

Questions & Answers about the Can-O-Worms™

Following are the most commonly asked questions about the **Can-O-Worms™** worm farm. Experts from the field of vermiculture (study of worms) have been consulted to provide answers and hints that will ensure the most efficient use of your **Can-O-Worms™**.

Q.1 Where can I obtain compost worms?

A. There are a number of worm farmers in most states. These can be found through ads in magazines or the Yellow Pages. Some local nurseries may sell them or advise you or even your local municipal offices may promote worm composting and be able to direct you to a local supplier. We recommend that you purchase a minimum of 1000 compost worms.

Q.2 How much will my worms eat?

A. This depends on how many worms you have. Worms can eat up to half their own body weight every day and can double their population every few months. If you start your **Can-O-Worms™** with 1 pound/450 grams of mature worms (identify mature worms by a distinct ring shaped swelling around their body) they will consume up to half a pound /225 grams of food waste per day. After a few months you should have double your worm population and you can feed them more. The baby worms, however, won't eat much and will take about 3 months to mature. As you become familiar with them you will learn their rate of food consumption.

Q.3 How can I help the worms to eat more?

A. Worms will feed at a faster rate once they have adapted to any new food source. Worms will also eat more if food waste is mashed, blended or processed. Controlling temperature to around 24°C (70°F) will improve the overall performance of your system. Worms will leave very acidic food such as onions and orange peels until after they have eaten their preferred foods. A handful of lime mix (or crushed oyster shells or ashes from a fire) every few weeks will help to balance the effect of acidic foods. The regular addition of worm treats or worm fattener (see page 15) will encourage stronger, fatter worms. Since they consume up to half their own body weight each day, the fatter they are the more wastes they will eat.

Q.4 What shouldn't I feed my worms?

A. Be careful what you feed your worms particularly if you are unaware of its source. Manures, for example, from horses, cattle or dogs often has vermicides still active in it that were designed to kill parasitic worms in the animal. They can kill all your worms in one day. If you use animal manures make sure you know when worming is conducted and avoid using the manure for a few weeks.

Q.5 Can I feed my worms garden refuse?

A. Not usually. The **Can-O-Worms™** is designed to break down soft organic waste. Slow composting organic wastes such as garden refuse are best dealt with by conventional aerobic composting methods.

Q.6 I've had my Can-O-Worms™ for a month now, but the worms don't seem to be eating?

A. The worms may be eating your bedding material if you have used manure or compost in addition to your **Can-O-Worms™ Bedding Block**. If that is the case the worms will eat through this before eating any introduced food. If just the bedding block is used the worms should readily eat introduced food waste even though they do also like to eat the coir fibre.

Q.7 Should I add water to the Can-O-Worms™?

A. Watering of the **Can-O-Worms™** worm farm will enhance the production of liquid fertilizer. Food wastes are about 80% water which is released as the worms break them down. This will tend to stay in the bedding for a long time before eventually draining out. Any dry material such as old manure, newspaper or cardboard should be presoaked before being added. It is important to keep a moisture mat or similar over the freshly added food to encourage the worms to move up to the surface to feed. This will provide a dark damp shelter for them. If you pour a maximum of 2 litres (1/2 gallon) of water over the scraps each week or two and then place the empty bucket under the open tap, you will have a constant supply of liquid fertilizer. The sudden 'flood' will not harm the worms.

Q.8 Will I get too many worms ?

A. No, you can never have too many worms. They will regulate their population to the confines of available space and the amount of food you give them. Worm concentration should reach capacity (about 15,000 to 20,000 worms) after 2 - 5 years.

Q.9 Can I put compost worms in the garden?

A. Only if you have a thick surface layer of mulch in your garden. Compost worms require moist conditions all year round because they don't tunnel deep like earthworkers to find moisture. If you cannot provide this environment in your garden, don't introduce compost worms into it.

Q.10 Why aren't the worms moving up from the lower levels into the top working tray.

A. This situation can arise in two ways. First, you may be adding new food too soon before the worms can eat the previous food. This will result in a lot of uneaten wastes being distributed throughout the system and a general reluctance by the worms to migrate upwards while they can still access material lower in the system. **Before adding new trays, stop feeding the worms for at least a week to ensure that all existing food in the lower tray has been eaten.** Worms will then move up to eat from the surface as this is their natural behaviour pattern. Secondly, you may not have waited for the level of worm castings to pass the support ribs on the inside of the tray before adding the next tray. This will create a gap preventing the worms from reaching the top trays.

Q.11 What about severe temperatures?

A. Worms will tolerate a wide temperature range from about 50° - 90° F/10° - 30° C. If it gets much hotter than this, make sure the **Can-O-Worms™** worm farm is in the shady cool position. Take the lid off and hose the whole unit down keeping the bottom drainage tap turned on so it doesn't flood. If it gets much colder and freezes, put your **Can-O-Worms™** in the warmest possible position, an example being your basement, laundry or shed. If it is on a balcony or out in the yard, cover the unit with a couple of old carpet pads or old blankets to keep some warmth in. Feed them a lot more food wastes which will create some warmth as they decompose.

Q.12 It's raining and the worms seem to be gathering in the lid. What do I do?

A. What you are noticing is the worms sensitivity to pressure changes in the weather. They will often go up into the lid even before it rains. In nature this takes them out of the soil to stop them flooding and drowning. Move the **Can-O-Worms™** out of the rain. Take the worms out of the lid and replace them in the bedding.

