

20 things you need to know about bees



About Friends of the Earth

For more than 40 years we've seen that the well-being of people and planet go hand in hand – and it's been the inspiration for our campaigns. Together with thousands of people like you we've secured safer food and water, defended wildlife and natural habitats, championed the move to clean energy and acted to keep our climate stable. Be a Friend of the Earth – see things differently.

Come and find out more at www.foe.co.uk



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Why bees?

They may be tiny but bees are essential to a healthy environment and healthy economy. We rely on them and other insects to pollinate most of our fruit and vegetables – it would cost UK farmers £1.8 billion a year to pollinate their crops without bees.

But bees are under threat and without them so is our food and economy. Friends of the Earth is encouraging people to make their gardens, streets and communities bee-friendly and take action to get the Government's support for bees too.

This booklet reveals 20 things you need to know, including some simple but important ways you can help Britain's bees.

www.foe.co.uk/bees



The brilliance of the bee

- 1.** What did you have for breakfast today? Jam on toast? Fresh fruit? Dried fruit in your muesli or some grilled tomatoes with your fry-up? Maybe fruit juice or a coffee? All of this was brought to you by bees. It's tempting to think bees just provide us with honey – but in fact they're behind much of the food we eat, including most fruit and vegetables. Bees are crucial to our economy – without them it would cost UK farmers £1.8 billion a year to pollinate our crops. In a world without bees, our food would cost a lot more to produce and our economy would take a big hit.
- 2.** When was the last time you noticed a bee buzzing around some flowers? Maybe you find them charming or annoying – either way, bees are incredibly important. They pollinate plants in gardens, parks and the wider countryside, including more than three-quarters of the UK's wildflowers. Bees are a sign of how healthy, or otherwise, our environment is.
- 3.** Places that are good for pollinators are good for people too. What's finer on a warm summer's day than lying in a park – fragrant with flowers and humming with



Photos: Corbis / Thinkstock



bumblebees? We share bees' need for varied, natural green spaces and the essentials such places provide, which we often forget. Wild areas are great for bees and perfect for picnics, but they also help give us clean air and water. They're important if we're going to cope with a changing climate – natural spaces absorb excess water and heat, and can offer cool shade.

- 4.** From pub signs and town names, from Shakespeare to JK Rowling, from beehive hair-dos to phrases like “having a bee in your bonnet” – the bee has been a star for centuries. Pliny called honey the “saliva of the gods”, while Chaucer was one of the first to use the phrase “busy as bees”. The bumblebee has always been a source of special delight because of its portly features and furry bottom. Mr Bumble in *Oliver Twist* and Dumbledore (a Cornish word for bumblebee) in *Harry Potter* suit their names well.
- 5.** The honey bee is probably the best-known bee around, but there are actually over 260 species of wild bumblebee and solitary bee in the UK. Honey bees and bumblebees live socially, led by a queen and serviced by male drones and female worker bees. Solitary bees tend to be smaller and their family unit is made up of a single pair. Although lots of solitary bees can be found in one area, they operate alone. Bumblebees are distinguished by their large furry bodies and species include the black-and-yellow striped Garden Bumblebee and Red-tailed Bumblebee. Solitary bees include mason bees, leaf-cutting bees and mining bees. The Wool-carder Bee strips hair from plants to weave its nest, while the Red Mason Bee lives inside hollow plant stems and holes in wood.



The plight of the humble bee

- 6.** You might have heard about the serious problems our honey bees are facing, but many wild bumblebees and solitary bees are also declining at an alarming rate. Three bumblebee species are already extinct. Forty seven British bees are listed in the Red Data Book of threatened species. But none are protected by law.
- 7.** Bees are facing numerous threats. We already know enough to do something to help, even if some issues might need more research to be fully understood. Known causes of bees' decline include things that affect us too – changes in land use, habitat loss, building projects, disease, pesticides, farming practices, pollution, invasive non-native plant and animal species, and climate change.

- 8.** The outlook for bees right now is quite bleak – and their drop in numbers is a sign of the plight of the natural world as a whole. Across society, we often undervalue nature and what it does for us. Governments often put business and growth before protecting or enhancing the natural environment. The truth is, if we want an economy that provides for everyone's needs in the long term, we need to reverse damage to the environment around us. Our politicians need to understand the importance of protecting the natural world – and protecting bees as key players in it.
- 9.** Without bees we're in trouble. We need to take action now, for the sake of people and wildlife. Friends of the Earth's Bee Cause campaign has already secured a promise from Government for a National Pollinator Strategy. But we need to make sure that the strategy is ambitious enough to reverse bee decline in the UK.
- 10.** You can make a huge difference where you live by doing a few simple things. Planting flowers rich in nectar will really help bees find the food they need. Choosing local, British honey will lend your support to our honey bees and their beekeepers. Encouraging your friends and neighbours to do the same will help create bee-friendly communities. Bees are crucial in the countryside but they're essential in the city too. A wild window box in the middle of the urban jungle has great value. A whole building covered in window boxes is even more useful and looks fantastic. Overleaf you'll find information about the kinds of flowers bees most enjoy.



