

Kids Recipes for Composting

Shopping List

- Green yard waste: grass clippings and weeds.
- Brown yard waste: leaves, small brush and twigs.
- Organic food waste: leftover veggies from dinner
- Worms. Learn how to [compost with worms](#) .



Easy Kids Compost

Ingredients: green and brown yard waste, water as needed.

Directions

- In a heap, layer your yard waste as it accumulates. For faster composting, chip it up first.
- Water so compost is kept as moist as a wrung-out sponge.
- In a year to 18 months, the material at the bottom and center of the pile will be dark, crumbly compost. Sift, and use the uncomposted material to start a new batch.

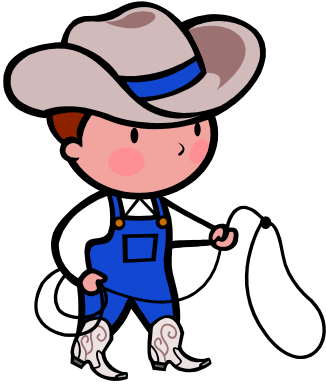


Do I Have To Eat My Vegetables Fast Compost

Ingredients: organic food waste, green and brown yard waste, water as needed.

Directions

- Mix one part green yard waste and organic food waste with two parts brown to form a pile (an average size is 4' x 4' x 4'). For fast composting, chop it up first with a hoe or lawn mower.
- Mix in one inch of soil.
- Keep the pile as moist as a wrung-out sponge.
- Turn the pile every week to let air in.
- Finished compost will take between 4 weeks and 1 year, depending on how often you turn it and how well you maintain the moisture of the pile.



So you want to be a Vermiculturist or a Worm Wrangler?

Raising worms can be an exciting activity and a great hobby. Do you have someone in your family that likes to go fishing or loves to garden? As a worm wrangler you can learn how raising worms can add fun to other family hobbies, as a vermicompost gardener you can smile and show off your prized flowers and favorite vegetables and just wait and see how excited the fisherman in your family gets when you show them how much your worms have grown.

Your First Worm Bin!

The easiest-to-build first worm bin is just a plastic or wooden box with air holes. It may be simple to you, but it's a dream home to redworms!

Are you using the Right Worms?

Earthworms live in many different environments. Some live under the ground, like nightcrawlers. Others live above the soil, wherever there are piles of leaves or animal manure or dead plants. (You'll see them in our compost piles, too). Redworms won't live down in the soil. "So, don't take burrowing worms from your garden soil — they won't live in a worm composting bin."

Redworms Are People, Too!

You need air, water food and warmth to live. Redworms need the same things! They're a lot like people, really. Their needs, one-by-one, are:

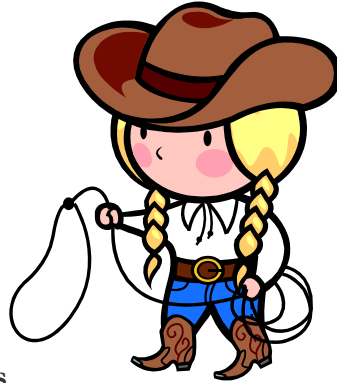
Air

You breathe through your mouth. Then air and oxygen go into to your lungs, where a moist layer of skin absorbs oxygen. Worms have lungs, too — their skin! The whole surface of their skin absorbs oxygen, it passes through, and enters their blood. Carbon dioxide passes through, toward the outside.

Moisture

Worms wiggle and move by squeezing muscles around their bodies. Their bodies are filled with water (even more than ours)! They also need water to breathe through their skin.

(Did you know that worms can live in the bottom of a fish tank, if the fish don't get to them? There's plenty of air in the water in a fish tank, for the worms and the fish to breathe.)



Bedding's Not Just For People Beds

Redworms don't sleep in beds, but we set up a worm bin with lots of bedding in it for redworms to live in. Oh — they'll eat it, too!

Good Beddings:

- white paper
- newspaper (not glossy pages)
- cardboard
- brown leaves
- straw
- coconut husk fiber (coir)

Shred all paper and cardboard into small pieces before using. Mixing types of beddings is great. Make it damp, but not dripping wet, then add it to the bin. (Make it feel like a wrung-out sponge).

Feeding Your New Pets - Redworms will eat one-quarter to one-half of their weight per day. Do you eat that much? (I hope not! Feed your worms lightly for the first few weeks, as they get used to their new home.

Hint: always mix in some good compost or worm compost in a new bin, if you have it — the bin starts decomposing food waste faster that way.

Feed your new pets every day, or just a couple of times a week.

