

RESOURCES

University of California Master Gardeners of Amador and El Dorado Counties offer practical composting workshops. Check our website at https://ucanr.edu/sites/MG_of_CS/Master_Gardeners for details about upcoming classes.

COMPOSTING RESOURCES



FOR COMPOST QUESTIONS:

Contact UC Master Gardeners at
Amador

Email: mgamador@ucanr.edu (209) 223-6838

El Dorado

Email: mgeldorado@ucanr.edu (530) 621-5512

UC Master Gardener Program

COMPOST EDUCATION



WORM COMPOSTING

and Other Methods for Recycling
Fruit and Vegetable Trimmings



UNIVERSITY OF CALIFORNIA
Agriculture and Natural Resources

UC Master Gardener Program

WHY COMPOST?

Composting is nature's way of recycling. It is a satisfying way to turn your waste into a resource and build soil!



COMPOSTING:

- ✓ **Saves you money** by lowering garbage bills and replacing store-bought soil conditioners.
- ✓ **Helps garden and house plants** by improving the fertility and health of your soil.
- ✓ **Saves water** by helping the soil hold moisture and reducing water runoff.
- ✓ **Benefits the environment** by recycling valuable organic resources and extending the life of our landfill.

COMPOST DO'S AND DON'TS

DO COMPOST

Chopped woody materials
Pine needles
Fallen leaves
Tea bags, coffee grounds
Vegetable and fruit trimmings

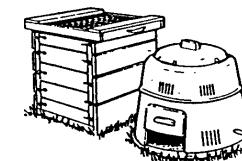
DO NOT COMPOST

Meat, bones or fish
Diseased plants
Grease
Dairy products
Citrus

BASIC COMPOSTING

Some Time and effort to set up and maintain 3'x3' or more yard space needed

Makes small to large amounts of finished compost



TO ADD FRUIT AND VEGETABLE TRIMMINGS to

basic compost bins, first be sure your bin is rodent-resistant — it needs a floor, a lid, and no holes bigger than ¼-inch. Ideally, the whole bin is enclosed in ¼-inch wire. Second, always bury food into the compost pile (*exposed food can attract pests*). No more than one-third of your pile should be fruit and vegetable trimmings. For more detailed instructions, see composting resources on our website.

UNDERGROUND COMPOSTING

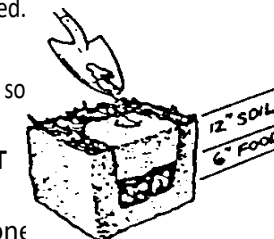
Some time and effort are required.

You'll need some yard space

No harvesting necessary - enriches soil directly

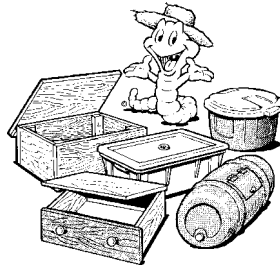
SIMPLY BURY FRUIT AND VEGETABLE TRIMMINGS at least one foot under the soil. This means a six-inch layer of compostables requires an 18-inch deep hole.

Dig your hole in a different place each time. One to three months later you can plant or bury more compost.



GETTING STARTED

1 Choose a Bin... Buy a bin, or build one out of wood, plastic, an old dresser drawer, shipping crate, or barrel.



What Kind of Bin?

Your bin needs to be 10 to 16 inches deep, have a snug-fitting lid, and holes in the bottom or sides for ventilation. To keep rodents out, the holes need to be ¼-inch or smaller. The rule of thumb for bin size is two square feet of surface area per person. An average two-person house would need a bin about 2'x2' = 4 square feet, or two bins that are 1'x2' = 2 square feet each. For worm-bin ideas and building instructions, see our website.

2 Pick a Place... Locate your bin where it will not freeze or overheat — in a pantry, kitchen corner, laundry room, garage, basement, patio, deck, or in your garden.

