

## WORM BIN Composting (Indoors)

If you don't have a backyard, live in the mountains, or don't have space for a big bin, you can still compost your kitchen scraps with red wiggler worms.

It's so easy even a worm can do it!

## INGREDIENTS for Worm Bin Composting

- ✓ **Bin** — Plastic or wooden bin with a tight-fitting lid and air holes
- ✓ **Bedding** — Shredded newspaper for bedding
- ✓ **Worms** — Red wiggler worms and a handful of their own bedding
- ✓ **Food** — Fruit and vegetable scraps for worm food (no meat, bones, dairy, or fatty foods)

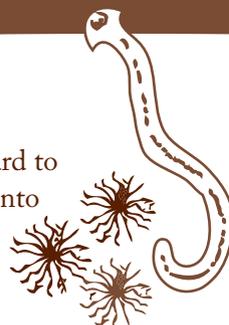
Feeding red wiggler worms in a bin is a good way to make high-quality compost from food scraps.

To find out how to set up your own worm compost bin or where to buy worms, call 720-564-2220 to request a copy of the Worm Bin Composting brochure, or visit [www.bouldercountyrecycles.net](http://www.bouldercountyrecycles.net)

**NOTE:** *it is not necessary to add worms to your backyard composting pile. Composting with worms is something that can be done indoors or in small living spaces instead of, or in addition to, having a backyard compost pile.*

## Compost CRITTERS

Compost critters are the organisms that work hard to break down organic matter into compost. Compost critters are worms, bugs, fungi, bacteria, and other microorganisms.



Compost critters are MUCH smaller than shown

## INGREDIENTS for a Compost Pile

- ✓ **Food** — Fruit and vegetable scraps and anything growing in your yard is potential food for compost critters.
- ✓ **Air** — Since all life needs a certain amount of air to survive, stir or turn your pile with a pitchfork regularly to keep air in the pile for compost critters and to keep your pile odor-free.
- ✓ **Temperature** — The hotter the pile, the faster the composting. Your pile will heat up to approximately 90° – 140°F and cool down as it is composting.
- ✓ **Water** — The compost critters work best if the pile is damp as a wrung-out sponge. In our dry climate, it means watering the pile with a hose and turning it to even out the moisture.
- ✓ **Particle Size** — Chop materials into one to two inch pieces for faster composting, so compost critters have more surface area to attack.
- ✓ **Volume** — Build your pile to the ideal size of 3' x 3' x 3' (27 cu. ft.) Smaller piles will have trouble holding the heat, and piles larger than 5' x 5' x 5' (125 cu. ft.) can collapse on themselves, cutting off the air to the compost critters at the center. These proportions are of importance only if your goal is fast composting. Slower composting requires no exact proportions.

## Composting RESOURCES

If you would like to know more about composting, there are resources to help you!

### Boulder County

RESOURCE CONSERVATION DIVISION

BACKYARD COMPOST WORKSHOPS

General composting information  
[www.bouldercountyrecycles.org](http://www.bouldercountyrecycles.org)  
720-564-2220

COOPERATIVE EXTENSION

Colorado State University – Boulder County

Fact sheets and general composting information  
[www.coopext.colostate.edu/boulder](http://www.coopext.colostate.edu/boulder)  
303-678-6238

Boulder County  
Resource Conservation Division  
[www.bouldercountyrecycles.org](http://www.bouldercountyrecycles.org)



1901 63rd Street,  
Boulder, CO 80301  
720-564-2220

Get the dirt on **composting.**



composting...

nature's way to recycle can be practiced in your **backyard, at work or school,** and **even indoors** if you live in an apartment! All you need to get started is a little bit of space, a bin, and a basic understanding of the composting process.

**...it's that simple!**

## COMPOSTING

Nature's ultimate recycling system where living or once-living materials break down into a rich soil-amendment called compost. Compost is a dark, crumbly, and an earthy-smelling form of decomposed organic matter.

✓ **Natural Process** — Composting, collecting organic materials and combining them to encourage their breakdown, makes use of the natural process of decomposition to create a high-quality soil amendment.

✓ **Saves Money** — Composting can be easier and cheaper than bagging organic wastes and having them removed. Your water bills may drop too, since a soil that's well-amended with compost holds moisture better and reduces run-off.

✓ **Reduces Waste** — Almost 20 percent of the waste stream in Boulder County is plant trimmings and fruit and vegetable scraps that could be recycled as home compost. Recycling organic resources extends the life of our landfills.

### ✓ Valuable Soil Amendment

Composting results in a very valuable product. It is more cost-effective to keep materials on site and cycle them back into the yard as a rich soil amendment — your own homemade compost is one that money can't buy.

