



Composting Worms: Quick Start Instructions

by Brian Donaldson 0419 419 572

www.TheWormMan.com.au

brian@TheWormMan.com.au

For more instructions, other information about raising worms, links to information and how-to videos on my u-tube channel, books, courses, worm farm plans etc go to www.TheWormMan.com.au

Hi !

Thanks for buying worms and or your worm farm from me. I sell many different worm farms, for different purposes, and have a lot of good info listed on my website.

If you're interested in looking at more info, then that is the place to start :)

This is a "quick start guide" - there is a lot more detailed info on my website.

Of special interest to you may be my FREE FAQ Guide (available on the website)

Temperature / Location:

*** MOST IMPORTANT: Worm farms MUST be kept in a cool shady spot - if the farm gets too much sunlight or heat in a day you may kill the worms.

How to start off a multi level worm farm you bought from the shop:

Basically follow their instructions. If you have bought it second hand, look at my website for detailed instructions on setting one of these up. The only thing to question/ignore is HOW MUCH to feed and HOW MUCH water to put into the farm - some of the systems IMO aren't giving good instructions. (I'd prefer you to believe what I tell you)

Feeding - What to feed and what not to feed:

How much and when and food preparation:

Amounts to feed: Feed an amount of food equal to the weight of the worms ONCE A WEEK. Add new bedding (detailed below) underneath each feeding.

On the internet they say that the worms eat their weight every day, but this is in perfect climate controlled conditions, and includes the bedding they eat as well.

Within reason you cant add too much "bedding", and too much wont hurt them as such, but adding too much food WILL kill them. If in doubt, just put more "bedding" type stuff in occasionally, like leaves, old grass, torn up newspaper and cardboard etc.

Where in the farm to feed: Its a good practice to put the new food up one end of the tray, then the next time you feed them feed up the other end of the tray. Don't feed again until the 1st lot of food is gone etc. This way you can keep an eye on when they finish the oldest food, to then feed again. Some rotate the feeds around the farm in a circle, some feed like the spots on the 5 on dice. This rotation of food ensures the juices from the feeds are in different spots, not always soaking one area of bedding. Even when you SEE the food is gone, the worms will still be feasting on small particles and the juices that seep into the bedding.

How to feed: When feeding, scrape back a little of the bedding, put the food in and partially cover the food with the scraped back bedding. This helps keep fruit/vinegar flies and other pests off the fresh food, helps reduce smells and aids the compost process too.

Virtual / Recorded Worm Farming Workshops Now Available!

Details:

www.TheWormMan.com.au/virtual

Worm Farming Workshops "Face To Face"

Locations:

Forest Lake &

Northey Street City Farm (Windsor)

- Worm Farming At Home
(*With Composting Worms*)

Details:

www.TheWormMan.com.au/workshon

When to feed again: Feed the worms once a week, but don't feed again until you see the food from 2 weeks before is gone.

Preparing food: Cut the food into smaller pieces - eg don't put a whole apple in there, chop it into a few pieces to let the composting action start better. Some people like to freeze the scraps first then thaw them before they feed them. This breaks down the food quicker, but also kills fruit fly eggs that are in the skins - handy if you have the worm farm inside. Some blend the food to allow the worms to eat it quickly, but this is not necessary. I myself do not blend or chop scraps finely. At most I will split apples into 4, or cut a banana in 2 pieces to open the flesh to the worms.

Foods they LOVE: Common kitchen scraps, raw and cooked, like pumpkin and watermelon (their 2 favorites hands down). All fruit **except** citrus and pineapple - they love bananas and mangoes skins and all (**but not** citrus/pineapple), small amounts of cooked rice or pasta without sauce are ok. Bread is ok but needs soaking first as it goes dry and mouldy and takes a while to break down to where they will eat it.

Foods to be careful of: Grains such as oats, wheat (incl. flour), rice and pasta, chicken feed etc need to be used sparingly - too much of these will cause sour crop disease and kill your worms.

A lot of things WILL heat up when made wet and placed in the farm, so be careful of putting ANYTHING in large quantities in the farm. Moderation is best.

DO NOT FEED:

-meat/dairy - in a small farm it just causes too many issues - it attracts blow flies and it smells.

-onion, tomato, citrus - they contain things the worms don't like and may cause issues if over fed in a small farm.

-especially not pineapple, as this contains enzymes which soften meat like in a marinade - it may kill your worms.

-I have heard that sometimes worms don't like mushrooms (we don't eat them so I don't know)

-Pet manure. Its just yucky. The exception to this is if you set up a special pet manure composting farm(I can help with this) - but there are special considerations with this. Ask me if you're interested.

- Animal manures - horse manure, despite what they say on the internet is now deemed unsafe for worms due to de-wormers.

Chicken/bird manure is considered too hot for worms. I would advise not to use ANY manures in a worm farm - I use NO manures.

Bedding: What to use and what NOT to use, why and how and when to use it:

Why: Too many scraps alone will overload the system, and the worms need bedding as well as food. Paper and cardboard are GREAT bedding materials, and also breaks down into food, while the kitchen scraps are pure food. If in doubt feed more bedding, rather than food scraps. If you feed either end of the box in turn each week, you will get to see when they have finished the stuff you gave them 2 weeks ago and can feed more.

When: Try to feed paper products and leaves/grass in proportion to the kitchen scraps - as "bedding", UNDERNEATH the kitchen scraps. Use it dry if your farm is ok for moisture, if your farm is a bit dry you can moisten the new bedding. If you forget one week, put more in the next week.

What to use:

Paper & Cardboard: While there is a lot of info on the internet both ways, I prefer to never use glossy or waxed papers/cardboard in the worm farm. Only use newspaper, (ok to use colored newspaper), non waxed non glossy cardboard, egg cartons, toilet rolls, etc. Newspaper can just be hand torn into strips, and cardboard only needs to be torn up to 10 to 15 cm square chunks.

