



HOW



TO



KEEP



YOUR



WORMS



HAPPY



***Worms are more powerful than the African elephant and more important to the economy than the cow.***

Charles Darwin

# *Hello from The Urban Worm and welcome to the world of worm composting! You are now an official environmental hero.*

Worm composting our kitchen waste at home and at work takes direct action on climate change as it not only reduces the need for fossil fuel driven transportation sending this valuable resource to landfill it also reduces emissions of Methane and Nitrous Oxide, two greenhouse gases (GHG) emitted from decaying food waste that are 31 times and 310 times stronger than Carbon Dioxide!

Being responsible with our food and organic waste is an important step on the road to sustainability that provides us with a steady supply of worm castings, the finest organic fertiliser known to humans, otherwise known as 'Black Gold'. Worm castings contain an abundance of nutrients and minerals essential for healthy plant growth and disease suppression, helping us grow happy and healthy plants, without the need for poisonous chemicals.

We are passionate about worms (naturally), people and the planet and as an enterprise we strive to raise awareness of environmental issues through the promotion of worm composting and organic growing. We understand healthy soil makes for healthy people, and together as a local and global community we can make a positive change, starting with a wormery!



# WORM CARE GUIDE

*Composting worms are very easy to please, although a small degree of care does need to be taken in regards to their favoured diet and environment. In exchange of your care your worms will efficiently eat their way through your food waste, whilst providing you with a steady supply of 'Black Gold'.*

## Getting To Know Your Worms

Your composting worms are not the same type of worms found in your garden. Garden worms are deep burrowing and feed on the soil, however composting worms are surface dwellers, preferring a constant supply of rich organic decaying matter. Although there are 3,600 species of Earthworm only seven are suitable for composting. The Urban Worm use Tiger worms as they are considered to be the best and most efficient for composting. They are called Tiger worms because they are red and stripy although their Latin name is *Eisenia Fetida*.

Worms are hermaphrodites, meaning they have both male and female reproductive organs, enabling them to breed prolifically and double their population every 60 days, if conditions are favourable. Although worms are hermaphrodites they need to mate with each other to reproduce and each worm will then lay a cocoon. These cocoons look like yellow pearls and can have up to 15 babies inside. Newly born baby worms are white and will take a few weeks to develop their colour.



## 5 Fabulous Worm Facts

1 Worms have five hearts 

2 Worms can grow back segments of their body, a bit like a super hero

3 Worms can double their population every 60 days 

4 Worms are hermaphrodites, they have both male and female reproductive organs 

5 There are 3,600 known species of Earthworm 

## Living Conditions

Worms like to live in moist environments and starter bedding should resemble the dampness of a wet sponge. To avoid your wormery becoming too wet add an additional paper source to soak up excess moisture from food waste. Empty toilet rolls and egg cartons are great for this purpose and adding a layer every 8-10 inches will give the worms a very comfortable air flow. If your wormery becomes anaerobic (without air) it will develop a foul smell and suffocate the worms, empty toilet rolls and egg cartons will overcome this problem and stop the food waste becoming too compact.

Worms love corrugated cardboard and the addition of a few sheets will make them very happy, you are sure to find them resting in the grooves. When adding paper ensure it is shredded or tear it into small pieces.

Worms are at their happiest and most productive in temperatures ranging from 10-30°C, and much like us they slow down during winter months, as do their eating habits. To keep your worms comfortable in the cold you can place an old bath mat or towel to insulate inside the wormery to reduce the cold airflow, they are also fond of snuggling in the fibres. Wrapping bubble wrap or a blanket around the wormery will also retain the heat. During the summer, keep your wormery out of direct sunlight to avoid overheating.

Newly housed worms may take a few days, if not weeks to settle into their new home and may stray around the lid, simply place them back in the wormery.

To reduce fruit flies during summer months add shredded paper or cardboard on top of food waste inside the wormery.



# Worm Menu



Fruit



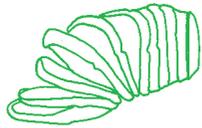
Vegetables



Cereal



Pasta



Bread

Tea



Coffee

Paper



Eggshells



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Meat

no THANKS!

Onion

Citrus

Dairy

## Dietary Requirements

Worms have a ferocious appetite and can easily eat up to half their body weight a day in organic waste, but over feeding can lead to a foul smelling wormery. As a rule of thumb 1kg of worms should be fed 500g a day. Chopping food waste into small pieces will help your worms consume it faster, as they only have very small mouths.

Whilst worms are not fussy eaters they are not great appreciators of acidic foods, therefore onions and citrus should be left out of the wormery along with dairy and meat products. Unlike the hot composting process, worms can manage cooked food, including pasta, bread and cereals, they particularly enjoy oats. As worms breathe through their skin oily foods should be kept out of the wormery at all times as not to suffocate them.

Worms are wonderful organic waste managers and will even eat their way through your old socks! If you keep pets (rabbits, guinea pigs, mice etc.) you can feed their waste to the worms, although dog waste should be dealt with in its own wormery to avoid contamination. Chicken waste should be composted for a few months before adding to the wormery as the high nitrogen content will scorch the worms.

Garden waste such as leaf litter and grass cuttings should be added in very thin layers. Garden waste takes a long time to decompose and composting worms prefer to eat well-rotted organic waste. Adding a handful of sand every couple of weeks provides a source of grit to help the worms digest their food, crushed eggshells serve this purpose also.

If you go on holiday for a few weeks your worms will be happy to be left to their own devices, simply leave them with a little additional food.



# 8 Benefits Of Worm Casting For Your Plants And Garden

## 100% Pure

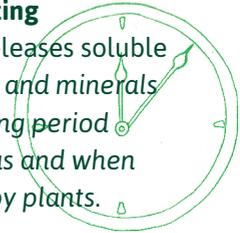
### Natural And Organic

Non-toxic. A safe alternative to harmful synthetic fertilisers.



## Long-lasting

Slowly releases soluble nutrients and minerals over a long period of time, as and when needed by plants.



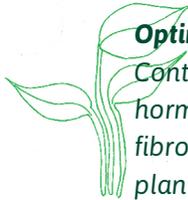
## Moisture Retention

Holds up to 50% moisture, perfect for hanging baskets and vertical gardens.



## Optimal Growth

Contains growth hormones promoting fibrous roots and fruitful plants.



## Disease Control

Microbiological life eats destructive fungi while producing beneficial fungi.



## Pest Control

Contains high levels of chitinase a natural insect repellent.



## A Little Goes A Long Way

One teaspoon contains millions of beneficial minerals and nutrients for healthy plant growth and development.



## Improves Soil Structure

Enriches beneficial microorganisms and prevents compaction.



## Harvest Time!

When your wormery is full, or at least  $\frac{3}{4}$  full it is time to harvest the fruits of your labour. Slide open the harvesting hatch, laying a plastic sheet or table cloth under the hatch door to avoid wastage and reduce the mess when emptying the processed worm castings. It is advisable to wear gloves during this process.

The majority of your worms will be residing at the top of the wormery among the fresh rotting waste, although there will be a few stragglers at the bottom, gently place them back in the top. Leave at least 6 inches of rotting waste in the wormery with the remaining worms ready to be filled up again for next years harvest.

Sieve the worm castings with a compost sieve to achieve a finer material. Unlike other manures worm castings can be applied to plants straight away without scorching the plant. As a potting mix use at a ratio of 2:10 to regular compost or sow seeds directly into pure worm castings to give them the best start in life.

For additional plant feed dilute the liquid from the tap at a ratio of 1:10 with water. Your planet, your plants and your people will love you for it!



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