Feed worms:

- bread
- spaghetti
- funny-smelling leftovers
- fruit peels and cores
- vegetables
- eggshells
- lots of other foods

Don't feed

- meat
- dairy
- fatty foods
- citrus fruit

Chop up your kitchen food scraps for them. It gets eaten faster that way. Question: How many teeth do redworms have? Answer: None, they have to wait for bacteria and fungi to start eating the food first, and soften it for them.)

Bury Dinner in Their Bed!

When you feed your worms, bury the food in somewhere in the bedding, at least 3" deep. Don't worry, the worms will find it. Change feeding spots each time you feed. After a month or so, it's good to add more bedding, once a week or so.

Best Temperature & OK Temperatures

A worm bin will eat up the most food waste when the bedding is 70°F-80°F. All the bacteria are happy, and worms are most comfortable. Down at 45°F, the bin slows down, and at 30° worms can freeze.

Who Else Lives in the Worm Bin?

There's lots of other critters living in a worm bin. Here's the short list:

- bacteria
- fungi
- protozoa
- microarthropods
- Springtails
- Sow bugs
- Fruit flies
- Pseudoscorpions
- mites

A Funny Critter

The springtail has a tiny spring (called a "fercula") at the back of its abdomen, which allows it to jump quickly.

All Critters are Good, & Only Live in the Bin!

All these critters work hard at decomposing what you feed your worm bin (the ecosystem). Conditions are good for them there — you kept it warm and their only interest is in decaying

organic matter — they won't bother your house or garden plants.

Keeping Worms the Easy Way

Now and then it helps to check for and remove excess moisture that may collect in the bottom of your bin (particularly common in plastic bins). Standing liquid may promote the growth of anaerobes, whose by-products stink and are not good for plants. Wooden bins “breathe” and will tend to experience more drying than plastic bins, particularly in dryer climates, and so may require occasional rewetting.

“Stink” in a worm bin is a sign that too little oxygen is reaching part or all of the worm bin system. If you find an area that stinks, where food waste and/or bedding are very wet or compacted, you'll want to mix in more dry bedding and reduce your feeding in the future.

Harvesting the Gold

After operating your bin for three to five months (or even more if you prefer dark, very finished-looking vermicompost), it's time to harvest your bin. Dump out the contents onto a plastic-covered table in daylight or under a bright lamp and form many small piles of material. The worms will dive down, and in a few minutes you can remove a small amount of vermicompost free of worms. Ten minutes later, the worms in each pile will have gone down again and you can continue to remove the vermicompost. When you're finished, re-bed the worms and you're done!

The vermicompost you harvest can be used directly in your garden or on your houseplants. It's an excellent fertilizer that you can use sparingly. Because it comes from an earthworm, however, it will not burn plants if you use more. Mixing it with coir (coconut husk fiber), topsoil, compost and vermiculite or perlite in equal amounts creates a good potting soil.

Recycle for the Birds



Ducklings prefer to eat from pie tin feeders.



If you think about some of the stuff we throw away each day, you'll realize that many containers can be used several times by finding creative ways to reuse them. In this recycling reuse activity, you'll see how to turn food containers into a nice feeder for the birds. When reusing any food containers, be sure that you completely clean the inside before beginning your craft project. Remember to punch small drain holes in the bottom of the containers to let rain water out.

Do some research to find out where to locate each different type of feeder. Each one will attract different types and sizes of birds. You'll also want to find out what types of bird feed to put in each container. Birds have very different diets and will be picky about what they will eat. It is also important to keep the feeders clean to avoid making the birds sick.



Use household containers that are completely clean:

- milk jugs
- milk cartons
- coffee cans
- pie tins
- mustard jar lid (for tracing circles)
- sticks or dowels (for perches)



Tools You'll Need (You may need an adult to help you with some of these tools.)

knife

hammer

nails

wire cutters

pencils

ruler

light wire

coat hangers



Milk Jug Feeder Instructions

You'll need a gallon or half-gallon plastic jug, small wooden doweling rods, and string to hang the feeder. Cut two or three holes in the middle of the jug, as shown in the picture. The holes should be between two and four inches wide depending on the type of birds you want to attract. Then make smaller holes below the feeding holes for the doweling rod. Take each rod and insert it into the smaller hole for a perch. Fill the feeder with seed and hang it in a nearby tree.



Birds also enjoy brightly colored nesting materials.

Provide string, old yarn, baler twine, or cloth strips for nesting materials. Wind these through an old sock and hang the sock on a coat hanger. You can also fill the bottom of the milk jug feeder with the nesting materials.

Enjoy your new bird feeder!

