Bumblebee Conservation Trust

Go pesticide-free in your garden

Listen using 'Read Out Loud' in Adobe Acrobat Reader.

Help your local bumblebees to survive and thrive by gardening organically and in balance with nature.

You can have a hugely positive impact on any bumblebees living in your area by leaving weedkillers and bug sprays on the shelf. Manufactured pesticides are harmful (and can be deadly) for bumblebees and other pollinators and should be avoided.

Lots of wildflowers, insects, and other invertebrates are thought of as 'weeds' and 'pests'. In fact they are almost always a sign of a healthy garden ecosystem! Letting things grow more freely, untreated with chemicals, will encourage a greater diversity of plants (including bumblebee-friendly flowers) and creatures in your outdoor space. Over time natural predators will return, taking care of species like aphids and snails which feed on plants. Your garden will be healthier overall, and you'll be lending a much needed helping hand to your local wildlife.

If you do feel you need to control certain plants and creatures, try out some of the organic methods in this guide.

What are 'pesticides'?

A pesticide is a substance used to repel, kill, or control unwanted plants and animals.

These are all types of pesticide:

- **Herbicide** – substances used to control unwanted plants. Often known as weedkiller.
- **Insecticide** – substances used to kill insects, e.g. fly sprays or ant powder.
- **Fungicide** – substances used to destroy or stop the growth of fungi.
- **Molluscicide** – substances used to control slugs and snails e.g. slug pellets.

How do pesticides harm bumblebees?

Pesticides are often used to control unwanted plants, insects, fungi and more. They're frequently used on plants and crops. But there's a huge problem, as they can also harm bumblebees and other useful insects (even if they are not the intended targets).

Pesticides can kill bumblebees directly. Even small amounts could affect a bumblebee's ability to find food or reproduce.

Bumblebees are at risk of being exposed to many different pesticides throughout their lifecycle. The combined 'cocktail' effect has the potential to be far more harmful than exposure to one chemical alone.

Weedkillers destroy the flowers that bumblebees need for their food! Some ingredients in weedkillers are just as lethal to bumblebees as insecticides.

Did you know many of the plants, bulbs and seeds available to buy have been pre-treated with pesticides? To help bumblebees, always try to choose **organic, pesticide-free** plants instead. Ask for advice at your local garden centre or nursery, search online for organic mail-order options, or look for a local, organic plant swap in your community.

Chemical-free ways to control unwanted plants

Embrace the ‘weeds’

Bumblebees love nectar and pollen-rich wildflowers like dandelions. By stepping back and letting more wildflowers grow, you’ll immediately be providing more food for hungry bumblebees. You could even put up a sign, to let people know why you’re making these positive changes and inspire them to do the same!

Adopt traditional hand-weeding methods

Run a sharp hoe over a bed in dry weather, to kill seedlings. Hand-weed larger plants before they set seed, using a trowel to get as much of the root out as possible. If you’re unable to reach the roots, chop the head off the plant to reduce the plant’s ability to reseed. Weed knives are useful tools for getting between paving slabs.

Get mulching

Use natural materials such as tree bark or wood chips on areas where you would like to prevent unwanted plants from growing. This will prevent light reaching the soil, stopping the plants beneath from developing. To be most effective, aim to keep the mulch at a depth of 10-15cm.

Use other plants

Use ground-covering plants to take up the space where other unwanted plants could grow, or plant flowers closer together.

Top tip! Choose bumblebee-friendly ground cover plants such as bugle, sedum/stonecrop, catmint, or hardy geranium.

‘Weeds’ are just wild plants which some people think are growing in the ‘wrong’ place! Embracing them is an amazing way to provide more flowers for bumblebees to feed on, and they look beautiful too.

Creeping thistle

Photo: Chloe Headdon

Self-heal

White clover

Photo: Chloe Headdon

Dandelion

Common valerian

Photo: Tim Griffiths

Herb robert

Chemical-free ways to control unwanted creatures

Attract natural predators!

