COMPOST 101

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Spring often sees gardeners turn out the mysterious contents of the compost bin and once again marvel at this fantastic transformation from kitchen scraps and lawn waste into rich, crumbly, black compost. Compost is the decomposed remains of organic materials after they have been broken down by beneficial microorganisms, and the process happens in our managed heaps just like it does on the forest floor. But sometimes this can be a daunting project for beginners, and other times composting slip-ups can throw a wrench into the works for experienced gardeners, too.

Why compost?

1. It's sustainable. The plants in your yard and the vegetables in your kitchen are full of nutrients taken from the soil by the growing process. Rather than sending the leftover to the incinerator or the landfill, return them to your garden plot and reuse them. Your plants won't care one bit if their nutrients are recycled!
2. Compost is full of beneficial microbes and helps support the soil ecosystem in your garden.
3. Compost improves the structure of your soil over time, reducing compaction and improving conditions for root growth.

4. Some research indicates compost gives lower nutrient boosts to plants than conventional fertilizer, but tends to retain those nutrients and make them available to the plants over a longer period of time, reducing leeching and runoff.

What to compost?

1. Yes to kitchen vegetable and fruit scraps, herbaceous yard waste (not wood, unless it's been chopped rather fine), coffee grounds, tea bags, and egg shells.
2. No to large pieces of wood (they will break down, but very slowly), meats and fatty foods (which can attract pests), and pernicious or invasive weeds.

Regardless of how long you've been composting, here are some valuable tips to keep in mind:

1. Organic materials have varying amounts of carbon and nitrogen in them. Compost undergoes optimal reactions (in other words, converts most quickly from yard and kitchen waste into the final product) at a carbon to nitrogen ratio of about 30:1. Translating this into practical terms, think 2 parts grass clippings (greens) to one part dead leaves (browns).
2. Keep that pile moist, keep it turning and moving about, and keep it aerated. Water and air are necessary for the microorganisms you're supporting, and matters will slow down or even stop completely if there isn't enough of either!
3. The magic number for "hot" composting is about 27 cubic feet—a 3x3x3 ft cube. This is enough volume for you to reach your hand into the middle of the pile and feel noticeable warmth, and it's the temperature that will break down organic material the quickest. Smaller piles tend to fail to hold the heat in and much larger piles are too difficult to turn.
4. Don't stress too much over the process unless you are having serious trouble, and certainly don't worry over it enough to keep you from trying! Composting happens as a course of nature and it will happen in your bins, as well—generally within 2 to 6 months. The above tips are aimed at speeding things up and improving the final product.

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