✓ **Healthy Garden** — Your garden will benefit as well. As the health of your soil improves, so will the health of your plants.



Cinder block compost bin

### CHOOSE a bin and a location for your compost pile

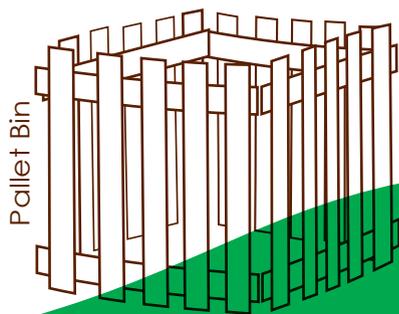
There are many different systems and bins that will work for composting. You just need to find the one that works best for you.

Options include: an open pile, a bin that you build yourself, or a bin that you buy. Whatever you choose, put your compost pile (if possible):



SoilMaker® Bin

- 1) In a shady area to help keep it from drying out
- 2) Directly on the soil or grass, so compost critters have access to your pile
- 3) Near the kitchen and garden hose, so you have easy access for adding food waste, watering and turning



*It is something of a miracle to see broccoli stems, orange peels, and fallen leaves change into dark, sweet-smelling earth.*

## BUILD your compost pile

A successful compost pile provides food for the compost critters (worms, bugs, fungi, bacteria, and other microorganisms) to break down. This food must be a balance of "green" (often wet) and "brown" (often dry materials).

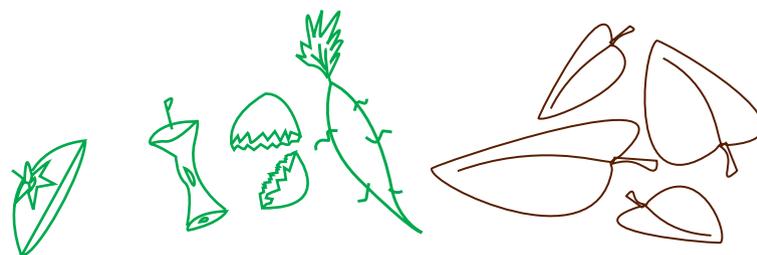
**Start** your pile by adding a 4-6" layer of greens, then add a 4-6" layer of browns. Add water and mix. Continue to alternate layers of green and brown materials, followed by watering and mixing the pile. Keep the pile moist as a wrung out sponge.

### GREENS (NITROGEN-RICH)    BROWNS (CARBON-RICH)    Do Not Include

- Fresh grass clippings
- Garden trimmings
- Fruit and vegetable scraps
- Eggshells
- Coffee grounds & filters
- Tea bags
- Manure (plant eaters only)

- Dry leaves
- Dried grass clippings
- Hay or straw
- Sawdust
- Shredded paper
- Finely chopped wood chips & bark
- Old potting soil

- Meat, fish, poultry & bones
- Dairy products, oils, grease & fat
- Weeds with seeds
- Cat and dog waste
- Charcoal or Duraflame® ashes
- Treated wood products
- Cat litter



**If in doubt, leave it out!**

What if...	Possible Cause	Suggested Remedy
<b>Pile not composting</b>	Too dry	Add water until slightly damp and turn
	Too much brown matter	Add fresh green matter (see chart above) and turn pile
<b>Pile smells rotten and/or attracts flies</b>	Too wet and/or too many food scraps or lawn clippings	Turn and add brown material (see chart above), particle size of 1-2 inches will keep pile from matting down
	Not enough air	Turn it
<b>Animals in pile</b>	Not maintaining or turning pile	Bury foodwastes and keep pile maintained and turned
<b>The compost is damp and warm in the middle, but nowhere else</b>	Pile too small	Collect more material and mix the old ingredients into the new pile
<b>The center of the pile is dry</b>	Not enough water	Moisten materials while turning the pile
<b>Nothing is happening</b>	Pile won't heat up	May need moisture and more greens such as coffee grounds to kick-start the process again

## USE your compost

Compost is ready when it is dark brown and crumbly, and when ingredients are not recognizable. Compost provides a long-term source of many nutrients not typically found in Colorado's soils and helps your soil hold water longer. You can use compost in two stages:

### 1) Finished

- use as a soil amendment in gardens (anytime)
- use as an ingredient for potting soil
- place around plants, trees, or on lawns as a mulch or top-dressing

### 2) Partially finished

(when all particles are not completely broken down)

- place around plants, trees, or on lawns as a mulch or top-dressing
- spread compost in your garden in the fall so it will enrich the soil over the winter to help your spring planting