By attracting more wildlife to your garden, you can use the natural enemies of 'pests' to keep their numbers in check. Insects such as hoverflies and ladybirds feed on aphids. Birds and frogs are natural predators of slugs and snails. 'Pests' are part of a healthy garden ecosystem and great food for other animals. Discover more about this topic below.

Photo: Richard Comont

Hand-pick slugs and snails

Although time consuming, one of the most effective methods is to gently hand-pick slugs and snails, preferably at night. Move them more than 20 metres away to prevent them returning. Where possible, raise seedlings inside and plant them out when they are larger and less susceptible to attack. Keep plants healthy and with good air circulation. Rake over soil to allow birds to eat any exposed slugs' eggs.

Try companion planting to deter insects

Growing certain plants together may discourage unwanted creatures. Growing chives alongside carrots can confuse carrot fly. Thyme is considered a good companion plant for roses. Nasturtiums are often used as a sacrificial crop; aphids and caterpillars love them and will choose them over other plants. (Added bonus – these companion plants also feed bumblebees!)

6 simple methods to attract more wildlife/natural predators

1. **Plant strips or pots with native wildflowers or encourage wildflowers** that are already growing in your garden to flourish. As well as feeding bumblebees, this will bring in plenty of other beneficial insects such as ladybirds, hoverflies and predatory wasps which will predate on the insects damaging your plants.

2. **Allow some areas to grow long and leave 'wilder' areas.** Leaving wild spaces will attract a greater range of creatures, allowing your garden ecosystem to be more balanced and resilient.

3. **Add a pile of logs in a shady corner.** Frogs and toads love these spaces and eat some of those pesky garden creatures. Log piles can provide a safe shelter for hedgehogs to hibernate or breed and you'll also attract useful beetles.

4. **Plant native hedge species and shrubs**. This is a fantastic way to encourage beneficial insects and birds and provides hedgehogs with access to gardens.

5. **Start your own compost heap**. These are great spaces for slow worms, rove beetles and all sorts of insect-eating insects. You'll also create free organic compost to use in your garden!

6. **Add a water source such as a small pond or tub**. This could attract frogs that will eat your slugs and draw in insect-eating birds. Make sure to add a ramp so that wildlife can easily access and exit the water.

Bee the Change bonus!

As wild bees, bumblebees need to find somewhere to nest, for example in long, tangled grass, wild corners, compost heaps, and under hedges. Bumblebee queens can also hibernate over winter in log piles. This means that by trying some of the methods above, you can also help provide potential homes for bumblebees!

Meet the garden heroes

Ladybirds

Photo: Barnaby Smith

Extremely helpful insects to find in the garden, many ladybirds prey almost exclusively on aphids. They will also eat scale insects and spider mites.

Frogs

These useful amphibians eat a large number of slugs and snails as well as a wide range of insects.

Hoverflies

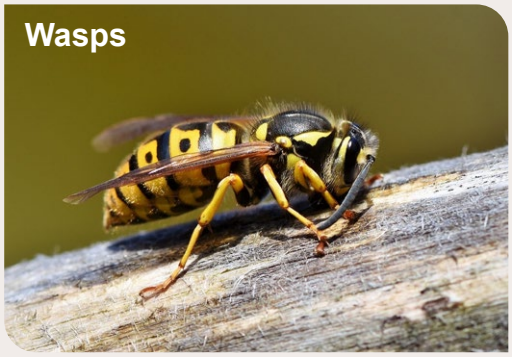
Photo: Bex Cartwright

A vital part of a healthy garden. Their larvae feed on large numbers of aphids and can prevent aphid breakouts. They are also excellent pollinators.

Hedgehogs

These amazing creatures are valuable insect munchers, enjoying meals including plant-eating beetles and caterpillars.

Wasps



These insects sometimes get a bad reputation but are some of the best creatures for natural pest control. In the summer, they hunt huge numbers of insects to feed to their grubs.

Ground beetles

Photo: Bex Cartwright

A great sign of healthy soil, these beetles also consume many pests including aphids, caterpillars and slugs.

Bee the change

August 2023. BBCT232 Copyright 2023 ©. All rights reserved.

The Bumblebee Conservation Trust is a registered charity (England & Wales 1115634 / Scotland SC042830).