COMPOST FLOW CHART

Moisture & Aeration
All life on Earth needs a certain amount of water and air to sustain its center will be warmer than its Volume and hold the heat of microbial activity. A large compost pile will insulate itself.

Time & Temperature
The faster the composting, the hotter the pile. If you use materials with sections. If you just want to deal with your yard and see that the moisture and aeration are adequate, you will have a hot, fast compost pile wastes in an inexpensive, easy, non-polluting way, and can be used as a mulch or for paths, the woody chips will eventually decompose. Used as a mulch or for house plants and planter boxes and, when screened, incorporated into garden soils to add texture. By using compost you return organic matter to the soil plant growth by helping to break heavy clay soils into a usable form. Organic matter in the soil improves capacity to sandy soils, and by adding essential nutrients to any soil. Improving your soil is the first step in getting a healthy garden. With these principles in mind, everyone can make excellent use of their organic wastes.

Other Resources
- Materials for Home Composting (supplemental SCRSWS brochure on C/N Ratios), 2014
- Clean Green programs for food/scrap - contact your garbage hauler
- Worms Eat My Garbage by Mary Appelhof, Flowerfield Enterprises, LLC, 1997

Spokane County Master Composter/Recycler Program
2902 S. Geiger Blvd. Spokane, WA 99224
The Master Composter/Recycler Program is sponsored by the Spokane County Regional Solid Waste System. Master Composters/ Recyclers are volunteers who are working to promote the practice of home composting throughout Spokane County.

Recycling Hot Line 477-6800 spokenecountytool.org
Printed on recycled/recyclable paper with partial funding from a grant from WA State Department of Ecology.

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For More Information
For information on the Master Composter/Recycler Program, or for help with composting or recycling questions, call the Recycling Hot Line at the Spokane County Regional Solid Waste System, 477-6800 or go to www.spokanecountysolidwaste.org.

Our appreciation is extended to the Seattle Engineering Department Solid Waste Utility and the Seattle Tilth Association for allowing us to utilize this brochure information which was designed for their Community Composting Education Program.

**Composting Yard Wastes**

*Holding Units*

These simple containers for yard wastes are the least labor-intensive and least time-consuming way to compost.

Which wastes? Non-woody yard wastes are the most appropriate.

How? Place the holding unit where it is most convenient. As weeds without seeds, grass clippings, leaves and harvest remains from garden plants are collected, they can be dropped into the unit. Chopping or shredding wastes, alternating high-carbon and high-nitrogen materials, and keeping up good moisture and aeration will all speed the process.

Advantages & disadvantages For yard wastes this is the simplest method. The units can be portable, moving wherever needed in the garden. This method can take from 6 months to 2 years to compost organic materials, so you only need to be patient.

Variations Holding units can be made of circles of hardware cloth, old pallets, or wood and wire. Soil can also be composted with or without the holding unit, by turning sections of sod over, making sure that there is adequate moisture, and covering the sod with black plastic.

*Turning Units*

This series of three or more bins allows wastes to be turned on a regular schedule. Turning units are most appropriate for gardeners with a large volume of yard waste and the desire to make high-quality compost.

Which wastes? Non-woody yard wastes are appropriate. Kitchen wastes without meat, bones, dairy products or fatty foods can be added to the center of a pile if it is turned weekly and reaches high temperatures.

How? Alternating the layering of high-carbon and high-nitrogen materials to approximately a 30:1 ratio. These should be moistened to the damp sponge stage. The pile temperature should be checked regularly; when the heat decreases substantially, turn the pile into the next bin. Dampen the materials if they are not moist, and add more high-nitrogen material if heating is not occurring. Then make a new pile in the original bin. Repeat the process each time the pile is in the first bin. After two weeks in the third bin, the compost should be ready for garden use. See the Rodale Guide to Composting in your library for more information on hot composting.

Advantages & disadvantages This method produces a high-quality compost in a short time utilizing a substantial input of labor.

Variations The unit can be built of wood/plastic lumber, a combination of wood and wire, or concrete block. Another type of turning unit is a barrel composter, which tumbles the wastes for aeration.

**Composting Food Wastes**

*Mulching*

Yard wastes can be used for weed control and water retention.

Which wastes? Woody yard wastes, leaves, and grass clippings.

How? You can simply spread leaves or grass clippings beneath plantings. For woody materials up to 1” in diameter, rent or purchase a chipper/shredder. Recomendations for organic mulch are: Woody material (3’-4’ deep) Dry grass clippings (1’-2’ deep) Keep material away from plant stems.

Advantages & disadvantages All yard wastes will work first as a mulch and then, as decomposition proceeds, as a soil enrichment. A disadvantage of mulching with woody yard wastes is that you may have to buy or rent power equipment.

Variations Use chipped materials for informal garden paths.

*Soil Incorporation*

Burying your organic wastes is the simplest method of composting.

Which wastes? Garden and yard wastes only. Burial of food wastes is illegal in some incorporated areas.

How? Everything should be buried at least 8 inches below the surface. Holes can be filled and covered, becoming usable garden spaces the following season.

Advantages & disadvantages This is a simple method, but because of the abundance of air some nutrients will be lost. Rodents and dogs can become a problem with wastes buried less than 6 inches deep.

Variations Using a post hole digger, wastes can be incorporated into the soil near the drip line of trees or shrubs and in small garden spaces.

*Vermicomposting*

Feeding earthworms in wooden bins is a good way to make high-quality compost from food scraps. Use Red Wigglers.

Which wastes? Kitchen scraps without meat, bones, dairy products or fatty foods.

How? Fill a bin with moistened bedding such as shredded newspaper for the worms. Rotate the burying of food wastes throughout the worm bin. Every 3-6 months the worm population should be divided and moved to fresh bedding. Refer to Worms Eat My Garbage by Mary Applehof (available at some library branches) for more information.

Advantages & disadvantages This is an efficient way to convert food wastes into a high-quality soil amendment for house plants, seedling transplants, or general garden use. The worms themselves are a useful product for fishing.

Variations A stationary outdoor bin can be used in all but the coldest months, or a portable indoor/ outdoor bin can be used year-round.

**The following troubleshooting chart is a guide to more efficient composting using a turning unit.**

<table>
<thead>
<tr>
<th>SYMPTOM</th>
<th>PROBLEM</th>
<th>SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>The compost</td>
<td>has a bad odor</td>
<td>Not enough air or too much nitrogen. Turn it and add brown dry, crispy material.</td>
</tr>
<tr>
<td>The center of the pile</td>
<td>is dry</td>
<td>Not enough water. Moisten materials while turning the pile.</td>
</tr>
<tr>
<td>The compost is damp &amp;</td>
<td>warm in the middle, but nowhere else.</td>
<td>Too small. Collect more materials and mix the old ingredients into the new pile.</td>
</tr>
<tr>
<td>The heap is</td>
<td>damp and sweet-smelling but still very</td>
<td>Lack of nitrogen. Mix a nitrogen source like fresh grass clippings, fresh manure, blood meal or ammonium sulfate.</td>
</tr>
</tbody>
</table>

**Vermicomposting**

For more detailed information on how to compost yard wastes, please refer to the book "Eat My Garbage" by Mary Applehof.