Victoria University of Wellington - Te Herenga Waka Worm Farm Coordinator's Handbook



A guide for worm farm coordinators

Organic waste in the landfill is a big problem.

Almost half of our waste stream in western cities is organic waste. When it goes into a landfill it turns anaerobic (because of lack of oxygen) and produces methane which is a potent greenhouse gas contributing to climate change.

In addition to this, when organic waste goes into the landfill, all the nutrients inside are lost and cannot be recovered or reused.

One of the best solutions to this problem is to compost organic waste on-site, reducing transport and handling costs, and producing nutrient rich compost which is an important ingredient for a healthy garden.

This is the start of our journey at Te Herenga Waka-Victoria University of Wellington to use worm farms to deal with our organic waste on campus.

Thank you for volunteering to be a Worm Farm Champion to help us reduce our waste to landfill.

This is a short resource that will provide you with the information you need to get started.



What is the job of a worm farm coordinator?

The coordinator will be responsible for ensuring the daily emptying of the compost caddy from the kitchen(s) in your office. You can decide the best way for this to happen. You may want to create a roster and share it with people in your team, or you may want to do it yourself each day, with some backup people for when you are away.

You will also be the go-to person for people in your team if they have questions about how the worm farms work, as we begin to increase peoples understanding.

How will the system work?

• Each kitchen will have a compost caddy

• There will be signs in the kitchen saying what can and cannot be fed to the worms.

• Each day, a staff member from your office will take the caddy to be emptied.

• The caddy will be emptied into black tubs located next to the worm farms.

• The caddy is taken back to the kitchen to be washed and used again.

• The Bark (grounds maintenece staff) will feed the worms with the scraps that are put in the wheelie bin, and they will take care of all Hungry Bin maintenence.



Locations

- 1. Rankine Brown dock way
- 2. Student Union Building
- 3. Te Toki a Rata dock way
- 4. Old Government Buildings, Stout Street end
- 5. Ngā Mokopuna The Marae (end of 2025)

Each office will be allocated to drop at the closest location to them. This is subject to availability, as each worm farm can only handle a certain amount of waste.

What can and cannot go in the worm farms?

First up it's worth mentioning that there is a difference between compost worms and earthworms. Earthworms live in your garden, and they remove dead organic material from the surface of the soil and carry it underground. Compost worms however live in the top surface material. When we refer to worms in this booklet, we are talking about composting worms (aka Tiger Worms).

Worms like a balanced diet. They will eat most normal kitchen and vegetable scraps, but they don't like large quantities of meat, citrus, onions, and dairy foods. Some processed food also contains preservatives, which discourage the worms from eating it. These foods won't harm the worms, but the worms will avoid them, and they will then end up rotting in the bin and bringing unwanted odours and insects.

We have created signs which will live in the kitchens to guide people on what to feed and not feed to the worms.



Worm Farm Feeding Instructions for Pipitea

Check that:

- There is no more than 5cm of uneaten food on the surface
- The worms are eating the food (it has reduced or disappeared since last time they were fed)
- Worm castings visible on the surface, indicating a good population of active worms. (Worm castings are dark in colour and look like fine soil they are soft, friable, loose and crumbly).

Do not feed a hungry bin if:

- There is 5cm or more uneaten food on the surface
- The soil on the surface and around the food is gluggy and slimy, or there are pools of smelly liquid, especially around the edges
- It has a bad smell
- There are lots of fruit flies or other insects.
- Put the bin contents in the Organic Waste Collection Bin instead
- Leave the Bin for Bark's Wormbulance to dig it out and fix it.

Feeding instructions:

- Take the food scraps from black tubs and distribute them across the hungry bins
- If there is any food that the worms don't like, or there is more food than the worms can handle, discard it into the organic waste (compost) wheelie bin for collection



Some teabags have plastic in them, can these go in the worm farm?

Ideally, we don't want this to happen as the microplastic will end in the soil. However, some teabags with plastic will inevitably end up in the Hungry Bins, which won't kill the worm population or stop the worm farm from functioning.

The best way to avoid plastic is to use loose leaf tea with a strainer. If you are using tea bags, the following NXP brands are plastic free:

- Pukka Herbal Teas (Note: These are individually wrapped in recyclable paper bags)
- Scarborough Fair
- Trade Aid
- Tagless Dilmah Tea Bags
- Healtheries
- Red Seal
- Chanui

Page 7 on our Sustainable Events Guide has the NXP codes for these teas:

https://intranet.wgtn.ac.nz/staff/services-resources/development-office/organising-events/sustainable-events-guide.pdf

Why can't coffee grounds go in?

Worms will happily eat coffee grounds, but the amount produced by our kitchens is too much for them to handle and causes the farms to become too acidic for them. You're welcome to collect coffee grounds separately and take them home for your garden or compost.

What will happen to the castings from the worm farms on campus?

They will be used by Bark to feed soil and plants here on campus.

What happens to the liquid (worm pee) that comes out of the Hungry Bins?

Bark use some to feed our indoor plants and the rest is taken to their shed at the Gate 7 dock way (Te Toki a Rata), Kelburn. You can BYO empty bottle and fill up — dilution instructions are on the container. Our worms are irregular pee producers so it might take a couple trips to see when the container is full.

Will the caddy attract fruit flies?

If they are emptied and washed out daily, they should not attract fruit flies. You can also keep your caddy in the refrigerator if you wish.

Will the worm farms smell?

If worm farms or compost smell bad, it's usually because they don't have the right balance of nitrogen (fresh green material) to carbon (dry brown material). Therefore, we have Bark managing the worm farms the ensure they are fed the right material. If you notice that a worm farm looks/smells bad, please lets us know. Andrea.marsden@vuw.ac.nz

Will the worm farms attract rats?

If managed properly the hungry bins are rat proof. If food is spilled and not cleaned up, this is when rats can be attracted and become a problem. If food is spilled when dropping of scraps, please clean it as best you can or contact us if it needs cleaning up.

What happens if I put the wrong food in the bin?

When Bark feed the worms, they discard any bad food into the offsite compost collection bin.

What's the best worm farm system for home?

There are a few different options with varying prices. Hungry Bin is the best but also most expensive. There are layered worm farms that are not quite so easy to use but still work well and are cheaper.

Compare composting systems:

https://www.youtube.com/watch?v=eO4HdrlXnVU&list=PLhAdE8OeOllUL_GfXk2o063CLTN5h8OU3 &index=6

More about Hungry Bins: https://www.youtube.com/watch?v=J-GgaOx68xQ

Contact:

If you have any issues or questions, email andrea.marsden@vuw.ac.nz