11. Here are a few of the flowering plants you could plant to help bees from early spring onwards.

1. BEE FRIENDLY IN YOUR GARDEN

Plants that create a buzz throughout the flowering seasons

The infographic features a central banner with the months MARCH through AUGUST, flanked by yellow and black pennants. Above and below the banner, numerous colorful illustrations of flowering plants are shown, each accompanied by a small illustration of a bee. The plants are labeled with their names, and the bees are labeled with their species. The plants shown include:

- March:** Lingwort, Winter poppy, Bluebell, Rosemary, Buff-tailed bumblebee, Early bumblebee, Pussy willow, Dead-nettle, Common carder bee.
- April:** Snowdrops, Bluebells, Cowslip, Primrose, Foxglove, Red-tailed bumblebee, Red clover, Bluebell, Blueberry, Cowslip, Primrose, Foxglove, Red-tailed bumblebee.
- May:** Anemone, Bluebell, Cowslip, Primrose, Foxglove, Red-tailed bumblebee, Red clover, Bluebell, Blueberry, Cowslip, Primrose, Foxglove, Red-tailed bumblebee.
- June:** Anemone, Bluebell, Cowslip, Primrose, Foxglove, Red-tailed bumblebee, Red clover, Bluebell, Blueberry, Cowslip, Primrose, Foxglove, Red-tailed bumblebee.
- July:** Anemone, Bluebell, Cowslip, Primrose, Foxglove, Red-tailed bumblebee, Red clover, Bluebell, Blueberry, Cowslip, Primrose, Foxglove, Red-tailed bumblebee.
- August:** Anemone, Bluebell, Cowslip, Primrose, Foxglove, Red-tailed bumblebee, Red clover, Bluebell, Blueberry, Cowslip, Primrose, Foxglove, Red-tailed bumblebee.

Bees shown include: White-tailed bumblebee, Buff-tailed bumblebee, Common carder bee, Red-tailed bumblebee, Field cuckoo bumblebee, Lesser carder bee, Wood bumblebee, Common carder bee, European honeybee, Red mason bee, and Escalbertia.

Take action

- 12.** If you've decided to make somewhere better for bees, the first thing to do is survey your spot. Take a short walk to see what's good for bees already and what's not. Are there any plants or trees that bees seem to like or avoid? Lots of ornamental flowers have been bred to contain no nectar – they might look good but do little for wildlife.
- 13.** Time to start planting. The key is to choose flowers with pollen that bees can get at easily – single-flower varieties for example. Choose a range of plants that will provide a succession of flowers for as long as possible during the year – bees need nectar from very early spring until early winter.

The great thing about gardening is that it's good for you as well as wildlife. Fresh air and gentle exercise improve health and well-being. The scale of your bee-friendly growing will depend on your outside space, but it all helps. If you don't have a garden, go for a window box or hanging basket.

You could try

- Flowering herbs like marjoram, chives, sage and thyme.
- Low growers like crocus, bluebell, snowdrop and nasturtium.
- Bushy plants like hyssop, hebe, rosemary and lavender.
- Trees like hawthorn, hazel, holly and willow.
- Easy edibles like strawberries, tomatoes and beans.
- Attractive ornamentals like achillea, allium, angelica, echinacea, foxglove and verbena.

A meadow area is a beautiful option and really low maintenance – and you can create a miniature meadow in a container if space is limited. Meadow-seed mixes are available in annual and perennial form – the annual mixes will give you lots of impact straight away. Perennials are slow burners but will gradually produce more colour and wildlife interest over the years.



- 14.** There are more than 200 species of solitary bee in the UK that need individual nests. Some species tunnel into the ground, sandy banks or crumbling mortar. Others use hollow stems or holes in wood. By making things like this available it's easy to create ideal accommodation for solitary bees. You could provide a bundle of hollow plant stems or a luxurious bee hotel, packed with dry logs, untreated timber and soft, crumbly mortar. The other thing bees need is water – so make sure there's a source nearby like a bird bath or pond, especially on hot days.
- 15.** An easy – and delicious – way to help the British honey bee is to buy the fruits of its labour: support beekeepers by choosing honey produced near you. You'll see all the different colours honey can be – from dark green and deep gold to almost pure white. And it could be an excuse to buy other products like honey beer, beeswax candles and sweet-smelling honey soaps and balms.

