

Can I Collect The Worms From My Garden For A Wormery?

No! There are many species of worms that are native in the UK, however not all of them are 'composting' worms. Compost worms differ from garden worms in that composting worms live and feed near the surface whereas garden worms (lobs) are deep burrowers.

There are two main types of composting worms.

1) Dendrobaena (Eisenia Hortensis) also called the European Nightcrawler This is the largest composting worm, and is reddish brown with stripes all over its body. This worm can tolerate acidic soils better than other species. Dendras also have a preference for damper conditions. Its normal habitat is the forest floor. You are likely to see this worm hiding under pots & stones

2) Tiger Worm (Eisenia Fetida) also called the Brandling Worm.

This worm is smaller than the Dendra above, and is usually found in manure heaps. It has a very distinctive stripy appearance hence its name.

These two species of worms are both fantastic for composting, and will happily live together in a wormery.

Why Have I Been Given Worm Food?

Your worms have been fed on the supplied food in their worm farm. It will help them settle down quickly. It has also been said that the ingredients in the food (cereals) will make your worms grow and breed quicker.

How Much Waste Will The System Compost?

Worms can eat up to half their own body weight every day and can double their population every 90-120 days. A tray will take approximately 4 months (depending on season etc) to become compost

What If I Go On Holiday?

Worm sitters will not be required when you go on holiday, as the worms will be happy munching away for a few weeks before they will need feeding again. If you have to go away for any length of time, add lots of shredded paper and cardboard to the wormery. Your worms will happily munch away on this.

All The Food Has Gone Mouldy Will The Worms Eat It?

Yes, worms don't have teeth, so the food needs to start to break down so they can eat it.

What Are All These Flies In The Wormery?

The flies you can see are probably fruit flies, they are smaller than the housefly (about 3mm in size) and have brownish bodies, and they won't harm the worms but can be a bit of a nuisance as when you open up your wormery a cloud of them appear. Obviously they are attracted to the vegetable matter so eradicating them is virtually impossible. There are however a few steps to bring them under control.

1) Try to bury your food, the flies lay their eggs on the food, so if it's under a layer of compost, they won't be able to get to it.

2) Put a covering over the food like a carpet cut to size or under a layer of damp newspaper, again this will help keep the flies at bay.

What Are These Tiny White Worms?

These are probably pot worms. They do a similar job as composting worms and are nothing to worry about; you will find them in most worm bins. They are very tolerant of waterlogged/ acidic conditions so if you find them proliferating, and your worms are getting fewer, improve the drainage. Mixing in some shredded newspaper will help. You can also add a sprinkling of calcified seaweed, rock limestone (dolomite) or eggshells to correct the acidity.

Newly hatched brandling worms are also whitish and only half an inch long. You can distinguish them from pot worms by their blood vessel which gives a pinkish tinge

Feeding

The biggest mistake that people make when starting off a new wormery is to over feed the worms; this could result in creating a poisonous environment, and ultimately kill them.

Worms need time to settle into their new home and acclimatise to their new surroundings. Therefore we advise that new worms should be left for two weeks before you start to feed them your kitchen wastes.

A small handful of the supplied worm food once a week will give them all the nutrition they need. When you start to feed them, we suggest that you begin by giving them a small handful every other day (chopped up into small pieces), and place it in each corner sequentially; you should see the worms feeding on the older food first. (Worms like it slightly mouldy) If after a week you see none of the food gone then stop feeding until you see the food being eaten. This will ensure that your food doesn't go rotten and poison the worms in the initial stages. If they eat it all then you know to put in more food.

Please don't worry if your worms seem slow to start, as they will eat all the coir that is supplied.

Multi Tray Wormery - Adding Extra Trays

When your first tray is nearly full you can add the next composting tray. Take a look in the bottom of the first tray to see if you can find any black compost, if there is take a small handful and place it at the bottom of the new tray. This will give the worms something familiar to move up into. Always cover any food in the top tray with newspaper - to keep flies at bay.

Repeat this process until all your composting trays are in operation, hopefully by the time they are all full your worms should have finished eating on the bottom layer and are moving upwards in search of more food.