Grass clippings: Grass is almost a "food" too, so dont add a whole bunch of it at once. You need to use old/dry grass, as fresh grass heats up too much as it dries out and starts to compost, and may kill the worms. I find in Brisbane, a pile of grass is usable for worms in about 2 to 4 weeks. Never COVER a farm in anything you add, as things CAN still heat up - rather put new things at one end and wait until the worms go into it themselves, then you can put some up the other end etc.

Coco Coir & Peat: Again there are a lot of opinions out there. Personally I don't like coco - it costs money and its hard to tell when it has turned to castings as it LOOKS like castings. Use the stuff you got with your farm if you bought one, just don't buy any more. Peat is bad as it is quite acidic in nature, and can harm your worms unless you buffer the acidity well with lime etc. Peat also costs money and can't be easily distinguished from castings. NEVER put European Night Crawlers in peat - these worms often dont recover from sour crop disease, so dont risk it.

Moisture & moisture control: The bedding should be as moist as a wrung out sponge - you should be able to squeeze a handful of bedding and have a few drops of water to a small trickle of water come out of it. Err on the side of too moist - it wont necessarily hurt them to be too moist but too dry will harm them as they need moist skin to absorb oxygen.

Adding too much moisture is bad. Also too much - some say ANY - leachate ("worm wee") in the bottom tray of a multi level farm is bad, it indicates you're adding too much moisture.

Quite often (every 2 to 3 days at most in summer) check your farm, ensuring that the bedding is moist, and the carpet on top is moist/wet. Quite often the action of wetting the bedding cover (carpet/newspaper etc) continually gives enough moisture to the bedding, but just check it..

Covering on top of worm farms (good in winter can be bad in summer)

Some farms come with a "blanket". Some say to use an old piece of carpet. Some say to use a couple sheets of newspaper. All these are ok to help retain moisture in the farm, mist them with a spray bottle to keep moist. The worms like a covering on the farm where possible, it helps them stay at the surface, by keeping the light out and providing a feeling of security from surface predators. Eventually they eat the covering, even the threads on the bottom of carpets.

BUT BEWARE: coverings also retain heat in the farm, which is great in our winter, but when it gets hot in summer, i like to remove solid coverings - until the blazing hot high 30's and 40's (Celsius) I will substitute dry newspaper strips as a cover, which still provide covering but allow more air entry. When it gets really hot i remove all coverings.

Air and cooling the farm: Worms need air to survive especially when hot. If you've made your own farm, often people don't put enough air ways for the worms. I advise AT LEAST 2 holes 10 cm x 15 cm. Drilling small holes just doesn't work.

Adding water to a farm only makes matters worse as it conducts heat and replaces air in the bedding.

Two ways to cool a farm: other than placing it in a cooler spot are:

- place a hessian bag over the farm, and moisten it. As the water evaporates it cools. You can also hang the bag into a bucket of water on the sides to keep it wicking water up and cooling while you're not there.
- freeze plastic bottles of water. Place them in the farm, rotating each day or as needed with a new one from the freezer.

Worm farm "conditioner" / Ph buffer / Lime - what does it do - and what IS it anyway?

Conditioner, or Ph buffer (usually a sort of "lime"), is added to control acidity in farms. The decomposition process is acidic, and some foods are slightly acidic. This can build up in the farm and worms may die. They die from what is called "Sour Crop Disease" aka "String Of Pearls" aka "Protein Poisoning" (which has nothing to do with FEEDING the worms protein. Also, often a slightly acidic farm will attract and allow pests to breed, such as mites, pot worms, vinegar/fruit flies etc.

Ph buffers are a good preventative (i sell one of them in small amounts, in a handy shaker) - prevention is better than cure.

Precautions on flooding: A common mistake is not emptying the liquid collection tray often enough so the farm floods. I prefer to leave the tap OPEN in such farms and leave a bucket under it so I know it's not flooding without having to lift all the levels off to check etc.

Common buffers:

-Egg shells, if adding as buffers, are better dried in the oven and ground in a coffee grinder, mortar & pestle etc. You may also be able to source ground oyster shell.

-Dolomite from the garden store (my personal preference)

- garden lime, which is ground limestone

NEVER USE: SLAKED OR HYDRATED lime, these will kill worms

How to apply: I like using a home made shaker (i have these with the conditioner ready to go) - but you can just use your hands, but it is a little harder to control amounts.

Just put a light dusting of the dolomite on the top of the bedding, as if you're flouring a bench to roll dough - then water it in a little if you need to add moisture to the farm. If you don't need to add moisture, just mix the lime in a little with your hand or worming fork - if you leave dry dolomite there it may hurt them a little.

PH Testers: You may want to use a garden PH tester to see you're in the ideal range of 6.5 to 7.5 (buffers increases the PH number, making it less acidic) The worms PREFER the bedding in this PH range and do best within it. You can buy a PH tester (pen type) for about \$10.

Tools to use in your farm: The best tool to dig around in your farm is one of the little gardening hand forks, the ones with 2 or 3 blunt prongs. A spade or hoe type will cut the worms up.

REMEMBER - the FREE FAQ Guide & the website for extra information etc.

If you have any questions, please just call or email me, I am happy to help.

I also sell complete worm farms, for different uses such as pet manure composting, or garden bed feeding stations to encourage worms into your gardens.

Please call me to ask about them.

Thanks and happy worm farming !!!

Brian Donaldson

brian@TheWormMan.com.au

www.TheWormMan.com.au

0419 419 572

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Brian Donaldson - 0419 419 572

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