



COMPOSTING FOR A HEALTHIER ISLAND

Can you imagine a substance that is beneficial to nature, helps reduce climate change, and is abundant and free? That substance is compost, a material produced by taking organic waste and turning it into rich plant food. In fact, it's one of the best things you can use to provide vital nutrients to your garden.

Compost is different from fertilizer. Fertilizer feeds plants while compost feeds soil. If you have poor soil, it is probably missing the organic matter plants need for nutrition. In undisturbed nature, like forests, decomposing plant and animal matter provide those nutrients. Composting is our way of stepping in on behalf of nature and supplying those necessary ingredients.

There are many benefits to composting. Besides keeping beneficial organic materials out of landfills, when added to soil, compost improves that soil, supplies critical nutrients to plants, helps retain moisture and suppresses pests and plant disease.

Composting is simply mimicking nature's way of recycling plant and animal residues and nutrients and possibly giving it a bit of a boost along the way. There are many composting methods to fit different lifestyles and amounts of time and energy you would want to put in.

The dominant elements in organic materials that affect composting are carbon and nitrogen. Carbon is dominant in drier, woodier materials such as dry leaves and wood chips, while nitrogen is dominant in wetter, fresher materials. We refer to the carbonous material as "browns" because they are often brown or dark in color and to the nitrogenous materials as "greens" as they often are green in color. The ideal carbon to nitrogen ratio for composting is about 30:1 carbon to nitrogen. Fortunately for the home composter, we can approximate this ratio by combining an equal quantity of browns and greens by volume.

Once we have a suitable mix of browns and greens, we need to provide the conditions for microbes to thrive and consume and transform the material. Specifically, the microbes need oxygen and moisture and some time to work their magic to produce the dark garden gold called humus, which is nature's stable, nutrient-rich amendment we can add to our landscaping and vegetable gardens.



Examples of common green materials are grass clippings, most food scraps, and coffee grounds. Examples of common brown materials are straw, dry leaves, and woody landscape cuttings. Avoid meat and fatty food scraps, dairy products, and pernicious weeds. These undesirable materials may attract rats and other rodents or propagate weed seeds.

Preparing materials is just a matter of making the pieces as small as possible. Smaller pieces allow the microbes more surface area to work on, hence a faster composting process. Materials can be chipped in a machine, cut up with pruners, or broken up by hand.

A compost pile can then be built with the prepared materials which can be layered, alternating greens and browns, or mixed with a similar 50:50 mixture. The ideal size for a pile is about 3' x 3' x 3'. This allows a sufficient volume to generate heat and to prevent rapid drying while still allowing air into the middle of the pile. Maintaining the pile is a matter of turning it periodically. The more often the pile is turned, the hotter it will get and the faster it will decompose.

Look for a suitable bin or container in which to build your compost pile. There are many commercially available bins for you to choose from. You can also compost in a pile without using a bin, but this may be prone to moisture control issues. A quick online search about "composting bins" will pique your creativity and hopefully prompt you to use materials you already have available.

There are multiple ways to use your compost. You can add it to vegetable gardens, flower beds and to the bases of trees and shrubs. Depending on the plant, you may want to keep the compost away from the trunk or it may inhibit proper root development. For vegetables you can never have too much compost. You can spread compost on top of your beds in early spring and again after harvest so it can keep improving your soil over winter. When planting or transplanting, you can add compost to the planting area to get nutrients faster to the roots. And during the growing season, small amendments of compost can provide additional nutrient boosts.

Composting is getting on the right side of nature. Realize that no matter what you do, no matter how many little mistakes you make, you are still going to produce reasonably good, usable compost. You just need a basic understanding of the life forms and processes that operate within a compost pile, a willingness to experiment, a little effort and a little artistry. And like anything worth doing, composting and its results get better and easier with experience.

The Island County Master Gardener Foundation is a nonprofit organization that provides educational opportunities to the community and supports the Master Gardener and Washington State University Extension education program. See www.icmgf.org for more information on our mission.

