

How to: Garden organically for wildlife



Sarah Pitt's Organic Garden Photos: Sara Pitt

Organic gardening for wildlife is very rewarding. It means gardening without the use of any artificial chemicals like pesticides (that kill bugs) and herbicides (that kill plants) or expensive artificial fertilizers. Next time you reach for weed-killer or pest killers in a plastic bottle, take a moment to think how much healthier your garden could be if you garden organically, alongside nature, rather than pitting yourself against it with chemicals.

Target species:

All wildlife is welcome in an organic garden and the longer you manage your plot in this way, the healthier the eco-system will become. There is however a focus on controlling 'pest' species by encouraging predator species so problem insects are controlled naturally. An example of this might be predator ladybirds that eat blackfly, greenfly and other aphids. You will never be rid of all aphids in the garden but if the conditions are right for ladybirds and other aphid predators then nature will be more in balance.

How to do it

Organic gardening starts with the soil and works up from there. Worms and soil microbes will incorporate manures and compost into soil and turn this decaying matter into 'humus', a source of rich nutrients for plants. A healthy soil will produce healthy plants and crops.

Manage your soil

Organic gardeners don't use unsustainable artificial fertilisers, which have a very high carbon footprint

- Make your own compost. Start a compost heap and fill it with fruit & vegetable peelings from the kitchen, tea bags (plastic free) and coffee grounds, paper, soft prunings and annual weeds (before they go to seed). You need both soft green materials that are nitrogen rich and "brown" more woody materials rich in carbon. The right mixture of nitrogen and carbon will break down and can be used as a compost mulch to enrich your soil. Leave to rot down across a year turning it regularly with a fork to ensure oxygen reaches the plant material.
- Apply garden compost as a mulch or dug into flower and vegetable beds.
- Organic poultry manure (usually in the form of pellets) can also be added to vegetable beds to improve fertility.
- Plant "green manure" cover-crops on otherwise bare soil in late summer or autumn to prevent nutrients in the soil being lost across winter. Dig the plants in the following spring, a month or so before planting young crops. If you use clover and vetch they will absorb nitrogen from the air and fix it

in nodules on their roots. When they are dug in a few weeks later, as the plants decompose, they release their nutrients and make them available to crops.

Weed control



You will have to do more hand weeding and hoeing to keep your vegetable plots and flower borders weed-free although in some situations annual weeds can be tolerated as soil cover.

Hand weeding with a trowel is remarkably satisfying!

Photo: Sarah Pitt

- You will need a fork to dig out any perennial weeds that can become a problem such as bindweed, ground elder, couch grass, dock, mare's tail and creeping buttercup.
- Alternatively cut down tall weeds and remove to wilt down and compost elsewhere. Then cover the area with geo-textile, cardboard or carpet. This will exclude light from weeds and can stay in place for a few months. It will severely weaken weeds but you may have to finish them off with a fork when you come to use the bed again
- Close planting in flower beds, particularly of perennials, reduces the opportunities for weeds
- Some weeds such as dandelions and nettles do no harm where they won't compete with your crops and provide food for beneficial insects, and their foliage provides nutrients for the compost heap

Plant disease control



Rotating crops across your plot is one of the main principles of organic gardening. Potato pests lurking in the soil from the previous year will be thwarted when you plant cabbages in the same ground this season – and vice versa.

Photo: Sarah Pitt

- Never grow the same vegetable family in the same bed year after year. Rotate alliums, brassicas, legumes (beans and peas), potatoes and cucurbits (marrow/squash/courgette) and other plant families to prevent a disease build up and discourage insect pests. Rotation aids soil fertility as legumes add nitrogen. Growing one crop in the same bed year after year could deplete the ground of certain nutrients.
- Choose disease resistant crop varieties to sow and plant

Insect pest control

Even conventional gardeners rarely *need* to resort to the pesticide spray, so going without all toxic chemical use isn't too much of a problem.

- Organic gardeners learn to tolerate minor leaf damage to flowers and crops, and this is something *all* gardeners can learn from them
- Encouraging predators such as amphibia and beetles will go a long way to reducing pest problems
- Check your plants carefully and often, so you pick up potential problems before they become serious
- Caterpillars, lily and vine beetles are easily spotted and removed by hand



Look up recommended organic controls for particular problems. For blackfly on broad beans for example, pinching off the tops of the plants is a great help, and it's also fun to blast them off with a hose water spray

Blackfly prefer the tender bean tops – which don't bear flowers and beans, so you lose no crop by removing them with the pests

Photo: Michele Iannizzotto via Wikimedia Commons *In this case a ladybird is already on the job*

- Having birds feeding and breeding in the garden will help keep troublesome insects in check (those aphids again!) and these in turn provide a food source for hungry parent birds and their chicks.
- Strict organic standards don't allow use of home-made soap sprays against aphids, because these are not officially registered with UK Health and Safety regulators
- Surprisingly, organic standards do permit *some* pesticide sprays made from natural ingredients such as sulphur, plant oils or pyrethrum extracted from a chrysanthemum. These are however entirely against the spirit of organic gardening, since they are indiscriminate and kill all insects, not just the pests

Slug control

See How to: [Manage pests and diseases](#) in the garden

- Few barrier method controls work well especially after rain
- You can use nematode cultures from the internet, which you apply as the soil warms in spring
- Organic standards rather reluctantly permit use of ferric phosphate pellets in moderation

Sustainability

Organic standards include the sustainability of the resources you use in the garden, and follow the mantra *reduce, reuse and recycle*.

