

Remember!
 As the bedding is eaten - so more needs to be added every few weeks. This is what most people forget!

To start a Domestic WormBox, buy 1 kg of worm - this may be about 1,000 worms. Getting your worms to work well for you is like looking after any pet – give them the living conditions they need, water, their favourite food and they will thrive.

These “litter worms” are found among the leaf litter in our woodlands – a moist, fibrous environment.

The conditions in your box must copy this.

Living Conditions 1

Bedding

The bedding layer is where they live and feed. It must be fibrous, moist and containing lots of air spaces.

To start a new wormbox, put a layer of semi-rotted compost on the floor of the wormbox.

On top of this goes the bedding for the worms – 150mm of moist, fibrous material – copying the conditions of the forest floor.

Worms do not have lungs. They breathe through their skin which must be kept moist or they will suffocate. Make sure the bedding never dries out.

Their metabolism is so rapid that they need plenty of air. The bedding layer must be moist but, if it contains too much water, it will become waterlogged, and the air spaces will be flooded.



Choosing Bedding Materials

The materials you use for bedding will depend on the season:

Good Materials

- semi-rotted compost from your compost heap
- brown, fibrous corrugated cardboard [e.g. egg boxes-torn up and made moist]
- soft leaves - not waxy or glossy [bag up lots in the autumn and store behind the shed to keep you supplied all winter]
- horse, sheep or rabbit bedding
- horse manure
- some grass cuttings - not too many as they may heat up quickly and worms don't like to be cooked!

Always cover the top of the bedding with some coarse brown cardboard or paper.

This keeps the surface moist and this is where the worms come when looking for romance!

Inferior Materials

- Paper [contains lots of clay and little wood fibre]
- glossy cardboard
- glossy leaves like beech or rhododendron





Getting the moisture right!

To keep the moisture level just right, do the Squeeze Test. When you squeeze a handful of bedding in your hand, only a couple of drops of water should appear. This will give the worms exactly the conditions they prefer and they will work hard for you.

Their new home is ready for habitation.

Doing the Squeeze test regularly will ensure that your wormcast will remain aerobic and sweet smelling – just like the lovely smell of the leaf litter under trees.

Beware!

- the lower layer of a WormBox should **NEVER** be waterlogged! Waterlogged means **NO AIR**:
- anaerobic bacteria are all that will survive and they are not beneficial!
- wormcast will become sour and smelly as hydrogen sulphide, sulphur dioxide and methane gas are given off.
- a WormBox should **NEVER** have liquid draining from it. This liquid will contain some nutrients but is the sign of poor worm husbandry.

You should be able to:-

Put your head in the Box!
Inhale deeply!
Smell the sweet smell
of leaf litter under
trees.

Bedding too dry? -
sprinkle some water
from your watering can
and do squeeze test.

Bedding too wet? -
tear up some cardboard
and mix it with the
bedding

Living Conditions 2

Food

Worms are always hungry!

They need a regular supply of moist kitchen / catering scraps as their food.

Keep a clean "caddy" with a lid under your sink and put your peelings and scraps into it.

Good Feedstock Materials

- Fruit & vegetable peelings
- Eggshells - crushed
- Coffee grounds (with filter paper)
- Tea bags
- Pasta
- Rice
- Potatoes
- Brown cardboard

Note Not much onion, garlic or citrus fruit – it gives them indigestion!

Ideally the kitchen scraps should be chopped up as finely as possible, particularly tough skins or stalks.

The worms will also eat the bedding as it breaks down and becomes soft.



