



Wild About Gardens

#wildaboutgardens



Go
wild
for **worms**



RHS

Inspiring everyone to grow

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wildaboutgardens.org.uk



Why worms are great

Worms make the world turn

These wriggly fellows are well known to gardeners all over. At first glance they might not seem particularly special, but they're essential for our soils and for wildlife. Charles Darwin called them the most important animal in the history of the world! He dubbed them 'nature's ploughs' for the way they mix soil layers and enable plants – the basis of all terrestrial life – to grow.

Engineers of the earth

Earthworms are true engineers – they specialise in moving through the soil, creating networks of burrows and mixing the earth. This means oxygen and water can flow through the soil, allowing water to drain away after heavy rain. They also break down and recycle decaying plants, releasing nutrients to increase soil fertility, which helps soil microorganisms and fungi to thrive.

It's in the poo!

So how do earthworms do all this? **First, they eat the organic matter in the soil, such as dead leaves and plants.** This breaks it down into smaller pieces, which they then pass out as 'casts', or worm poo. These casts are very high in nutrients that improve the quality of the soil, helping plants to grow.

Smooth movers

Earthworms can move smoothly through even very dense soil due to the mucus covering their bodies. **They move by contracting the muscles surrounding their body,** forcing their way through the soil. This moves air through the burrows, further mixing the soil.

Cutting a worm in half

doesn't give you two worms! It just gives you one unhappy worm, or one dead worm

The longest worm in the world is **the giant Gippsland worm** from southern Australia, reaching **more than 2m long!**

Did you know?

Earthworms **don't have eyes,** but find their way by sensing light and soil vibrations

A worm can **eat its own weight** in soil in one day

Not all earthworms are **brown or pink.**

In the UK they can be **deep red, black headed, green, grey** and even a **bit stripy,** while one tropical worm is **bright blue**

Earthworms are hermaphrodites – so each worm has **both male and female parts**

The largest earthworm in the UK can grow to **more than 30cm long!** It's known as **the nightcrawler**

Worms absorb **oxygen** through their skin

The slow worm is actually **a lizard,** while the glow worm found in the UK is a **type of beetle**

Welcoming worms into your garden

1 Feed your soil

Whenever planting, take the opportunity to work a little peat-free garden compost into the soil.



© RHS Tim Sandall

2 Mulch your leaves

Collect leaves in the autumn for leaf mould and use it to mulch acid-loving plants like rhododendrons, or add to a home potting compost mix.

3 Be a bit messy

Let plants die down naturally in winter and don't be too quick to clear fallen dead leaves from the soil – unless they are diseased.

4 Stack sticks

Lay small stacks of logs or woody prunings directly on the soil. They will eventually decompose into worm food.



© photographyfirm Shutterstock

5 Keep it cool

Conserve soil moisture by mulching borders with peat-free garden compost or composted bark once a year, or on a rotating basis in larger gardens. This can be done at any time provided the ground is moist.

7 Let your earth breathe

Reduce the amount of hard surfacing; lift unnecessary paving and plant up instead. This will give worms somewhere to live.

6 Avoid chemicals

Minimise pesticide use, including metaldehyde-based slug pellets.



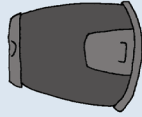
© RHS Tim Sandall

How to make simple compost



You will need

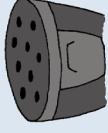
- A compost bin, with a lid*
- A well-drained, easy to access area
- Green compostable ingredients
- Brown materials, like straw and scrunched-up paper
- A gardening fork



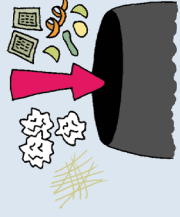
Compost worms are brilliant recyclers so put them to use on your green waste. The finished compost will enrich your garden soil, benefiting even more earthworms! This rich soil also boosts flowers, veggies and other plants.



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



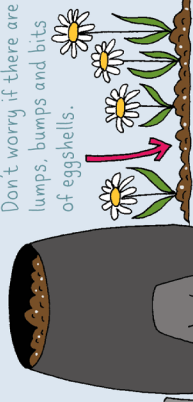
2 Start putting stuff in... mix brown materials, like straw and paper, with nitrogen-rich ones like veggies and tea bags.



Check out the worms that have moved in!



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



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

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

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

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

What's that worm?



You will need

- A garden to search for worms
- Spade
- Keen eyes!



WE NEED YOUR HELP!

