

Composting Food Scraps

Vegetable trimmings and other food scraps from the kitchen can be composted at home

to make a rich soil amendment. However, food scraps must only be composted in special systems that help prevent bad odors and keep out disease carrying pests. Vegetables and grains—no meat, dairy, or other animal products—can be safely composted only using these three methods:

- 🌿 **Burying food scraps in the garden is a simple system requiring no special tools.**
- 🌿 **Food "digesters" are a convenient way to keep pests out of buried food scraps.**
- 🌿 **Worm bins are a fascinating way to compost food scraps—and produce fishing bait!**



What Food Scraps Can Be Composted at Home?

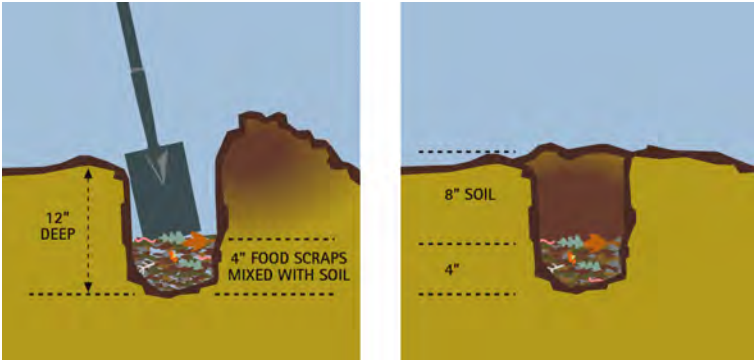
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| <p>Compost in worm bins, bury in garden or food digester.</p> | <p>Fruit and vegetable trimmings, bread and grains, coffee grounds and filters, tea bags, and soiled paper.</p> |
| <p>Do Not Compost or bury.</p> | <p>Meat, fish, poultry, or dairy products—put into curbside green yard debris cart. Pet wastes—bag and put into curbside gray garbage cart.</p> |

Food Burial—Easy as 1-2-3!

Burying food wastes in the garden is the easiest way to compost. Soil absorbs bad odors and usually keeps flies and other pests away. Just follow these simple steps:

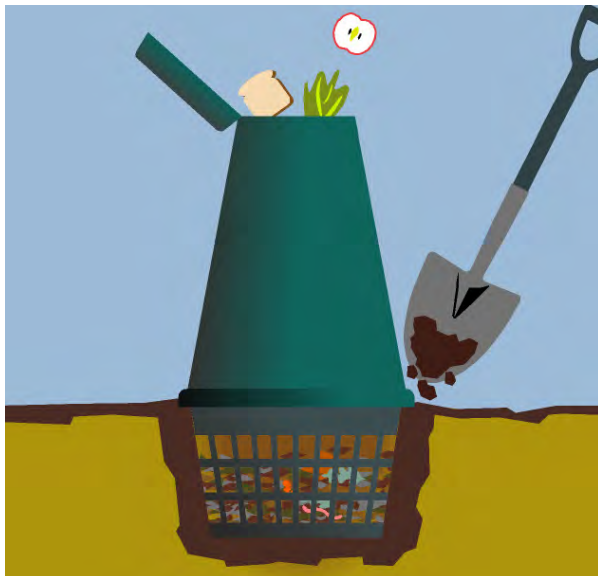
- 1 Dig a 10-12" deep hole in a convenient spot.** Find an empty spot in the vegetable or flower garden or between trees and shrubs (a few feet from any trunks to protect major roots).





2 **Mix a 2-3 inch layer of food scraps into the bottom.** Use shovel to chop and mix food scraps into soil, to speed decomposition and deter pests.

3 **Cover with 8 inches of soil.** In 3 to 6 months, the food scraps should decompose enough that you can replant on top of the hole. If rodents, dogs, or other pests dig up buried food, a digester or worm bin may be needed.



Food Digesters— Pest Resistant Food Burial

Food digesters (*illustrated, above*) are plastic or metal baskets with secure lids, which are buried in the soil to allow burial of food scraps without digging a new hole each time. The basket and lid keep pests out. Sprinkling sawdust or shredded newspaper on top of each addition of scraps helps control flies and odors.

Digesters can be purchased through garden supply catalogs or made from a garbage can with holes punched in the bottom. It can take 6 months to 2 years to fill a digester and a few more months for the compost to mature. Using two digesters allows you to feed one, while material in the other finishes composting. Mixing the curing compost occasionally and adding peat moss or sawdust makes the finished compost drier and easier to harvest for use in the garden.

Worm Bin Composting

Worms are a fascinating way to transform food scraps into high-quality compost and grow your own fishing bait. Worms can also be shared with neighbors who are starting worm bins. Follow these easy steps to start your own worm bin. Check out Mary Appelhof's book "Worms Eat My Garbage" for more detailed information.





Worms thrive in the cool temperatures of a basement or garage, though most people choose to keep bins outside. Cold winter temperatures and summer drying slow decomposition. Surrounding a worm bin with straw bales moderates drying heat and cold. A low wattage light bulb placed inside the bin helps keep worms warm and active in winter.