Remove the bottom tray, pick out any stray worms and remove the black vermicompost, and then put that tray back on top of the wormery. A continuous rotation

Looking After Your Worms

Your worms have been sent in the bedding that they have been living and breeding in. This bedding may contain worm eggs (look out for small yellow lemon shaped eggs) babies and adults. The eggs grow darker as the worms grow inside and can hold between 2 and 5 babies.

It takes approximately 3 weeks for your wormery to become established. Your worms will soon start to breed - the more worms, the more you can feed them.

Please be aware that in the winter months your worms won't feed or breed as much due to the cold weather, so care should be taken not to overfeed. In the winter if it is really cold, it might be worth bringing your wormery into a garage or shed, or if this isn't possible try making an insulated coat out of bubble wrap, and wrapping it around your wormery. Cardboard, carpet and paper also make great insulators. Similarly in the summer keep your wormery away from direct sunlight, as you don't want to cook your worms.

Worms like the temperature to be between 12-25 degrees centigrade, and feed and breed best between these temperatures.

Worms need air to live, they breathe through their skin, so it's imperative that they get as much air as possible. A great tip is to add lots of shredded newspaper and corrugated cardboard (egg cartons are excellent) to your wormery as this creates small air pockets. Worms love damp shredded paper, and from our experience, you can never have enough!

Worms also need grit to help with their digestion, crushed dried egg shells work brilliantly, or add a handful of sand and sprinkle over the contents occasionally. Another great tip is to get some insect mesh and place it over the top of the bin (secure with elastic) and leave the lid off (weather permitting) this gives great ventilation, but stops the flies from entering and the worms from escaping. Remember that you need to keep the compost moist for your worms to survive and also to replace the lid at night.

Always remember to bury your food under damp (not soaking) newspaper that is about 1-2 inches deep keeps the wormery moist and dark and keeps those annoying fruit flies away.

You may be eager to empty the liquid from the sump. Please don't worry if it takes ages to appear (it can take months) again it all depends on how wet your wormery is and what you put in it. Rain will penetrate the lower levels, but compost worms feed near the surface, so will not be affected.

All About Worms

Worms can eat half their own weight of waste each day. They are photosensitive (don't like light) and can live up to 2 - 3 years.

Body – A worm has an Anterior end (head) and a Posterior end (tail) and has 5 hearts.

If you look closely you will see many rings around the body called segments. Each segment has 4 pairs of hairs protruding from it called Setae, which help the worm to stop.

When the worm has reached about a month old, it will produce a light coloured raised band near the head called a Clitellum. The Clitellum tells us that the worm has reached sexual maturity, and is responsible for the formation of the cocoon containing the eggs.

Mouth – On the tip of the head there is a flap of skin called the prostomium which stops things going into the worms' mouth. Underneath the prostomium is the mouth. A worm's mouth is big enough to grab a leaf and drag it around. Worms do not have teeth

Eyes - Worms don't have eyes. They are very sensitive to bright light. They will try to hide as soon as exposed

Movement – Worms have muscles all round their bodies, and others that run the length of their bodies. When the circular muscles tighten up, the body becomes thinner and longer.

This movement squeezes their front end forward The other long muscles squeeze together and help move the rear end of the body towards the front end

Breathing - Worms do not have lungs but take in oxygen through their skin and it goes straight into their bloodstream. The skin must stay wet in order for the oxygen to pass through it, but they can drown if they are in too much water.

Reproduction – A Worm is a hermaphrodite (both male and female) When mating 2 worms join together with heads pointing in opposite directions. Sperm is passed from one worm to the other and stored in sacs. Then a cocoon forms on each of them on the clitellum.

As they back out of the narrowing cocoons, eggs and sperm are deposited in the cocoon.

The cocoon closes and fertilization takes place. The cocoons are much smaller than a grain of rice and are yellow. Each cocoon can have 1-5 eggs. If conditions are not right for hatching, such as dryness, cocoons can lay dormant for years and hatch when conditions are right.

