

# The Dog & Pet Poo Wormery Guide



COIR BEDDING



LIME MIX



LID



TRAY



BOKASHI BRAN



WORMS



HOLDING TRAY



STAND



SUMP TRAY



TAP & WING NUTS

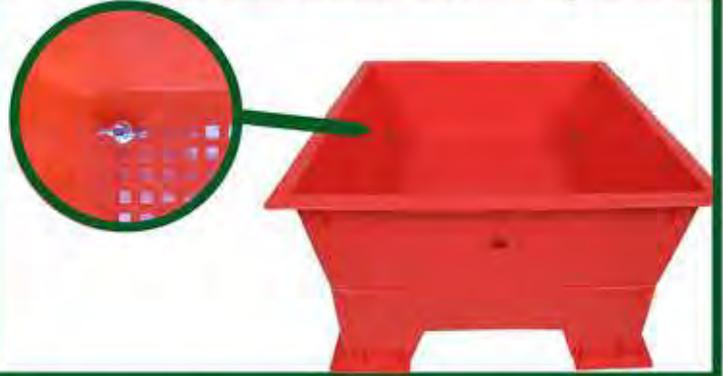
**1 Before you start:** Check you have the items pictured above against the list below to ensure you have all the correct items

- 3 or 4 x trays depending on which wormery you've chosen
- 1 x drainage sump tray (with hole)
- 1 x holding tray (looks like a normal tray, but with a hole)
- Coir worm bedding
- Lime mix
- 1 x pouch of tiger worms or worm card voucher
- 1 x stand
- 1 x tap with white nut & 2 washers
- 1 x lid
- 4 x screws with wing nuts
- 1 x pack of bokashi bran (2kg)

**2** Put the stand down with the two feet and cut outs on the ground. This is not to be confused with the standard trays which you'll need later on.



**3** Put the holding tray on the stand ensuring the holes align and secure them with the screws and wing nuts. Push each screw through a corner hole and fasten with the wing nuts.



**4** Take the sump tray and put it inside the holding tray, again ensuring that the hole in the front aligns with the hole in the holding tray, so that you can install the tap.



**5** To install the tap, put a washer on end of the tap and put the other washer inside and tighten with the white nut.



**6** Then put your first tray in and insert a single sheet of newspaper.



**7** Evenly spread the coir bedding around the first tray, just on top of the newspaper. Lightly spray it with water so that it is damp to the touch.



**8** Empty the worms into the middle of the tray and put two handfuls of rotting food waste into a corner. Add a small amount of pet poo and bokashi bran once the worms have started to eat the food. The bran will help them process the poo.



**9** Pop the lid on top and congratulations, your wormery is now ready to use! Read through the rest of this guide to learn when you should be adding the rest of your trays.



# Starting your Pet Poo Wormery

No two Wormeries will have identical conditions because there are so many variables including type, frequency and state of Pet waste added, the location of the Wormery and the temperature. In view of this, operating a Wormery involves just a little bit of 'art' and some common sense.

Whilst it is true to say that the Wormery requires relatively little maintenance, its success is dependent upon the health of the worms. A short inspection on a regular basis should ensure that the worms stay on course. Every 4 weeks or so gently dig into the compost with a hand fork or stick to check that the worms are thriving, and that compost production is underway.

Although problems are few and unusual, they are simple to avoid and usually straightforward to remedy. If conditions become less than ideal, your worms may slow down their processing of waste. If this occurs stop adding new waste for a week or so to give them a chance to catch up.

Some pet wastes are harder to deal with than others and we have done a lot of research into what is safe and how to deal with your pet waste in a Wormery. Animal waste should have its own Wormery due to diseases but you are able to add items such as rotting food waste, straw, shredded paper and sawdust to your Wormery. Newspaper can be saturated with pet urine, too (perfect if you have puppies!).

If you have any questions regarding this, please ring us on 01462 429765, lines are open Monday-Friday 9am-5:30pm.

## Cat

Whilst cat poo can be used in a pet poo Wormery, it is to be noted that cat poo can contain very harmful viruses and bacteria. Handle this waste with care before adding it to your Wormery. It is to be noted that worms can transit toxoplasma gondii to birds from cat poo. To kill most pathogens, you could add your vermicompost to a hot composter, the temperatures will annihilate a lot of viruses and diseases to make this rich compost great and safe for your garden. The compost that is produced from this waste **must not be used to fertilise fruit and vegetables**. Wood and paper pellet cat litter in small amounts can be used in your pet poo Wormery. The ammonia in urine can affect the pH levels of the compost, wood pellets are treats to worms so they will be fine to eat it. Do not add clay litter as worms will not be able to process this.