1 **Get a Bin.** Use a sturdy wood, metal, or plastic box with a tight-fitting lid to keep moisture in and pests out. Drill several 1/4-inch holes in the bottom for drainage. A box about 1 foot deep is best, since worms must live near the surface to breathe. Refer to the *Resources* section of this guide for on-line sources.

Worm bins should have one square foot of top surface for each pound of food added per week. A 2 ft. by 4 ft. bin can process 8 pounds a week—usually large enough for a family of 2-3 people. Before buying or building a worm bin, weigh your food scraps for a week to figure out how large a bin you need.

2 **Fill the bin with "bedding."** Food scraps must be buried in "bedding" of moist autumn leaves, shredded cardboard or newspaper, straw, or clean sawdust (no plywood, chip board, or painted wood). The bedding helps keep flies away from food, prevents odors, and provides a balanced diet for bacteria that help worms digest food.

Worm Bin Troubleshooting

| Symptoms | Cause | Solution |
|--|---|--|
| Smells like rotten eggs or garbage. | Too wet or too much food. | Mix in dry leaves, shredded newspaper, or sawdust. Don't add food for a while. |
|  Bedding is dry or covered with white mold; few worms. | Meat, fish, dairy, or pet waste in bin. | Keep animal products out of bin. |
| Undecomposed food scraps accumulating. | Too dry. | Mix and moisten bedding, cover with plastic or cardboard. Move bin into shade. |
| Undecomposed food scraps accumulating. | Too much food. | Limit food scraps. Add more worms. Build another bin. |
| Undecomposed food scraps accumulating. | Bin too cold or too hot. | Move bin to shade in summer, heated basement or garage in winter. Insulate bin or use light bulb to warm in winter. |
| Maggots crawling in bin.  | Meat, dairy, or other animal products.  | Keep animal products out of bin. Cover bedding with cardboard or plastic. |
| Flies swarm out when bin is opened. | Exposed food scraps, not enough bedding. | Bury food scraps in bedding. Cover bedding with moist cardboard or plastic. |
| Worms crawling up sides of bin. | Too much food, bedding too wet, something toxic in box. | Limit food scraps. Build another bin. Add dry bedding. Harvest compost and re-bed bin.  |

3 Add worms. Start with about a pound (two or three hundred) of red worms—also known as "red wigglers" or "manure worms." "Earthworms" or "night crawlers" dug out of the garden will not work. Red worms can be purchased, or dug from a friend's bin or a compost pile. Refer to the *Resources* section at the end of this guide for link to worm sources.

4 Bury food scraps. Use a hand trowel or garden fork to make a trench in the bedding large enough so food scraps can be spread 1 to 2 inches thick and then covered with a few inches of bedding. Rotate burial places around the bin to prevent overloading of one spot. Place a sheet of plastic or moistened newspaper or cardboard on top of the bedding to keep moisture in and flies out.





5 Harvest Compost and Worms.

Worm compost is ready to use when most of the bedding looks like dark rich soil. To harvest compost, push it to one side of the bin (it shrinks as it decomposes) and fill the empty side with fresh bedding. Bury food scraps only in the new bedding. Worms will finish composting any food scraps left in the old bedding and migrate to the fresh food. Then harvest finished compost and add more fresh bedding to fill the bin.

It is simple to pick out a few worms for fishing. To harvest enough worms to start a new worm bin, shovel a few gallons of compost into a pile in bright light. Worms will move into the pile to avoid light. After 15 minutes, scrape away the outer layer of compost until many worms are visible. Let the compost sit for another 15 minutes, and repeat until worms are concentrated in a small pile.



STACKABLE WORM BINS

Some worm composting systems use stacking trays with holes in their bottoms that take advantage of worms' habit of feeding on the surface and then migrating out of finished compost. Trays of fresh bedding are periodically added to the top of the stack. When worms move up into fresh materials, bottom trays are removed to harvest. Refer to the *Resources* section for on-line information and sources.

Photo courtesy Nature's Footprint, Inc.

RESOURCES

Books

These books are available at local libraries, bookstores and some nurseries.

- *Worms Eat My Garbage*, by Mary Appelhof
- *The Rodale Book of Composting*, edited by Deborah Martin and Grace Gershuny

Bellevue's Natural Lawn and Garden website

www.bellevuewa.gov/naturalyardcare.htm

Bellevue's Natural Gardening Guides

Composting Food Scraps • *Composting Yard Trimmings*
• *Drip and Soak* • *Fertilizer* • *Garden Design* • *Lawn Alternatives* • *Lawns* • *Mulch* • *Pests, Weeds, and Diseases*
• *Plant Right* • *Seasonal Calendar* • *Soil* • *Watering*

For copies, visit Bellevue's Natural Lawn and Garden website (*above*) or call Bellevue Utilities at 425-452-6932.

King County's Solid Waste Division's Backyard Food Composting Website

<http://your.kingcounty.gov/solidwaste/garbage-recycling/backyard-composting.asp#scraps>

The Garden Hotline

www.gardenhotline.org or 206-633-0224

Grow Smart, Grow Safe

www.growsmartgrowsafe.org

King County Master Gardener Lake Hills Greenbelt Urban Demonstration Garden at 15500 SE 16th Street, Bellevue.

Natural Yard Care Neighborhoods

www.naturalyardcare.info

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