Worms mature in about 3 -6 weeks after hatching from cocoons and will breed every 3-4 days throughout the spring through to autumn.

Fresh worm eggs look very much like tiny lemons that darken in colour as the worms grow in the eggs. The colour changes from pale yellow to mid brown.

Each egg takes around 3 weeks to develop before the baby worms' hatch. Baby worms are white and each egg holds around six babies.

Worms self-regulate their population to the confines of available space and the amount of food you give them. From egg to maturity takes approximately 3 months

How Do They Grind Food?

Worms can only take small particles in their small mouths. Micro organisms help soften the food before the worms can eat it. Worms have a muscular gizzard. Small parts of food mixed with some grinding material such as sand, topsoil or limestone is ingested. The contractions from the muscles in the gizzard compress those particles against each other, mix it with fluid, and grind it to smaller pieces

If A Worm Is Cut In Two, Will It Grow Back?

It depends on where the cut took place. If a worm is cut at the posterior end, sometimes a new tail will grow back on. Sometimes a second tail will appear next to a damaged tail. However, the posterior half of the worm can't grow a new anterior (head.)

Do Worms Need Air?

Worms need oxygen to live. A constant supply of fresh air throughout the bedding allows the worms to breathe and stops the wormery smelling

Does It Smell?

A normal wormery should smell earthy. Bad smells arise when food is allowed to rot; and becomes Anaerobic (bacteria that doesn't need oxygen to live) worms work quickly enough to prevent this by eating the micro-organisms that cause decay. If it starts to smell you can help by getting your rubber gloves on and stirring up any uneaten food as this allows the oxygen to penetrate. Stop feeding the worms, add cardboard and if you have a really horrible smelly mess, it might be advisable to remove the rotten food, as it could poison your worms.

Why Are My Worms In The Lid?

If you find that your worms are on the lid or stuck to the sides (anywhere except in the compost) its possible that your wormery has gone acidic or anaerobic. Worms do not like these conditions and they are trying to escape.

You should mix up the contents to introduce some oxygen. Check the waste you have put in, onions and citrus fruit can irritate the worms skin, then add lots of shredded cardboard

A great neutraliser if you have an acidic wormery is crushed egg shells, as worms love the grittiness and it also helps the worms grind up the food in their stomachs

Other possible causes are foods that are overheating (like bread) or conditions that are too wet, too dry or too hot

My Worms Have All Died

Unfortunately this does sometimes happen and it can be difficult to understand why. Here are some common reasons.

- 1) Too much food. - do not overfeed your worms, the food will just rot completely and possibly poison your worms
- 2) Too hot / cold / wet sometimes with the extreme British weather it can cause a problem. Try to site your wormery away from direct sunlight, and away from strong winds. leave the tap open, and maybe insulate with newspaper or carpet placed on the top of the food
- 3) Insecticides / Pesticides - make sure that nothing comes in contact with your wormery, beware of cut flowers, some have been treated
- 4) Wrong foods, refer to the list provided as to what to feed them
- 5) No air – If your wormery starts to smell, use a spade or your hands to give the contents a mix up. If you wormery is inside, then leave the lid off. Also add lots of damp shredded paper and cardboard, to create air pockets.

How Will I Know If I Have Overfed The Worms?

Your bin will smell, if this is the case stop feeding, remove any sludgy soggy mess, mix in lots of damp cardboard and paper, and get some air into it.

Wormery Liquid

Your wormery has a sump to collect any liquid residue. (Leachate) As the liquid passes through the bin it becomes charged with nutrients and therefore makes an excellent plant feed. It can take many months to get any liquid, as it is all dependent on what is placed in the wormery. Obviously vegetables will produce more water than bread. And if you use lots of paper, this will mop up any residues as well. Dilute any liquid with 10 parts water and use it to feed your plants for free!

Using The Vermicompost

The compost that is produced by the worms is called vermicompost and is very high in nutrients (vermicompost contains 10,000 times the amount of bacteria and microbes than normal compost and is high in phosphates, nitrogen and potassium) therefore you will need to use it sparingly. Add it as a top dressing, or sprinkle some around the plant roots, to give them a real boost