- 16.** Encourage other people to help bees too. You could nudge them to follow your lead simply by showing off your bee-friendly plants. There's nothing like a bit of neighbourly competition to prompt a flurry of wildflower planting. Bee-friendly growing could be a great way to make your neighbourhood more attractive and to meet your neighbours.



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Scaling it up

17. Why not take your experiences to work: tell people what you're doing for bees, and why. Encourage your work mates to do some bee-friendly planting of their own. Often offices have patches of grass or planters that could be perked up with some pretty flowering plants. Reassure the resident gardener – if there is one – that bee-friendly planting can be both formal and low maintenance. Smart troughs filled with drought-resistant lavender look good all year round, and smell wonderful too. Bee-friendly planting won't just improve things for pollinators – it'll make work more pleasant as well.

18. How about going a bit further and spreading the bee message throughout your neighbourhood?

■ **Bee walk.** Explore your neighbourhood with a bee's eyes. Is your local park or favourite walking route popular with pollinators? Is it managed in a bee-friendly way? Could your local park include a wildflower meadow to replace some of the shortgrass or have beds full of bee-friendly plants? How are the hedgerows and the verges managed? If they're cut at the wrong time and in the wrong way it's likely to harm bees. Why not invite other people to walk with you? Perhaps you could ask your MP or local councillors along – to highlight the plight of the bee and wildlife more widely.

■ **Bee breakfast.** Bees pollinate most of our fruit, vegetables and other crops. One great way to show the difference bees make to our lives is to invite people to share a meal with you – but instead of the feast they might expect, give them bland food that's not pollinated by bees. As your guests become grumpy, whip back a curtain to reveal a fantastic spread of the foods that bees pollinate and that we'd miss without them. Then tuck in. The tactic has been used to great effect by campaigners targeting politicians – it's a powerful way to show that the bee is critical in putting food on our plates.

■ **Bee swarms.** If you're really keen – and love dressing up – you could cause a storm with a swarm. Why not join your local Friends of the Earth group and swarm around a town centre handing out bee information, perhaps with a street stall nearby. Or dress up as bees and offer information to people at garden centres. You can find your nearest local group at www.foe.co.uk/get_involved/find_group.html

■ **Go online.** For lots more ideas how to help save Britain's bees, visit www.foe.co.uk/bees



Be wise

19. Together we can show policy makers we're willing to help bees, and we think they should too. Friends of the Earth is encouraging people to make their gardens, streets and communities bee-friendly and to take action to get politicians' support for bees. We want the Government to make the National Pollinator Strategy good enough to save British bees. If it acts now, it could save us millions of pounds and help secure our food supply.

20. Want to know more? Visit www.foe.co.uk/bees for more ways to help, and expand your bee knowledge with books, films, websites and visits to inspiring places.



Photos: iStockphoto / Amelia Collins, Friends of the Earth / Getty



Films

The Ailing Queen (La Reine Malade)
Bee Movie
Honeybee Blues
More than Honey
Queen of the Sun
Vanishing of the Bees

Books

A World Without Bees
– Alison Benjamin and Brian McCallum
The Beekeeper's Lament
– Hannah Nordhaus
Bees in the City
– Alison Benjamin and Brian McCallum
Bees, Wasps and Ants: The Indispensable Role of Hymenoptera in Gardens
– Eric Grissell
Bugs Britannica
– Peter Marren & Richard Mabey
Gardening for Wildlife: A Complete Guide to Nature-friendly Gardening
– Adrian Thomas
Wildflowers
– Sarah Raven
FC19 Field Guide 'Bees of Britain'
– FSC Guides

Websites

British Beekeepers' Association
www.bbka.org.uk
Bumblebee Conservation Trust
www.bumblebeeconservation.org.uk
Hymettus
www.hymettus.org.uk
Plants for Pollinators
www.rhs.org.uk/Gardening/Sustainable-gardening/Plants-for-pollinators
The Pollinator Garden
www.foxleas.com
Wild About Gardens
www.wildaboutgardens.org

Places

Loch Leven Bumblebee Sanctuary in Scotland (nature reserve with a bee-friendly focus)
Olympic Park in London (eye-catching areas of wildflower meadow)
Sheffield (pioneer in urban meadow planting)
A nature reserve near you (www.wildlifetrusts.org/wildflowermeadows)

Many of the above resources are available at www.foe.co.uk/shop

Bees help produce three-quarters of the world's most important crops. But they're under threat. This booklet offers a glimpse into the amazing world of bees – and suggests what we can all do to help save them.

www.foe.co.uk/bees



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