



SIMPLE WORM BIN

Almost any container can become a worm bin, whether opaque plastic, metal, or wood. Make sure it will not harm your worms [i.e., no wood preservatives, pesticides, etc.] Follow these steps to make your own simple worm bin.

1. MAKE [or purchase] A WORM BIN

The container should be shallow [8"–12" deep], yet large enough for the amount of kitchen trimmings [waste] you produce. If you produce one pound of waste per week, you will need a bin with a surface area of one square foot [12" x 12"] that is also 8-12" deep. Choose a shallow container because redworms tend to be surface feeders. Odors will be minimized in this aerobic environment. When looking for a place to keep the bin, consider the worms' needs as well as your own. Redworms tolerate a wide temperature range but they prefer temperatures between 55-77°F [they die if they freeze]. They breathe through their skin so they need moisture but they will drown in too much water. Redworms breathe air and produce carbon dioxide, just like we do, so it is important to allow air to circulate in and around the bin. Finally, locate the bin so it is convenient to use. However, since worms don't like loud noises or vibrations, avoid the top of the dryer, for example.

2. ADD BEDDING

Many materials make good worm bedding, including shredded newspaper [black ink only], shredded corrugated cardboard, peat moss, leaf mold [partially decomposed leaves] or a combination of these materials.

Bedding holds needed moisture, so before adding the material to the bin, wet it until it is as moist as a wrung-out sponge. It must be light and fluffy enough to allow air exchange. The bedding provides a medium in which the worms can work and their food can be buried. Worms actually consume the bedding as well as the food waste so when preparing the bedding, add a little bit of soil or fine sand [grit] to help the worms break down the food. Fill about half the bin with bedding.

3. ADD WORMS

Redworms [*Eisenia foetida*], also known as red wigglers or manure worms, are the best worms to use for vermicomposting. Begin with two pounds of worms for each pound of kitchen waste produced daily. Once established, the worms will process their own body weight of organic matter each day. The worm population increases and decreases according to how well they are fed. Remember these basics:

- Worms need adequate temperature [55-77°F], moisture [bedding as moist as a wrung-out sponge], and air.
- Worms like to live in the dark.
- To prevent freezing, keep an active worm bin in a heated garage, basement or kitchen during the winter.



EASY FIRST WORM BIN

Here is one way to build a worm bin. Use an opaque plastic tub with lid [24" x 19" by 9" deep]. Drill 9 air holes, ¼" diameter, in the bottom of the tub. Set a 24" x 19" piece of floating row cover [Remay] in the bin bottom. Put about 4" of moist bedding [see "Bedding"] on top of the Remay. Place the worms in the middle of the bedding. Add food [kitchen scraps] and cover with bedding. Cut 6-9 slits [X's] in a piece of black plastic the size of the bin; loosely cover the bedding with the plastic to retain moisture and keep the bin dark. Set the bin in the tub's lid. Place something [e.g. wood, corks] between the tub and lid for air circulation under the bin.

4. ADD FOOD WASTE

Food wastes that can be composted in a worm bin include, vegetable and fruit Scraps, crushed eggshells, coffee grounds [and paper filters], and tea bags.



Avoid fats, meat, bones, fish, & dairy products as they may produce an unacceptable odor and/or attract unwanted pests.

Cover all worm food with bedding to minimize odors. Loosely cover the bedding with a sheet of black plastic and cut 6-9 slits [X's] into the plastic. This will help retain moisture within the bin. Keep the bin dark and allow air circulation. If the bedding dries out, mist it with water. If the bedding becomes too moist, add some dry bedding.

Feed your worms regularly, put the food in a different area of the bin each time. This will keep the population from becoming too dense in any one area. It's helpful to keep a small container near the kitchen sink to collect scraps. Leaving the worm bin uncovered will prevent odors but may attract fruit flies. Be careful to not let the lid seal in place on the worm bin as this prevents vital air flow.

5. HARVEST YOUR COMPOST!

Harvesting the compost [worm castings] involves separating the worms from the castings. The castings are used as plant nutrients and the worms are given fresh food and bedding so they can get back to work making more castings.

There are several ways to harvest worm castings [compost] but the easiest way is:

- Remove the black plastic sheet
- Move all of the bin contents [castings, old bedding, food] to one side of the bin.
- Add fresh, moist bedding and food to the other side and cover with the plastic sheet. Since worms prefer the darkness, they will naturally migrate to the fresh material. This migration may take several weeks.
- Remove the castings. Since dry castings are difficult to use, remove the castings from the bin while they still have a crumbly texture [25-35% moisture].
- Use the castings as a top dressing for houseplants and seedlings, for general garden use, or for the preparation of compost tea.
- Leave the worms to produce more castings.

WORM COMPOST... *easy to make, easy to use.*



Vermicomposting [composting with worms] is an easy way to turn kitchen scraps into dark, nutrient-rich humus [**hyoo** - muss] that improves the soil of both houseplants and outdoor plants.

Worm compost is one of the best natural fertilizers available... in fact, vermicompost often contains higher nutrient levels than traditional garden compost found in home and garden stores.

Kitchen vegetable and fruit trimmings compost well in a worm bin and in your outdoor compost pile. If you add kitchen trimmings to your outdoor compost, bury them in the middle of the composting materials or they may create odors that attract rodents or other unwanted visitors. Simply burying kitchen waste in your yard may cause similar odor problems.

Both apartment dwellers and home owners can compost with worms.

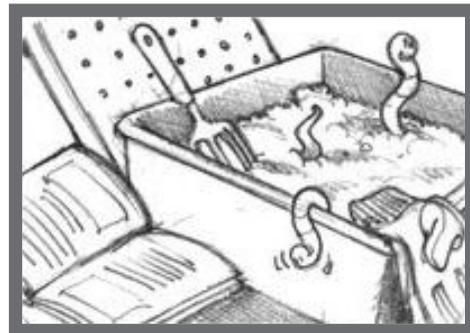
Apartment dwellers benefit from vermicomposting because it takes up very little space.

Home owners sometimes vermicompost indoors only during the colder winter months.

It's easy to set up your own worm composting system. To begin, you will need:

- A container (or bin)
- Bedding
- Water
- Worms
- Non-fatty kitchen scraps

Look inside for more details!



CONTACT THE RECYCLING HOT LINE AT 477-6800 FOR INFORMATION ON:

- Worm resources
- Plans to make your own WOOD worm bin

REFERENCES:

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George W. Dickerson, **Vermicomposting**, http://www.cahe.nmsu.edu/pubs_h/h-164.pdf

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VERMICOMPOSTING COMPOSTING W/WORMS



FUN & EASY TO DO!

Great project for little kids and "grown-up" kids too!

Recycle kitchen scraps into rich, organic fertilizer

INSIDE
Directions for building your own simple Worm Bin



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