canadensis*, *S. altissima*)
False acacia, black locust, silver chair, white laburnum (*Robinia pseudoacacia*)
Few flowered leek (*Allium paradoxum*)
Giant hogweed (*Heracleum mantegazzianum*)
Giant rhubarb (*Gunnera* spp.)
Himalayan balsam, Indian balsam (*Impatiens glandulifera*)
Hottentot fig, sow fig (*Carpobrotus edulis*)
Japanese knotweed (*Fallopia japonica*)
Japanese rose (*Rosa rugosa*)
Montbretia, falling stars (*Crocasmia x crocosmiiflora*)
Non-native cotoneaster (e.g. *Cotoneaster horizontalis*)
Russian vine (*Fallopia baldschuanicum*)
Spanish bluebells (*Hyacinthoides hispanica*)
Variegated yellow archangel (*Lamium galeobdolon*)
Three cornered garlic/leek (*Allium triquetrum*)
Snowberry (*Symphoricarpos rivularis*)
Skunk cabbage (*Lysichiton americanus*)
Sea buckthorn (*Hippophae rhamnoides*)

11. Wildlife Garden Calendar

January	February	March	April
<ul style="list-style-type: none">  Trim hedges once the berries have been eaten  Put out fresh water for birds and check it isn't frozen  Plant trees, shrubs and hedges in milder weather  Prune apple trees  Make a plan for the year ahead  Look out for different birds in your garden – you might get some unusual winter visitors 	<ul style="list-style-type: none">  Plant trees, shrubs and hedges in milder weather  Spread compost or bark around shrubs and trees  Prune apple and pear trees  Check bird baths and ponds and remove any ice. If completely frozen over melt a hole in the centre with a bowl of warm water  Look out for frog and toadspawn in your pond 	<ul style="list-style-type: none">  Plant shrubs and perennials  Feed and mulch beds and borders  Sow hardy annuals  Plant summer bulbs  Start weeding  Birds will be nesting by now so don't disturb any hedges or shrubs where they could be  Build a bee box for queens who start searching for a home this month 	<ul style="list-style-type: none">  Sow hardy annuals  Feed and mulch beds and borders  Plant herbaceous plants  Plant summer bulbs  Introduce water plants into the pond  Nesting season is well underway and farmland birds often venture into gardens, so leave seed feeders well stocked
May	June	July	August
<ul style="list-style-type: none">  Plant container-grown shrubs  Plant herbaceous plants  Plant hanging baskets and containers  Sow hardy annuals  Sow vegetable crops outdoors including salad crops, peas and cabbages  When all threat of frost has passed, plant out tomatoes and courgettes in grow bags  Look out for interesting insects, like dragonflies over your pond 	<ul style="list-style-type: none">  Spread a mulch of compost or shredded bark around trees, shrubs and roses when the soil is moist  If you have been growing plants from seed inside the greenhouse, take them outside to acclimatise before planting  Sow vegetable crops directly into the soil, and try some in large pots  June is a good time to see butterflies – plant traditional cottage garden plants to provide abundant nectar 	<ul style="list-style-type: none">  Start cutting spring-flowering meadows now and cut for rest of summer  Harvest hay if you have let your lawn grow tall  Rake up lawn clippings to keep fertility down  Dead-head flowers  Keep down unwanted weeds by hoeing  Night-scented flowers are best this time of year, so sit out in the evening to look for moths – and bats hunting them 	<ul style="list-style-type: none">  Dead head roses and other perennial plants to encourage them to keep flowering  Sow wildflower seeds to make a meadow late in the month  Allow lawns to grow slightly longer to tolerate hot weather  Keep ponds topped up with rainwater  Put a log or stone pile in a sunny corner for lizards to bask on
September	October	November	December
<ul style="list-style-type: none">  Now the bird nesting season is over you can trim conifers and hedges – but leave any with berries until January  Deadhead summer flowers to keep them flowering longer  Plant or move evergreen shrubs if they are in the wrong place  Give late-flowering meadows a final cut  Animals start preparing for hibernation this month, so leave out food for hedgehogs 	<ul style="list-style-type: none">  Plant herbaceous perennials  Ensure bird table and feeders are out  Do any work to your pond late in the month, such as clearing vegetation  Leave fallen leaves to provide shelter and protection for wildlife  Plant spring bulbs from now until end of November  Leave seedheads to overwinter to provide food for birds  Look for interesting fungi this month 	<ul style="list-style-type: none">  Plant bare-root and balled shrubs, trees and hedges from now until March  Make leaf mould  Compost as much as you can, rather than burn it  If you are having a bonfire, check carefully for hedgehogs beforehand  Dig new beds before the winter frosts  Put up nest boxes anytime during the winter  Look out for flocks of redwings and fieldfares coming to feast on berries 	<ul style="list-style-type: none">  Plan and dig new borders and beds  Prune apple trees  Mend and replace fences, arches and other garden structures  Tidy up greenhouses, but be careful of any hibernating creatures  Winter dig the vegetable plot  Look out for Christmas robins driving intruders from their territories
Gardening tasks for the month		Wildlife to look out for in your garden	
