



## Worm Farms

Worm farms are relatively simple to make and care for. The worms used are tiger worms, available from some Garden Centres and specialist outlets.

### How to make a worm farm

Purpose-built worm farms can be bought, or you can make your own using an old bath or other container, or a contained area on the ground. A 10cm layer of bedding material should be put along the bottom of the worm farm. The bedding material should consist of shredded newspaper, cardboard or old carpet. A thin layer of compost can be spread over the bedding material for the worms to be put in initially. The food is spread over the compost and bedding material and the worm farm should have a fairly strong cover such as carpet, thick cardboard or untreated timber to keep the environment dark and moist with temperatures between 18-26°C.

### What to put in

The worms will eat food scraps (cooked and raw), tea bags, coffee grounds, bread and other organic waste but limit the quantity of citrus, onions and garlic. They will eat their body weight in food every day.

**X Keep out:** meat, dairy foods and oils.

### Care for your worm farm

Check the conditions of the worm farm when you put the food in. When a reasonable amount of worm compost (or castings) has

been formed move the bedding to one side and put in new bedding and food on the cleared side. Leave for a few days for the worms to migrate to the new bedding and food. Remove the old bedding which is now ready to use as fertiliser.

If your worm farm is in a bath the liquid wastes (worm tea) can be collected in a bucket under the plughole. This can be used for fertiliser by diluting, if necessary, until it is the colour of weak tea. Pour worm tea around plants to fertilise rather than on leaves.



Waitakere City Council  
Te Tatao o Waitakere

Waitakere Central, 6 Henderson Valley Road, Henderson  
Private Bag 93109, Waitakere City 1231  
Telephone: 839 0400, Facsimile: 836 8001  
Email: [info@waitakere.govt.nz](mailto:info@waitakere.govt.nz)  
Website: [www.waitakere.govt.nz](http://www.waitakere.govt.nz)

Produced by the Solid Waste Business Unit  
November 2006

## COMPOSTING AND WORM FARMS

### How to reduce your domestic refuse



Waitakere City Council  
Te Tatao o Waitakere

## REDUCING YOUR Domestic Refuse

Almost half of the rubbish produced by the average household in Waitakere City consists of organic waste or "putrescibles". Most of this is kitchen waste, with only about 1/6 being garden waste. When taken to a landfill site this organic waste has negative environmental effects including the emission of harmful greenhouse gases, and toxic leachate that ends up in the ground. As landfill space becomes scarcer, the costs of refuse disposal in New Zealand will continue to rise. By removing organic waste from your domestic refuse you reduce the burden on landfill sites and you also save money by using fewer rubbish bags.

## COMPOST OR WORMS? What's the difference

Organic waste will naturally decompose, however the process can be speeded up by using a compost heap or worm farm (vermiculture) which also contain the waste and prevent vermin getting in. The difference between using composting and worms is that the worms process the material more quickly by eating, however, they can be selective as to what they eat.



## Composting

Compost is a natural fertiliser and soil conditioner that can be made at home from organic wastes which are converted into a rich humus by soil micro organisms, insects and worms. Compost can be added to the soil in your garden to improve its nutrients and texture.

### How to make compost

Compost heaps should be about 1m square and upto 1m high. Purpose-designed bins can be bought or you can build your own bin from whatever materials you have available. It's important that the bins are bottomless and placed on bare ground, and that they have a lid or cover to keep heat in and reduce flies or vermin.

### What to put in:

A combination of kitchen scraps and garden waste can be composted, but the system works best if layers of "green" (nitrogen rich waste) are alternated with layers of "brown" (carbon rich waste). Compost heaps are a good way of processing a large amount of waste slowly.

✓ **Greens** - kitchen food scraps, fruit/veg peels, coffee grounds, teabags, grass and plant clippings, hair, fur, animal manure, blood and bone, seaweed, fish bones, chopped weeds (less noxious varieties-your compost heap will probably

not get hot enough to kill wandering jew, ginger etc so these should be avoided).

✓ **Browns** - dried leaves, untreated sawdust or wood shavings, hay, peat, vacuum cleaner dust, shredded paper and newspaper, egg shells, crushed sea shells, wood ash.

✗ **Keep out** - meat, grease, fat, dairy products, large bones.

Begin with a bottom layer of coarse twiggy plant material followed by alternate layers of "greens" and "browns" and a layer of soil.

### Care for your compost

Compost will form if the heap is left to breakdown, however, it can be speeded up and

the quality of compost improved by chopping/shredding the contents before adding them, watering the heap if it looks dry, by adding more "browns" if it looks too wet, and by turning the heap after it has heated up. Depending on the time of year, heating up may take several weeks.

The warmer the location the better, so it's worth finding a sunny spot in your garden, particularly somewhere that gets winter sun. If at first it doesn't heat up, add more "greens" such as manure or blood and bone. The contents can be turned within the bin or it may be easier to empty them into another heap or bin. After 2 or 3 turnings, when the compost looks like potting mix, it will be ready to use as a natural fertiliser for your garden, avoiding the use of garden chemicals.