Note: Do not use cat waste from a recently wormed cat as this may kill your worms.



## Herbivorous Mammals

Pets that keep a herbivore diet such as cows, rabbits, gerbils, hamsters are fine to be used in a pet poo Wormery. This is because their stomachs do not contain the organisms that carnivorous beings (including humans) have.

## Dog & Carnivorous Animals

Dog waste can have the same implications as cat poo so needs to be handled with care. The compost that is produced from **dog poo must not be used on fruit and vegetables**, due to the possibility of the presence of the toxocara disease.

Note: Do not use dog waste from a recently wormed dog as this may kill your worms.



## Poultry & Birds

Whilst most birds are herbivorous, their waste is high in nitrogen which can cause the roots of plants to burn when added as a compost. This poo needs to be pre-treated before adding to a Wormery as your worms will not want to eat something in such high nitrogen content at first. Pre-treatment can be just washing the waste through. You can add this in small quantities after treating it but mix with shredded newspaper as the carbon makes it a better feed and balances the pH.

# Early days

Once your Wormery is assembled, add two good sized handfuls of rotting food waste to a corner of your first working (bottom) tray and place the lid on top. You should wait around a week before adding further waste as the first few weeks are when the worms settle down, explore their new home and become mature.

The worms rely on the waste decomposing (rotting) naturally a certain amount, so don't worry if the waste is looking rotten and mouldy – your worms will love it! For the first few weeks add a couple of handfuls of waste only every week and increase quantity over time thereafter. After the first 2 weeks along with the food waste start to add small amounts of pet poo. Keep an eye on the worms to see if they are consuming the waste. If it appears the waste is dry or drying out then you will need to moisten it. You can do this with water sprayed from a spray bottle but do not soak the waste as it will become wet and soggy which will cause the worms to try to leave. They may travel into the sump and drown if there is liquid in the sump or they will leave the Wormery completely.

The Wormery is an 'upward migration' based system. Once your first tray is full, place another empty tray on top and start adding the waste to this tray. The worms will follow the waste up into the next tray through the mesh base when they're ready.

# Separating the castings

If you have a small dog it may be up to 18 months before the box is filled with compost but with a large dog it may be six months (or less). However, it is quite possible to harvest small quantities of castings which can be used in potting mix or seed raising mix at any time. Be sure to wear gloves when handling castings or waste.

## Getting Started

Once you can see that the worms are eating the food and pet waste, gradually increase the pet poo and reduce the food waste that you add to the Wormery. When the bottom tray is full of waste, you can put poo into the second tray. Leave the bottom tray in position until you can see all of the waste in this tray has been turned into compost. At this point you can harvest the contents and add to your soil.

The compost and liquid fertiliser should not be used on any growing vegetables which are going to be eaten. Also, when using the compost this should be dug into the soil not spread onto the surface. Liquid fertiliser should only be used on borders away from vegetables.

# Looking after your Wormery

Conditions in each Wormery are bound to differ because of numerous variables such as type, frequency and state of waste added, location of the Wormery and the temperature. No two Wormeries will have identical conditions. In view of this, operating a Wormery involves just a little bit of 'art' and some common sense.

Whilst it is true to say that the Wormery requires relatively little maintenance, its success is dependent upon the health of the worms. A short inspection on a regular basis should ensure that the worms stay on course. Every 4 weeks or so gently dig into the compost with a gardening fork or stick to check that the worms are thriving, and that compost production is underway. Whilst doing this you will be able to check for any possible indications of excess moisture (waterlogging) or acidity.

Pet poo can be very dry and you may need to lightly spray the waste with water every so often as worms prefer damp food. If you add rotting food waste and notice the Wormery contents become soggy or very wet, add torn cardboard egg cartons to help absorb any excess liquid and thoroughly mix into the waste. The worms will eat the cardboard so do not worry about overloading the Wormery. Draining off the liquid feed frequently also helps to prevent over-moist conditions. Worm composting is a simple, clean and efficient natural process. A little bit of care and attention will ensure success. Although problems are few and unusual, they are simple to avoid and usually straightforward to remedy.