- Avoid plastics where you can – but in a balanced way. Sturdy plastic products like compost bins and wheelbarrows can be used for many years. So can plant pots, but recyclable ones are now available
- Try to avoid using tap water to irrigate, instead collect rainwater and use grey water from the bath.
- Don't use wasteful lawn sprinklers – in fact don't water lawns at all
- Use hand tools rather than power tools, buy them second-hand and repair them

Helping biodiversity

Organic standards include giving as much help to all wildlife as you can – in turn wildlife helps you manage your garden.



Photos: Sarah Pitt

- Look at our pages on [garden ecology](#) and [garden biodiversity](#) to get a good understanding of how garden biodiversity “works”
- Put in as many features as you can to help wildlife. Look at our other “How to” guides for advice on [planning](#) a wildlife garden, installing [habitats](#) such as ponds and wood piles, [plants](#) for pollinators and other wildlife, and [special tips](#) for birds, beetles, butterflies and other wildlife groups

How easy is it to do?

Easy to moderate. Most jobs are the same as for conventional gardening, but a bit more effort has to go into maintaining fertility and managing pests and weeds.

How much will it cost?

You will save a lot of money on garden chemicals! Otherwise see other How to guides for different aspects of wildlife gardening. The most important investment will be in a compost bin, which vary in cost from £30 up to over a £100. This is a one-off cost and the bin should last you many years. However, many people build their own for free from discarded [wooden pallets](#).

How effective is it ?

Soil supports all terrestrial life and we need to start paying it a lot more attention to keep it healthy. In an organic system you aim to build up soil fertility, through the application of organic matter so you are recycling natural materials back into the soil

Using no chemicals means you can be a partner in how your garden develops, alongside nature. You can create and maintain your own soil fertility and help make your garden more resilient to changes in climate now and in future.

Golden Rules - what the science tells us

- Maintaining fertility and soil health is essential for good plant growth
- By avoiding general insecticides you will allow natural predators to manage your pests
- Vigilance and early intervention will always pay dividends for an organic gardener
- There have been no studies at the garden level to assess how much damage is actually caused to wildlife by the proper and timely use of pesticides. The organic approach therefore follows the precautionary principle, as with banning genetically modified crops

What to look for?

Similar levels of production of flowers and vegetables as before, and at least as many species of wildlife.

- Besides that - organic gardeners will tell you their produce tastes better!

Things to be aware of:

- If your garden is not already organic and you have used artificial chemicals in the past, it may take up to three years to create organic status and build natural soil fertility.
- Keep on top of weeding, particularly perennial weeds as once they take hold they can be difficult to eradicate completely.
- Ensure the garden compost you use to mulch your soil is well rotted and looks dark and 'friable', like soil, when it is ready to apply. This can take over a year. Poorly rotted compost can introduce more weeds into your beds and borders.

Further Information

Our Web pages

Garden [biodiversity](#) www.wlgf.org/intro_garden_biodiversity.html

Garden [ecology](#) www.wlgf.org/intro_garden_ecology.html

Compost and [fertility](#) www.wlgf.org/compost_fertility.html

Gardening [without peat](#) www.wlgf.org/Gardening_peat.html

How to: [Make garden habitats](#) for wildlife www.wlgf.org/ht_make_habitats.html

How to: [Use plants](http://www.wlfg.org/ht_use_plants.html) to support garden wildlife www.wlfg.org/ht_use_plants.html

How to: Help different [groups of wildlife](http://www.wlfg.org/ht_help_wildlife.html) www.wlfg.org/ht_help_wildlife.html

How to: [Plan](http://www.wlfg.org/ht_plan_garden.pdf) a wildlife-friendly garden www.wlfg.org/ht_plan_garden.pdf

How to: [Manage pests and diseases](#) in the garden

How to: Make compost (in preparation)

RHS guides

Organic gardening [introduction](http://www.rhs.org.uk/advice/profile?pid=822) www.rhs.org.uk/advice/profile?pid=822

[Green manure](http://www.rhs.org.uk/advice/profile?pid=373) www.rhs.org.uk/advice/profile?pid=373

Garden Organic

[Principles](http://www.gardenorganic.org.uk/principles) of Organic Gardening www.gardenorganic.org.uk/principles

Organic growing [advice](http://www.gardenorganic.org.uk/growing-advice) – start here www.gardenorganic.org.uk/growing-advice

Making a [pallet compost](http://www.youtube.com/watch?v=fW_DVNUt7ms) bin www.youtube.com/watch?v=fW_DVNUt7ms

Books

RHS 'Organic Gardening', by Pauline Pears and Sue Stickland (2000) Mitchell Beazley

Composting, a Step-by-Step Organic Gardening Guide (1997) HDRA

Compost: The natural way to make food for your garden Ken Thompson (2011) Dorling Kindersley