If you want to contribute to Earthworm Watch to help build our knowledge of worms, visit: www.earthwormwatch.org

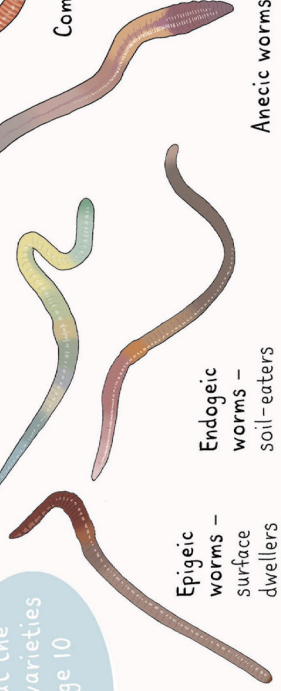
Check out the common varieties on page 10

1 Sneak a peek under garden objects, like plant pots, compost bags and leaf piles.



2 You can also dig a 20cm x 20cm pit... carefully pick out any worms from the soil you have removed or from the bottom of the pit.

3 Try to identify the adults. This isn't about size... an adult will have a tell-tale swollen fleshy band near to their head, called the 'saddle'. What type of worm do you have?



Epigeic worms – surface dwellers

Endogeic worms – soil-eaters

Anecic worms – vertical burrowers

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*Please avoid disturbing worms too much and be very careful when digging

Worms as food

Worms are an important part of food chains and many other animals rely on them as part of their diet. Here are just some of the animals that feed on earthworms...



Robin © Mark Robinson



Blackbird © Joni Hawkins Surrey Hills Photography



Mole © Steve Bottom



Badger © Elliott Neep



Frog © Neil Aldridge



Fox © Joni Hawkins Surrey Hills Photography



Water shrew © Neill Beavers 2020 VISION



Wood mouse © Margaret Hubbard



Common toad © Joni Hawkins Surrey Hills Photography



Hedgehog © Tom Marshall

Know your worms

There are no less than 29 earthworm species in the UK

A gardener's friend, worms are a good indication of soil fertility. Here are a few of the most common species working away beneath our feet.

A sure ID will need a microscope, but you should be able to tell which one of the four ecological groups your worm belongs to:

Composter worms

These are usually found in garden compost and rotting vegetation. They make excellent recyclers of green waste. Generally bright red and stripy.

Endogeic worms

These live in soil, eating and aerating the earth. They are grey, pink, green or blue.

Epigeic worms

These live at the soil surface and help to break down leaf litter. They are often bright red or reddy-brown but not stripy.

Anecic worms

These live in the soil, pulling down leaves from the surface. They usually have red or black heads and a paler tail.



Black-headed worm

● anecic ● common

This black-headed worm reaches up to 20cm long. Can be found when digging in lawns.



Lob worm

● anecic worm ● common

Also known as the nightcrawler, this worm emerges in the dark of night. It is the largest worm in the UK.



Tiger worm

● composter ● very common

These surface dwellers like to live in rich organic matter, so you may find them in decaying leaves, under logs or in your compost.



Green worm

● endogeic ● common

There are different colour forms of this worm, one pink and one green.



Red-headed worm

● epigeic ● common

This is a deep red-headed worm that comes in all sizes – from 2cm to 20cm! Frequently found hiding beneath plants pots or compost bags.



Rosy-tipped worm

● endogeic ● common

This worm is small and pinky-grey. It has a flared band beneath its often orange saddle.



Grey worm

● endogeic ● very common

This pale pinky-grey worm is known by many gardeners. In high numbers across the UK, this is one of the powerhouses of the earthworm world.

Let your soil breathe

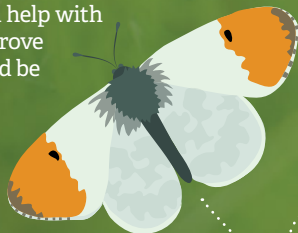
Artificial turf and excess paving is pushing worms and wildlife out of gardens. But together we can bring nature back. With an estimated 24 million gardens in the UK, the amount of green space we can create makes a big difference to the natural world.

Grow your own gorgeous grass

Artificial turf causes habitat loss for wildlife and creates plastic pollution.

We love to feel the cool brush of grass between our toes. It's not quite the same when it's fake. Love your lawn and avoid artificial turf. In doing so you can create a home for worms, birds, butterflies and more.

A real lawn is muddy, motley and magic. It could help with urban cooling, improve your air quality and be loved by creatures great and small.



Your paving has potential

More than half of the total surface area of the UK's front gardens is hard surfacing, but you can help green the grey. Replace non-permeable tarmac or concrete with a porous gravel drive or pull up some paving slabs to make mini flower beds.

Looking at plants rather than concrete is known to make us happier.¹ Not only that, but borders and lawns soak up the rain and help reduce flood risk.