Favourite Worm food?
Bananas
Melon

How to feed

Feed at least once a week :

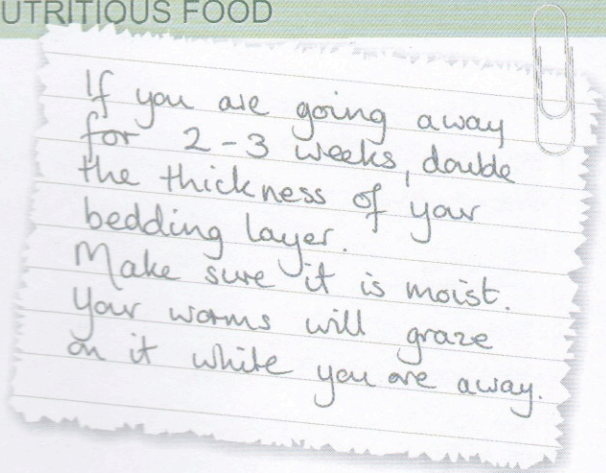
- Make a trench in your bedding
- Spread the scraps from your kitchen caddy along the trench
- **Cover it over** [worms prefer to work under the surface and it will avoid attracting fruit flies]
- Put a marker where you have fed and when you come to feed again, dig the next trench slightly along from the first trench. This way the bed will be evenly fed over a period of time.

The worms are very active and so will quickly find the food wherever it is.

If you maintain a 150mm layer of bedding, your worm population will grow according to how much food you give. If you do not have a lot, the population will remain small.

Worms do not have teeth.

They essentially feed on soft material. However, like poultry, they do have a muscular sack in their digestive system, the **gizzard**, where food is ground up. For this their digestion is speeded up by sprinkling a handful of sand or rockdust [see page 47] onto the bed every month or so.



How do I harvest my wormcast?

As the worms climb upwards towards the “restaurant” and eat their way through the bedding and food, they will leave behind the precious **wormcast biohumus**.

The amount of wormcast you produce will depend on your husbandry skills, the quality of your bedding and how many kitchen scraps you have.

If you keep your worms working all year, your WormBox may fill up three times each year.

With experience, a WormBox 1300 x 600 x 500mm can produce 1 tonne / 1300 litres of lovely rich, mineral enriched wormcast each year!

This would normally be used as a mix with ordinary compost.

When the worms are living near the top of your wormbox - **that is the time to harvest!** To bring them into the top layers, spoil them with a fruit smoothie! They will definitely come up for that.

Weekly tasks:-

- Do the Squeeze Test
- Loosen the bedding to make sure they have sufficient air

Warning: only loosen the bedding. DON'T disturb the wormcast

- Feed your scraps - chopped up finely.



Community and commercial wormcast production



The Six Steps

Removing the wormcast is a very easy and quick job.

1. Get yourself large buckets or other containers.
2. Lift off the bedding layer and put it into a bucket. You will have removed most of the worms with it - any left in the lower wormcast layer will be good for your garden when you spread your harvest.
3. You will recognise when you have reached the wormcast layer. The wormcast is a black, heavy, sticky, material - not fibrous.
4. Dig out the wormcast from the bottom of your box and store it in a suitable container [watertight and covered] in a cool place.
5. Place a layer of fresh bedding in the bottom of the WormBox and put the worms back into their box. Feed them and make sure the bed is moist enough.
6. Cover them up.

Job done!



Wormcast

Bedding

Storing your Wormcast

Ideally, harvest your wormcast during the spring and summer when you are ready to use it – it is at its most biologically active when it comes out of your WormBox.

However when you become so good at looking after your box that during the winter it is full and **MUST** be harvested – the best place to store it is in a wooden box.

Do not sieve the wormcast – just store it.

Cover the wormcast with cardboard and carpet or bubblewrap and spray its surface with water every month until you are ready to use it.

If the wormcast is stored in a plastic bin condensation can cause it to go anaerobic

or

If the wormcast is stored in a breathable sack it may dry out.....

In either case, its potency will decline rapidly.



Using your wormcast

- Mix the wormcast with 10 x the volume of ordinary compost and some rockdust [see page 47] and use this premier compost mix to top dress your garden soil at the start of the growing season
- Add very little to your seed compost. Seeds do not need many nutrients
- Sprinkle some of your wormcast/compost mix into the planting holes when plantlets are being planted out in their final position
- Sprinkle round your house plants, rake into the surface soil and water lightly
- Mix 50ml biohumus with dechlorinated water and use as a soil drench