If conditions become less than ideal, your worms may slow down their processing of waste. If this occurs stop adding new waste for 1 or 2 weeks to give them a chance to catch up and check the Fact File/troubleshooting section in this information booklet. If you are in any doubt or have any queries concerning your Wormery please do not hesitate to call us - we are only too happy to assist. The timely resolution of any minor problem or difficulty should avoid the possibility of any more major problems or failure later.

# Harvesting Your Pet Poo Wormery

When harvesting your Wormery, it is best to use gloves to ensure you protect yourself from any bacteria that may have passed into the compost. Do not use any compost harvested from carnivorous animals on fruit or vegetables as you cannot guarantee that all toxins have left the waste.

## Liquid Feed

As with the standard Tiger Wormery, this is simply accessed via the tap and is an excellent general purpose liquid plant food ideal for a broad range of garden plants. Dilute the liquid with 10 parts of water for your liquid plant food. This liquid feed is **not suitable for vegetables or fruits** as pet poo contains pathogens that can be extremely harmful to humans.

In addition, pet poo Wormeries do not produce as much liquid feed as a standard kitchen waste Wormery as organic food matter contains far more water so do bear this in mind if you own a kitchen waste Wormery and are used to a healthy amount of liquid feed.

## Emptying the Compost

When your second tray is full the first tray should be ready for harvesting or thereabouts, this will typically be 4 months + on from when you first set up the system. The contents of the bottom tray will be a rich dark colour if not black. Simply lift off the upper trays to access the bottom one, then remove it and harvest your compost. The working trays are then replaced on the stand and you now have a spare tray ready to go on top of the stack when required. As most of the worms should be in the upper tray you should not lose too many when the compost is dug into your garden. However, if a few worms are added to the garden with the compost they will not cause any harm whatsoever.

This compost should not be used on vegetable patches due to the danger of the contraction of viruses from your pet.

## Worm Environment

The aim is to provide the optimum conditions to breed 'happy worms'. They like cool dark and damp conditions and will breed and process the pet poo better in these conditions. If the temperature gets too high in the box (over thirty five degrees) or it dries out then the worms will stop breeding and die off. Also make sure your Wormery is kept under cover as rain can affect the conditions, **please note the Wormery is not water tight**. Providing the right conditions for worm farming is fully covered in more detail the 'Building Your Wormery' guide provided.

Worms are surface feeders and when the pet poo is added it is put on top of the worms in the working box and they will move up towards it. If you open the lid and lift the covering material you will see the worms working away in there, but in no time they will disappear as they dive for the comfort of the darkness below. This is because they are sensitive to light and will move away from it so do not worry if you cannot see them.



## Bokashi

You will have received a packet of Bokashi Bran with your Wormery. This amazing Wormery addition doesn't just make the waste smell slightly better, but it also accelerates composting and helps the worms to break the waste down. A bag of this is included with your Wormery so just add a handful with the first offering that you place into your composter to get the worms used to the food. You can add this bran intermittently and when you are putting slightly more than usual in.

This bran can be added to normal compost heaps and can be used as chicken feed too.

We have varying sizes of Bokashi Bran so you can keep topped up on [originalorganics.co.uk](http://originalorganics.co.uk).

# Troubleshooting

## Excess Moisture and Waterlogging

Wormeries should always be stored under a roof or in a secluded and sheltered area for best results as they're not rainproof and could flood in the event of heavy showers, but they are perfect for a garage, shed or out-building. Signs to watch out for include any unpleasant odour in the Wormery or numerous worms that look like they're continually attempting to escape (after the first month or so of operation during which time some worm exploration is to be expected).

Both of these are generally signs of waterlogging in the compost compartment, which is more common if you are adding food waste as well as pet poo. Forgetting to tap off the liquid feed can result in the sump filling up which also stops the flow of water thus leaving the compost waterlogged and unpleasant. Your worms will not thrive under these conditions. If the contents of the bin have become too acidic (see section on lime mix) and the worms have failed to thrive, the reduced worm activity will slow the flow of nutrient rich liquid to the sump.

With Pet Poo Wormery's the opposite is more likely to happen. If you notice the contents are too dry, spray water onto the waste until it is slightly damp, not soggy.

