

Recycling with Earthworms

You are probably aware of the role earthworms play in aerating and fertilising garden soil. Their ability to recycle kitchen and household waste is not as well understood or appreciated. When harnessed to a concentrated recycling task in a worm farm, it is possible to recycle up to 70% of ordinary household waste.

These amazing quiet workers can consume shredded newspapers, vegetable scraps, egg shells, hair from brushes or from pets bedding, vacuum cleaner dust, any natural fibre clothing and left over food. Dog droppings as well as other animal manures are great fodder. Chopped up corrugated cardboard is a real favourite with worms because the adhesives used are starch based. Even small quantities of fresh lawn clippings can be fed into a worm farm.

When it comes to bulky garden waste such as tree prunings and large quantities of weeds or lawn clippings, it is a good idea to break them down by composting in a compost bin or tumblers. In the form of compost, these wastes are readily consumed by worms. Living plants and insects are not eaten by worms they will only tackle dead material. Plastic, in any form, is a no-no on a worm menu. I've seen window envelopes eaten away entirely but for the plastic see through part.

Worms can consume their own body weight in a day. As 1000 worms weigh about 250 grams you can see the need to rapidly build up numbers in order to efficiently cope with household wastes. This is no problem for these productive animals.

Worms lay eggs every 10 days which take 3 to 4 weeks to hatch. A worm population can double in numbers every 6 to 8 weeks. Because individuals can live for three to 15 years there is plenty of potential for garden enhancement once you get conditions right.

There is no need to worry however, about having too many worms in the farm, as they are self regulating and only reproduce if there is enough food and space to support the next generation.

The product of all of this worm activity is manure, actually called worm castings or vermicasts. These castings contain a complete range of nutrients required by plants for normal growing. The pH is neutral and this means that it won't burn the roots of your plants when used as fertiliser. It not only includes the major elements of NPK but in addition there are micro nutrients as well as a suite of beneficial micro-organisms.

Worm castings look like gluggy clay. One unexpected characteristic is there is no smell. It is a good idea to actually bury castings under a layer of mulch or soil so that it doesn't dry out or heat up too rapidly. Castings usually contain some live worms as well as eggs which can help to build a population of new worms right in your soil.

Worm manure can be added to the potting mix for indoor and potted patio plants. You can make it into a more convenient liquid form by pouring water through the worm castings and collecting the dark brown liquid. This liquified manure can be easily applied to the vegetable patch or indoor plants.

SO WHAT DO YOU NEED TO GET STARTED IN THE RECYCLING BUSINESS?

Firstly, worms are available in small cartons from your local Waldecks Garden Centre. They are not our common earth worms, who tend to wander off, they are imported Tigers and Reds which will happily stay put. You will need to move your worms into a larger container. Large wooden boxes are suitable but I recommend purchasing a Worm Factory because it is so convenient. This factory consists of four black plastic trays that sit neatly in one another. In

addition there are clip on feet to keep the farm off the ground as well as a light proof lid to maintain the darkness worms insist on. The system makes it possible to move the worms from one tray to another so that the castings can be harvested every 6 weeks or so.

How do you move the worms around the farm?

Food is the motivating force. By placing scraps in the next layer up worms will be encouraged to move to the food source. This makes it possible to remove a lower level tray to harvest the castings once the worms have vacated.

It is important not to over feed earthworms. The rule of thumb is to add only the amount of food to the farm that can be consumed in two days. Drying out can also affect numbers. If you soak newspapers or cardboard before placing in the farm it is often the only additional moisture required.

When expanding the farm to a larger box or just creating a new layer in the factory you will need to make up a casing bed. Finely shredded newspaper mixed with equal quantities of pulverised sheep or cow manure is ideal. Of course it will need to be moist before worms will be happy to move in.

Worm farming is a great project for the younger members of the family. It teaches some valuable recycling lessons and contributes free fertiliser to the garden as well as reducing the amount of household rubbish that goes into the bin. If local councils ever get to charge for rubbish disposal by weight there will be an extra incentive to turn to worms.

Happy worm farming