Important facts about Composting

- Keep in mind composting requires that your pile is "alive." This means having the correct amounts of food and moisture.
- Problems with the food mix (brown: green ratio) are typically related to the green materials (nitrogen). With or without experience, it's not always easy to get a 25:1 ratio from the start. Keep a close eye on what the pile is doing; if it smells bad, add brown material; if the pile does not get hot/warm, or you can't actually see materials braking down, add more green materials. Patience and close observation are the best tools in getting this ratio right.
- Getting the moisture correct is similar to having the right food mix. Too dry, it simply will look that way, and will stay that way until you get water into the pile. Then the microbes can thrive, and start doing their decomposition thing. If too wet, the pile gets "clumpy," difficult to turn, and odors can occur. Start turning the pile more frequently, (preferably on sunny days) so you can dry it back, not out.
- Weeds have seeds, and most back yard compost piles will not get hot enough to destroy them. Weeds can provide green material for your compost pile through the growing season, but you have to realize adding them makes your finished compost a source of weed plants wherever it is used.
- Same for diseased plants, a back yard compost pile will not get hot enough (at least not throughout the entire pile) to kill most diseases capable of wintering over. It is advised you exclude diseased plants from your compost pile all together.
- Wood chips have a "bulking" effect in your compost pile helping air infiltrate. But they don't readily break down and rob the pile of available nitrogen. They should be used sparingly, and screened out of the finished compost.
- If adding more than 10-20% pine needles (acidic) to your compost pile, you may need to neutralize them with wood ash or lime. The best way to know you are balancing these materials is to purchase an inexpensive home pH test kit from the local garden center so during the composting process you can test the pile's pH.
- When using only yard waste and the green materials from the kitchen, unwanted insects in your compost pile should not be a problem. But if this should happen, either as a static pile or immediately after turning, cover it with a shallow layer of seasoned leaves or straw/hay.
- If plants, where your compost is used, appear "burned", typically this is an indication your compost was not "finished," and there is excess nitrogen. Depending on how severe the damage is to the plants, you could replace the plant bed soil; try adding just brown materials (leaves or straw/hay) to use up surplus nitrogen in the soil; or frequently turn/work the top 6-8 inches of soil to basically compost in-place the remaining raw organics that have been recently added to the bedding soil.

Be Waste-Wise, Compost.

Capital Region Recycling Partnership

BACKYARD COMPOSTING

A Recipe to Trim the Waste!

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What is Compost?

A rich crumbly humus material that is the product of decomposed organic matter.

Why Compost?

To produce a beneficial soil amendment in your own backyard that can provide nutrients and moisture to your vegetable and flower plants, maintain a neutral soil pH, and even protect them against disease.

What can I Compost?

Leaves, grass clippings, weeds, garden clean up, manure, sawdust, and a limited amount of smaller wood chips.

Green kitchen waste (vegetable), egg shells, coffee grounds, and peanut shells. No meat, fish, pet droppings, fatty food waste, or colored paper.

Newspapers and computer paper are good carbon sources that work best if shredded. Materials that can raise (wood ash) or lower (pine needles or oak leaves) pH (basic or acidic) need to be used sparingly.

Don't panic if it looks like your compost pile is disappearing. Over the course of the composting process there will be a greater than 50% volume reduction.

Where should I locate it?

Make sure to give yourself adequate space. You might consider starting out with double the space you plan for the pile itself. Your compost pile should be a minimum 3 feet on each side, and 3 feet high. Heat is a good thing, so try to locate the pile someplace that gets a fair amount of sunshine.

When selecting a specific location, remember there is potential for odors (at least during the learning phase). It is probably best to stay away from your deck, pool, a play set, or close neighbors.

How do I Get Started?

You need to keep the microbes in your compost pile happy. This means having the right balance of moisture, carbon (brown waste like leaves and straw) and nitrogen (green items like grass clippings, manure, green plant material, and green kitchen waste).

Mixing oxygen into the pile is optional. But whether you operate with (aerobic) or without (anaerobic) oxygen will have a significant impact on the time and effort you will put into this operation, and how quickly you will have a finished product.

Anaerobic composting can be as simple as mixing your brown (leaves, straw, relatively clean paper products, dry straw/hay, small wood chips) and green (grass clippings, plant materials, manure, green kitchen waste) materials in a ratio of about 25:1, adding moisture (damp, not soggy), and walking away. Improvements can include fencing your pile, purchasing a bin (plastic or untreated wood) from a garden center or some hardware stores, or building a bin yourself (a common favorite is with wood pallets).

Aerobic composting starts with the same mixture, then periodically mixing air into the compost pile. This is the "significant" impact on time and effort part. But incorporating air into the pile increases the rate of composting, getting you to a finished compost much quicker. To introduce air, you can physically turn your pile with a shovel, pitch fork (more difficult as the materials breaks down), or long prong rake; use a hand aerating tool; purchase a tumbler/rotating style bin; or even use a rototiller to mix the compost pile.

Using a rototiller is likely the most expensive composting method, but likely the most effective. It will evenly mix your brown and green materials, help incorporate water if needed, and mix air through the entire pile. The obvious down side is the initial cost, and plan on doing some work putting the compost pile back together after mixing. But this method best mimics the larger commercial/municipal facilities that produce high quality product in a relatively short period of time. The use of a fossil fuel in the rototiller's engine is a much smaller carbon footprint than having these materials picked up curb side, transported to and processed at larger composting facilities or to a landfill.

If you plan to add new organic material to your compost pile over the growing season, try to keep the 25 (brown):1 (green) ratio in mind.

Recipes for Great Compost

Aerobic

Nutrients: carbon 6 C 12.011 + nitrogen 7 N 14.007

Moisture: + water H_2O

Oxygen (Aerobic): + oxygen 8 O 15.999

Finished compost in 4 - 8 weeks. =

Or

Anaerobic

Nutrients: carbon 6 C 12.011 + nitrogen 7 N 14.007

Moisture: + water H_2O

No Oxygen (Anaerobic): + oxygen 8 O (with prohibition symbol)

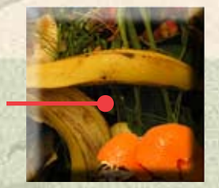
Finished compost in 6 – 12 months. =

What is an Activator?

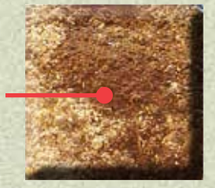
These products contribute high nitrogen, microorganisms, or both. They can provide a quick boost to the decomposition process. Examples include algae, seaweed (be sure to wash off any salt), lake weeds, aged manure, alfalfa meal, cottonseed meal, blood meal, or commercial compost starter. They might help get the process started a bit quicker, but if you get a good brown: green ratio and the right moisture level, your compost pile should take off on it's own.

Ingredients

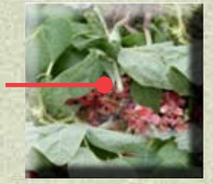

Soil & Water

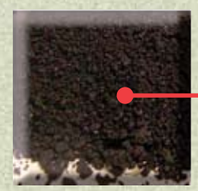

Kitchen Waste


Shredded Papers

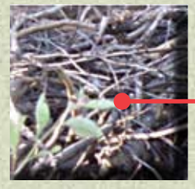

Aged Manure


Grass Clippings


Garden Waste


Blood Meal


Seaweed


Wood Chips & Twigs