# The Process

## What is the best temperature for the Wormery to operate at?

Worms operate year round, but they work best within the temperature range we humans tend to feel comfortable in. The optimum temperature range is 18-25°C but your hard working Tiger worms will work well at lower temperatures, although there may be a noticeable 'go slow' below 10°C. Temperatures over 30°C are best avoided. Please note that in the first 8-10 weeks after setting up the Wormery, the worms are particularly vulnerable to extremes of temperature.

## How much compost can a Wormery hold?

Each tray in a 3 or 4 Tray Wormery can hold approximately 15.5 litres, giving 3 Tray Wormeries a capacity of roughly 46.5 litres and 4 Tray Wormeries a capacity of around 62 litres. The capacity of the all-in-one Wormeries will vary depending on which model you select and the food waste you put in it.

## How long does the process take?

The Wormery is quick and efficient. To start, let a couple of handfuls of food waste rot for 3/4 days in a kitchen caddy before adding to the Wormery, this then takes 6-8 weeks to turn into compost. However, most people wait until the Wormery is nearly full before emptying the compost. Remember to dilute the liquid feed 10 parts water to one-part liquid before using it on your plants, **do not use on fruit or veg.**

## What about flies?

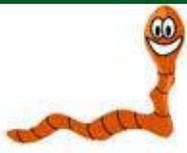
Flies should find it rather difficult to get into your Wormery. However, Wormeries can sometimes provide a good breeding environment for them if they are inadvertently introduced with some waste. If you do end up having a problem with flies you can use an organic fly spray to kill their lifecycle.

## What about mould and weeds?

In the early stages of decomposition of waste, a furry grey mould may occasionally appear. It is not unpleasant, will not affect the worms and will soon disappear. It's also unlikely weeds will appear, but possible. The most likely cause is the addition of weeds with seed heads. In any event this is no problem. Simply pick out any seedlings to prevent further growth.

## Can I add newspaper?

Yes, but the best thing to add to absorb excess liquid is torn cardboard egg cartons, make sure you thoroughly mix them into the waste. If your Wormery seems very damp then add as much dry, torn egg cartons as necessary to absorb the excess moisture, be sure to mix into the waste, thoroughly. This may require a significant quantity of cardboard. The occasional handful of lime mix also helps ensure that the process remains sweet.



# FACT FILE



## The Basics

### What is a Wormery?

A Wormery is a very simple, but highly effective and environmentally-friendly compost bin that turns dead organic matter into a superb high quality worm cast compost and a nutritious liquid feed, which you can use in your garden and around your home. Although, much of the liquid has been removed from dog droppings during its passage through the dog's digestive system. This will mean that liquid compost may not be produced as regularly as in a kitchen waste Wormery. This is absolutely fine and is not a reason to be concerned. You may need to moisten the waste using a spray bottle every so often to ensure the waste is damp but not wet.



### What are the main benefits of a Wormery?

A Wormery will divert your pet poo, food waste, shredded newspaper, cardboard tubes, teabags, egg boxes and more away from landfill. Not only that, a Wormery is also giving you something useful back - the highest quality compost you can get and a liquid feed which you can use to feed your plants and you can also save money with one. **Please note the liquor and compost from a Pet Poo Wormery should not be used on fruit and vegetables which are to be eaten.**

### Where should I keep my worms until I'm ready to set up my Wormery?

You can store worms in the fridge once they arrive if you need some time to get your Wormery sorted. They'll also survive in the post as we put them in special bags.

## Flies and Insects

The Wormery is designed to make access to flies and insects difficult. The fly most likely to take an interest in your Wormery is the small fruit fly (drosophila). A little care in operation should help reduce the likelihood of such trouble.

The risks to be aware of are:

- Adding garden soil or compost which is not sterile and may contain various insects or their eggs.
- Adding garden or kitchen waste from home grown vegetables which may have eggs or larvae on their leaves.
- Poo with larvae or eggs in it
- Storing your waste too long or in an open container before adding to the Wormery - flies may have laid eggs and then you inadvertently introduce them to the worm bin

Flies won't do any harm, but may well be considered unpleasant or undesirable and particularly unacceptable if you keep your Wormery indoors! Should you experience a minor fly problem simply cover the surface of the food waste in the bin with a two inch layer of well-rotted compost, leaf mould, peat free compost or coir and don't add further food for 6 to 7 days - this should rapidly cure the problem. This process is called 'casing' the bin.