3 Make a Worm Bed... Worms like to live under lots of moist paper or leaves. This helps keep them cool and moist, gives them fiber to eat, and prevents fruit flies from getting to the food. To make your worm bed, tear black and white newspapers into one-inch strips, scrunch them up, then moisten them so they are as damp as a



wrung-out sponge. Fill your bin three-quarters full with this moist *bedding*. Shredded, corrugated cardboard, leaves, compost, sawdust and straw can also be added in as bedding. Sprinkle bedding with a few handfuls of soil. Do NOT use glossy paper or magazines.

4 Adopt Some

Worms... Compost worms are often called *red worms* or *red wigglers*. They are different from earthworms and nightcrawlers who live underground. You can find red worms in an old compost pile, get them from a friend's worm bin, or buy them from a source listed in a separate handout, **Worm Suppliers in Northern California**.



5 Feed Worms Their First Meal

...Start your worms off with about a quart of fruit and vegetable trimmings (see the **Do's and Don'ts** section). Then leave them alone for a couple of weeks while they get used to their new home.



MAINTAINING YOUR WORM BIN

Feed Your Worms about a quart (*one pound*) of food scraps per square foot of surface area in your bin per week. To avoid fruit flies and odors, always bury food under the bedding. Don't dump and run!

Add Fresh Bedding every one to three months. Always keep a four to six-inch layer of fresh bedding over the worms and food in your bins.

Keep Bedding as Moist as a wrung-out sponge. In a plastic bin, add dry bedding to absorb excess moisture. Wooden bins may require adding water occasionally.

HARVESTING AND USING WORM COMPOST

Harvest worm compost at least once each year to keep your worms healthy. You can start harvesting two to three months after you set up your bin. Simply reach in and scoop out the brown crumbly compost, worms and all. You can also move the contents of your bin to one side, place fresh bedding and a handful of soil in the empty space and bury food there for a month or two. Harvest the other side after the worms have migrated to the new food and bedding.

Using Worm Compost

Help your plants thrive by adding nutrients and humus to the soil. Sprinkle a ¼ to 1-inch layer at the base of indoor or outdoor plants, or blend no more than 20% worm compost into potting mix or garden soil.

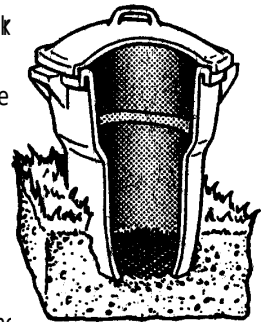


WORM-BIN TROUBLESHOOTING		
Problems	Causes	Solutions
Worms are dying	Food and bedding eaten	Harvest compost, add fresh bedding and food
	Too dry	Add water until slightly damp
	Extreme temperatures	Move bin so temp is between 40 to 80°F
Bin attracts flies and/or smells bad	Food exposed/overfeeding	Add 4 to 6 inch layer of bedding and stop feeding for 2 to 3 weeks
	Non-compostables present	Remove meat, pet feces, etc.
Sowbugs, beetles in bin	These are GOOD for your worm compost!!	

- Low maintenance, some set-up time required Prone to
- odor and insect problems
- 3'x3' yard space needed; two bins best Produces
- small amounts of compost infrequently

GETTING STARTED

You can buy a closed-air bin or make one. Find a spot with good drainage, dig a hole and bury the bottom 12 to 18 inches of the bin. Be sure to pack the soil firmly around the edges.



FEEDING

Feed your closed-air composter no more than once or twice per week. Always close the lid firmly after feeding. Water at least once a month so the compost is always wet. Don't add dry leaves or woody prunings. If it fills up too fast, let it sit for a few weeks, then feed it less. The compost reduces in volume with time.

HARVESTING AND USING

When your bin gets full (*after six to 10 months*), let it sit for six to 10 more months before collecting the sweet-smelling finished compost. While you wait, set up a second bin, or use another composting method during that time. Mix a one to four inch layer of finished compost into garden soil before planting, or spread it as a mulch around shrubs and trees.

PROBLEMS?

If your closed-air system smells bad or has flies and/or insect larvae, add a four to six inch layer of dry soil and stop feeding the bin for four to six weeks.