Q.13 Are the little white worms in my Can-O-Worms™ worm farm baby earthworms?

A. No, baby earthworms are not white, but clear to opaque, before developing a reddish color. They are just visible at this stage. The 'white worm' you are noticing is a type of worm called entrachyadids. They will not hurt compost worms, but they do indicate acidic conditions, which can be overcome by the weekly addition of a handful of lime. By placing a piece of moist bread on your **Can-O-Worms™** you can lure the white worms to a small area for easy removal. It is important to note that many organisms that may appear in your **Can-O-Worms™** (such as large populations of minute red mites and large soldier fly larvae) are beneficial to the breakdown of organic material, so there is no need to remove them.

Q.14 How do I keep ants out of my Can-O-Worms™?

A. Ants will enter your **Can-O-Worms™** if you have a lot of them in your backyard and particularly if you have let the bedding become too dry or acidic. Add water to raise the moisture level and add a liberal quantity of garden lime to where the ants are gathering. This should discourage them. If they persist remove them physically and smear some vaseline around the legs or place each leg in a container of water to isolate the system.

Q.15 Will the Can-O-Worms™ attract flies?

A. No the **Can-O-Worms™** is fly-proof against household flies. Sometimes the very small vinegar fly (often mistaken for the fruit fly) gets in, but these do no harm. However, very large numbers of the vinegar fly may indicate that you are **feeding the Can-O-Worms™ too much** and may be a prelude to problems such as offensive odors. To eradicate vinegar flies, slow your rate of feeding to what the worms will eat on a daily basis and ensure that freshly added wastes are covered by a moist burlap/hessian bag or newspaper.

Q.16 What about maggots?

A. Should you experience any influx of maggots, it will most likely be the soldier fly or vinegar fly larvae. The soldier fly larvae grow up to an inch/2cm big starting out white but soon turning dark grey with distinct ribbing bands. Fishermen say they make great bait. The vinegar fly larvae are small, usually 1/4 inch/6mm or less. Don't be too alarmed if they appear. They are actually beneficial to the waste breakdown. If you want to remove them though, do so by liberally applying lime, or placing bread soaked in milk on the surface of the compost. Larvae love bread and should infest it. Remove the bread after 2-3 days and dispose of it.

Q.17 Will the Can-O-Worms™ smell?

A. The only smell associated with a well maintained **Can-O-Worms™** worm farm is a pleasant rainforest odor. If your **Can-O-Worms™** has an offensive smell, it is an indication that anaerobic bacteria have built up in the system in uneaten food wastes. Stop feeding the worms and stir the wastes in the top tray lightly with a garden fork adding garden lime as well. This aerates the organic material and allows worms to move through it more easily. Repeat this aeration procedure regularly to prevent recurrence. Start feeding again when all smells are gone.

Q.18 What about holidays?

A. Leaving an established **Can-O-Worms™** for 3-4 weeks without constantly adding food is not a problem. Just feed the worms a good quantity of food waste (1/3 of a tray full) before you leave. Make sure that you leave the unit in a cool place under cover and leave the tap open with a container under it. Putting a soaked newspaper on top of your burlap will give added protection against their bedding drying out.

APPENDIX 1 - Worm Menu

As a guide worms will eat anything that was once living. This includes:

- Left over vegetable scraps, fruit and vegetable peelings
- Manures (well aged)
- Tea leaves/bags and coffee grounds
- Vacuum cleaner dust or hair clippings (also animal)
- Torn up newspapers, egg and milk or pizza cartons (soaked first)
- Crushed egg shells (These will help with the pH balance)

The greater the variety of material you use, the better the castings will be...

APPENDIX 2 - Worm Fattener

Make up the following recipe to fatten and toughen up your worms;

Chicken Layers Pellets	50%
Wheat or Corn Flour	10%
Powdered Whole Milk/Skim Milk	10%
Bran or Wheat Meal	20%
Agricultural lime or dolomite	10%

Mix the ingredients and sprinkle lightly on the food wastes about once a week.
After several months you will have fat, tough worms in ready supply for fishing.

APPENDIX 3 - Using Castings and Liquid Fertilizer

Worm Castings are a useful additive to any garden. You will see exceptional results in the color, quality and quantity of all your fruit, vegetables, flowers and ornamental plants.

Castings are interesting in that they can be used pure as organic fertilizer or as an additive for your own favorite potting mix.

You cannot harm any of your plants by using worm castings. The pH is neutral (7) and therefore suitable for most types of plants from azaleas to orchids.

Castings are a great way to incorporate the beneficial effects that earthworms can bring to your garden in a convenient, cheap and easy manner.

The following methods are typical of the many different ways to use worm castings:

Top Dressing - Simply spread a layer (about 1/2 inch/12mm deep) of worm castings around your favorite plants. Mulch and water in.

Seed Raising Mixture -

3 parts aged compost or coir fibre to 1 part castings.

Potting Mix -

2 parts aged compost, 1 part castings, 1/2 part Vermiculite.

Native trees, fruit trees - Apply around base and water in well. Re-apply when necessary. Collected liquid fertilizer may be added to your plants directly from your **Can-O-Worms™** or diluted to 50% without loss of nutrients.

"Reduce, Re-Use, Recycle "
Its Easy !
We just have to make the commitment.



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