



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 1/4". Ideally, the whole bin is enclosed in 1/4" wire mesh (see the Composting Bins brochure for sources and designs). Second, always bury food into the compost pile (exposed food can attract pests). No more than 1/3 of your pile should be fruit and vegetable trimmings. For more detailed instructions, see the "Mixed" compost recipe in the Basic Composting brochure.

Underground Composting

- Some time and effort
- Requires some yard space
- No harvesting necessary-enriches soil directly

Simply Bury Fruit and Vegetable Trimmings at least one foot under the soil surface as often as you like. This means a 6" layer of compostables requires an 18" -deep hole. Dig your hole in a different place each time. You can plant shallow-rooted plants (like lettuce) immediately. One to three months later you can plant deeper-rooted plants (like most shrubs and trees), or bury more compostables in the same place.

Remember...

Composting fruit and vegetable trimmings requires special care. To avoid rodents, flies and bad odor, just follow the simple guidelines in this brochure. Also, the Health Department requires a rodent-resistant system. Use a container with a lid, a floor, and no holes bigger than 1/4 inch, or bury food scraps at least one foot underground.



Resources

More Composting Brochures

Basic Composting

Compost Education Center

Stop by the center at Garden for the Environment at 7th Ave. and Lawton! It features compost bins and how-to signs. Open all daylight hours.

Free Workshops

Sign up for our urban composting workshops! Call **Garden for the Environment** for a current schedule.

Books

Rodale Book of Composting, 1992. G. Gershuny, Saint Martin's Press, New York, NY, 278pp.

Worms Eat My Garbage, 1982. Mary Appelhof, Flower Press, Kalamazoo, MI 100pp.

Worm Sources

Cole Hardware in San Francisco, (415) 753-2653

Sonoma Valley Worm Farm, (707) 996-8561

The Rotline (415) 731-5627

The Rotline answers composting questions.



Garden for the Environment

Office: 451 Hayes Street, 2nd Floor, SF Ca 94102

(415) 731-5627

Garden: 7th Avenue @ Lawton Street, SF Ca 94122



SF Environment

San Francisco Department of the Environment

11 Grove St.

San Francisco, CA 94121

(415) 355-3700

Worm COMPOSTING

And other methods for recycling fruit and vegetable trimming

Recycle your Food Scraps Indoors or out. Its fun it's smart.

It's recycling.



Why compost?

Composting is nature's way of recycling. It is a satisfying way to turn your fruit, vegetable and yard trimmings into a dark, crumbly, sweet-smelling soil conditioner.

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 organics resources and extending the life of our landfill.

Compost Do's and Don'ts

Do compost

- All fruit and vegetable trimmings
- Coffee grounds and filters
- Tea bags
- Citrus rinds
- Rinsed-out, crushed eggshells
- Used paper towels
- Soft green plant trimmings

Don't compost

- Meat, bones and fish
- Dairy products and grease
- Grains, beans and breads
- Dog, cat and bird feces
- Sawdust from plywood or treated wood
- Woody pruning (In closed-air system, worm bins, or underground)



SF Environment

Our Home, Our City, Our Planet



Worm Composting

- Most fun! More time and effort
- Very compact –indoors or out
- Produces small amounts of excellent fertilizer

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" –16" deep, have a snug fitting lid, and holes in the bottom or sides for ventilation. To keep rodents out, the holes need to be 1/4" 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' x 2' = 2 square feet each.

2. Pick a Place Locate your bin where it will not freeze or overheat—in a pantry, kitchen corner, laundry room, garbage, 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 newspaper into one-inch strips, fluff them up, and then moisten them so they are as damp as a wrung-out sponge. Fill your bin 3/4 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 who live underground. You can find compost worms in an old compost pile, get them from a friend's worm bin, or buy them from a source listed on the back of this brochure. Start with one half to one pound, or two nice big handfuls.

5. Feed Worms Their First Meal Start your worms off with about a quart of fruit and vegetable trimmings (see "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 you bin per week. To avoid fruit flies and odors, always bury food under bedding. Don't dump and run!

Add Fresh Bedding every 1-3 months. Always keep a 4" to 6" layer of fresh bedding over the worms and food in your bin.

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.

Worm-Bin Troubleshooting

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



Harvesting & Using Worm Compost

Harvest worm compost at least once each year to keep your worms healthy. You can start harvesting 2-3 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 will help you plants thrive by adding nutrients and humus to the soil. Sprinkle a 1/4" to 1" layer at the base of indoor or outdoor plants, or blend no more than 20% worm compost into potting mix or garden soil.

Need More Help? Call the hotline: (415) 731 5627



Closed Air Composting

- 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 12-18" 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 & Using

When your bin gets full (after 6-10 months), let it sit for 6-10 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 1" to 4" 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 4" to 6" layer of dry soil and stop feeding the bin for 4-6 weeks.