In the unusual event of a serious insect infestation it is likely that insects have started to breed in the Wormery. Fly paper or a sticky fly trap may well resolve this problem. Alternatively spray the bin for 8 or 9 consecutive days to break an established insect breeding cycle. We don't like recommending chemical insecticides as they're not organic, however they shouldn't harm the worms (as they will be below the surface).

# FAQs

## **I can't find my sump tray, where is it?**

It will most likely be packed inside the lid as it's the same size and shape and it has a hole to distinguish it from the lid and the other components.

## **What is coir bedding?**

The coir bedding in the plastic bag is something you can use right from the start and is a crucial component for helping worms settle into the Wormery. Simply put down a layer of newspaper and then put the coir bedding onto it, spread it evenly over the newspaper. The alternative to the coir bedding in the plastic bag is a coir block (which we sell on our website), place the block in a container, put enough water in to cover it and leave to soak. Then drain it and squeeze out excess moisture before spreading it evenly around the bottom tray on top of the newspaper. Then you add your worms. The coir bedding is not to be confused with a coir mat or coir moisture mat.

## **What is the anti-acid lime mix and what does it do?**

Essentially it is a gentle form of calcium which reduces the acidity. Most food waste is mildly acidic and worms thrive best at a broadly neutral pH (7). A small handful sprinkled over the surface every 4 to 5 weeks will keep the conditions sweet. Crushed up eggshells (which are essentially calcium oxide) have the same effect.

## **Why Tiger worms?**

Red wigglers (Tiger worms) are recommended by most vermicomposting experts, as they have some of the best appetites and breed very quickly. Other breeds of worm can be used, but they do not adapt as well to the shallow compost bin or work as hard as the tiger worms, so the progress of your composting will be slower. Tiger worms typically live for between 6 months up to 2 years.

## **What is the best temperature for the Wormery to operate at?**

Worms operate year round, but they work best within the temperature range we humans tend to feel comfortable in. The optimum temperature range is 18-25°C but your hard working Tiger worms will work well at lower temperatures, although there may be a noticeable 'go slow' below 10°C. Temperatures over 30°C are best avoided. Please note that in the first 8-10 weeks after setting up the Wormery, the worms are particularly vulnerable to extremes of temperature.

## **Do I need to dilute the liquid feed and what can I use it on?**

Yes, the feed should be diluted with 10 parts water prior to being used. The liquid feed is multi-purpose and can be used on indoor and outdoor plants, flower beds, or on your lawn. Please note when using the liquid feed, it needs to be diluted 10 parts water to one-part liquor, before use on your plants.

Though it could be quicker, or longer, depending on the amount and type of food you're putting in and the time of year (or rather prevailing weather and temperature). Once the liquid starts to come through you generally tap it off every week. Please remember if you leave the liquor in the sump and worms get in they will drown.

## **Do not put any of the end produce from Pet Poo Wormeries in areas where children will play or on fruit and vegetable patches.**

## **Can I store the liquid feed and compost?**

Yes, the liquid can be tapped off into a suitable container (e.g. 4 and 6 pint plastic milk bottles) and stored in a cool dark location for several months prior to dilution and use. Similarly the compost can be bagged up and stored for later use. Be sure you have marked these containers with 'Not to be used on fruit & vegetables' so that no one accidentally uses it.

## **What happens if I go away on holiday?**

No problem at all. A well-established Wormery should be fine left for around a month. Simply add some food waste before you go and leave the tap open with a container underneath (just to stop the build-up of liquid feed) and enjoy your holiday. The worms will look after themselves.

# Other Useful Information

## Compostable Waste Bin Bags

If you are using these in your waste caddies before you put the food waste into your wormery, be sure to empty the contents of the compostable bag into the Wormery.

**DO NOT PUT THE BAG WITH THE CONTENTS IN IT INTO THE WORMERY.**

Food waste will start to rot and release water which in turn will allow the waste to compact in the waste bag and the worms will not be able to reach the waste in the bag. We would suggest that when the bag is emptied it is put into your normal recyclable waste bin.

## What if it all goes wrong?

If the instructions are followed, this is unlikely. But if you do feel your Wormery is not working properly, don't panic. You can reach us on 01462 429765.

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