Go for plants that will withstand a bit of impact if you are brightening a patio or drive area. For example thyme (*Thymus serpyllum*), creeping jenny (*Lysimachia nummularia*), bugle (*Ajuga reptans*) and grape hyacinths (*Muscari armeniacum*).



Every tiny patch of planting benefits wildlife and people

How can I improve my lawn?

If you have a regularly mown lawn, leave grass clippings on the grass after mowing. This will provide a ready source of nutrients for the worms below. For part of your lawn, put the mower aside! Try leaving a patch or strip of your lawn to go wild and see what wildflowers and grasses grow there.

If you want to plant a wilder lawn, species-rich grass seed can be sourced from garden centres. You can also wild an existing lawn by planting wildflower plug plants.

How can I make my neighbourhood greener?

Get in touch with your local Wildlife Trust to find out if there are any community conservation projects in your area. The nature reserves we look after are home to ancient undisturbed soils – become a member and help to protect them.

www.wildlifetrusts.org/your-local-trust

Grow your community with the RHS. Check out our website for inspiration to get you started, or join a Britain in Bloom or It's Your Neighbourhood group and help green and clean your local patch.

www.rhs.org.uk/communities



¹ Wellbeing benefits of natural environments rich in wildlife: a literature review (2015) The University of Essex

Peeling happy

Worms love your veggie peelings, so cut down on your waste and enrich your soil at the same time.

Veggie gardens make a lovely home for worms

Worm-filled beds mean healthy soil and healthy plants, meaning more worms!

And we get fresh food as well!



Enriched soil feeds your veggie beds – and your worms

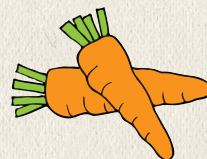
Raw fruit and veggie waste breaks down as rich organic matter

Grow your own worms

Veggie beds and allotments are one of the richest habitats for earthworms.

The highest concentration of worms are often found here. All the good stuff gardeners add to these patches, such as manure and garden compost, give worms plenty to feed on. Happily the free-draining, moist soil, which suits our veggies, is a favourite of worms too. And, perhaps surprisingly, earthworms aren't too bothered by a bit of digging!

Get started with these easy-to-grow root veg and table staples, then return your peels, tops and tails to your garden compost bin or worm composter to help feed your soil and your worms. All these vegetables could be grown in a container, except parsnips which like nice deep soil.



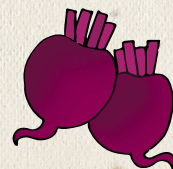
Carrots

Make successional sowings every two weeks in spring and early summer for a regular supply.



Parsnips

Sow in spring in nice deep soil; harvest in autumn and winter.



Beetroot

Start off in modules and plant out in the ground or a window box.



Potatoes

Grow a row or plant a single tuber in a 30cm (12in) bucket with drainage holes in the bottom.



Baby turnips

Pick before they get too large for sweet baby veg.



About Us

The Wildlife Trusts and the RHS set up Wild About Gardens to celebrate wildlife gardening and to encourage people to use their gardens to take action to help support nature. Over the past 50 years we've seen declines in two thirds of the UK's plant and animal species. Many of our common garden visitors – including hedgehogs, house sparrows and starlings – are increasingly under threat.

To discover more ways to take action for the worms in your garden visit us online. You can also sign up to our monthly newsletter or follow us on social media to receive updates and ideas on all things wild about gardens.

wildaboutgardens.org.uk | facebook.com/WildAbtGardens

The Wildlife Trusts

No matter where you are in the UK, there is a Wildlife Trust inspiring people about the natural world and saving, protecting and standing up for wildlife and wild places near you. We believe that people are a part of nature; everything we value ultimately comes from it and everything we do has an impact on it.

Supported by more than 800,000 members, together The Wildlife Trusts care for 2,300 diverse and beautiful nature reserves. The nature reserves we look after are home to ancient undisturbed soils, and our members help us to protect them. We work to inspire and empower people to take action in their lives to help wildlife.

The Wildlife Trusts

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The Royal Horticultural Society

For more than 210 years, the RHS has been the force behind gardening in the UK. Our aim is to enrich everyone's life through plants, and to make the UK a greener and more beautiful place. We believe everyone in every village, town and city should benefit from growing – for stronger, healthier and happier communities.

Our work in education, science and communities is only possible thanks to the generous support of our visitors, members, partners, donors and sponsors. With your help we can harness the power of horticulture, one gardener at a time.

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Thank you to the Natural History Museum and the Earthworm Society of Britain for images and expert advice. www.earthwormsoc.org.uk

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Illustrations by Corinne Welch

Find more information at

wildaboutgardens.org.uk

