

WHY VERMICOMPOST

A natural method for recycling your kitchen scraps. It can be done year-round, indoors and outdoors, in apartments, houses, offices, and schools. The finished castings provide a good soil conditioner for houseplants, lawns and gardens.

Removing worms from their natural environment and placing them in containers creates a human responsibility. They are living, breathing creatures with their own unique needs, so it is important to create and maintain a healthy environment for them to continue to do their work. If you supply the essential ingredients and care, your worms will thrive and make rich castings for you.

Essentials To Vermicompost

- Container (wood / plastic)
- Worms (750 - 2000) approximately 1 pound
- Bedding (shredded paper / leaves)
- Kitchen wastes
- 2 cups fine sand

How It Is Done

- Fill container with bedding and sand
- Sprinkle with water until moist
- Add worms
- Bury kitchen wastes in the bedding, alternate location at each feeding

What Occurs

- Over 1-3 months the worms and micro-organisms eat the organic materials and bedding producing rich castings

Worms Need

- Dark, cool spot
- Kept from direct sunlight, heavy rain and cold
- Below 4°C the vermicomposter should be moved inside

COMMON PROBLEMS

Odours: Odours may come from your bin when it is over-loaded with kitchen wastes. If this occurs, gently lift up the entire contents of the bin to introduce air. Stop adding kitchen wastes until the worms and micro-organisms have broken down what food is in the bin. Check the drainage holes to make sure they are not blocked; drill more holes if required. If the moisture level seems right, the bedding may be too acidic from citrus peels or other acidic foods. Adjust pH by adding a little lime and stop adding acidic wastes. Collect your kitchen wastes in a covered container to prevent introduction of fruit flies.

Fruit Flies: To discourage fruit flies, keep the kitchen wastes covered at all times and do not overload the bin. Keep a paper sheet, moist piece of cardboard or moist old carpet on the surface of the vermicomposter. If flies persist, move the bin to a new location where flies will not be bothersome.

REAPS Compost Demonstration Garden

Growing Knowledge Community Compost Garden Located on the plateau UNBC campus. The garden provides an opportunity to view a variety of composters at work, ask questions, locate resource materials or attend composting and vermicomposting classes.

For hours of operation or more information phone the Compost Hotline at 250-561-7327.



Location: Growing Knowledge Community Compost Garden Campus Ring Road (UNBC) Prince George

Mailing Address: PO Box 444,
Prince George, B.C. V2L 4S6

Phone: 250.561.7327
Fax: 250.561.7324

Website: reaps.org
Email: recycling@reaps.org

Guide to

VERMI- COMPOSTING





WORMS

Red Wigglers

Red Wigglers (*Eisenia fetida*) are the best because they thrive on organic materials. They can be purchased in Prince George. Suppliers can be found on the REAPS Waste Reduction Directory or find the worms in aged horse manure piles, leaf piles or obtain them from a friend.

For every 1 pound of kitchen wastes per day, you will need 2 pounds of worms (approximately 2000 worms). If you are unable to get this many worms or you do not produce this amount of kitchen wastes reduce accordingly.

Red Wigglers produce 2-3 cocoons per week for 6 months to a year once they reach sexual maturity in 3-4 weeks from hatching. Each cocoon will contain 1-14 babies, which will hatch in approximately 3 weeks. The cocoons appear white when first produced and gradually turn to a deep brown-red colour before hatching. They will only breed to the holding capacity of the bin, therefore they will not overpopulate.

Creating the optimum conditions in your vermicomposter you can successfully breed and produce castings. Three important facts are food, space and a moist, cool environment.

Worm Food

A variety of kitchen wastes ensures the worms are receiving all the required nutrients and provides richer castings. Bury the kitchen wastes by pulling aside the bedding, dumping in the wastes and covering the wastes with bedding. Alternate the burying spots in the bin to ensure that the bedding is digested as well.

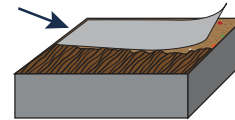
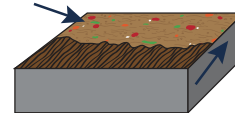
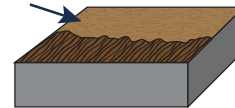
HARVESTING

After 1-3 months, little original bedding should be visible in the bin; it will appear brown and earthy.

Worms Do The Sorting

This is the easiest method of harvesting. Place the finished castings to one side of the bin, place the new bedding in the space created and put the wastes in the new bedding. Worms will gradually move over to the new area in search of food. Once this occurs, remove castings and use.

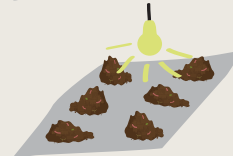
1. Pull castings and worms to one side of the box.
2. Add new bedding to empty side.
3. Bury kitchen waste in new bedding. Worms will move to new bedding in search of food.
4. Cover this side with paper.
5. Remove castings in 2-3 months and replace with new bedding.



Hand Sorting

Another method of harvesting. Separate by hand the worms from the castings; remember to remove the cocoons as well. This is time consuming, but fun.

1. Empty worms and castings onto a large plastic sheet
2. Make pyramid shaped piles and shine a bright light over sheet.



SUGGESTIONS

- Apple Peels
- Baked Beans
- Banana Peels
- Biscuits
- Cabbage
- Cake
- Carrot Peels
- Celery
- Cereal
- Cheese
- Coffee Grinds
- Corn Bread
- Corn Cobs
- Cream Cheese
- Cream of Wheat
- Cucumber
- Egg Shells
- Grapefruit Peels
- Lemon
- Lettuce
- Molasses
- Oatmeal
- Onion Peels
- Orange Peels
- Pancakes
- Pasta
- Pears
- Pineapple
- Pineapple Rind
- Pizza Crust
- Potatoes
- Potato Salad
- Stale Bread
- Tea Leaves
- Tomatoes
- Zucchini

BEDDING

Shredded newspaper and cardboard, fall leaves, chopped straw, sawdust, dried grass clippings, peat moss, compost and aged manure can all be used as a bedding.

Vary the bedding to provide more nutrients for worms and to create richer finished castings.

Two handfuls of sand or soil must be added to provide grit for worm's digestion which occurs in the gizzard.

Always keep the bedding moist "like a wrung out sponge". Lifting the bedding 3 times a week pro-vides air spaces, aids for freer movement of the worms and controls odour.

3. Worms go to bottom of the piles to avoid light. Scoop castings away from top and sides of pile.
5. Save the castings for garden and house plants

4. Place worms in a container.

6. Add worms to bin with new bedding and sand.

