## "Browns" for Composting

by Jolene Adams, Master Gardener '02

Fall is a great time to get started making compost. You can have the finished product ready for your spring garden. Compost is a wonderful lovely crumbly dark additive for your soil– no matter what condition your garden is in. Got clay? Add compost. Got sand? Add compost. Does your garden need to be "pepped up"? Add compost! The organic materials in compost add pore spaces to the soil that either retain water for a while or drain water from soggy soil.



Photo by Plant Natural

Good compost piles are made in layers of "browns" which add carbon to your pile and "greens" which add nitrogen. Stockpile the "brown" materials now while you can. Save

large trash bags full of dry fallen leaves, shredded paper, dried stalks and stems and husks from the summer garden, Halloween yard decorations like straw and hay, twigs and clippings from the garden cleanup, dry pine needles, dried strappy leaves of the day lilies, amaryllis and other bulb plants, crushed egg shells, lint from the clothes dryer, dust and dirt swept out of the shed or garage. "Browns" give compost a light, fluffy texture. Fall is a great time for "browns."

The location of your pile will determine how fast it turns into compost. Also, you need to take into consideration how much time and physical labor you are willing to devote to this pile. A pile built out in the sun needs to be kept moist so it doesn't dry out, a pile built in the shade needs less moisture and should be monitored to make sure there is enough brown stuff in it so it doesn't start clumping together.

Start by placing some type of enclosure on the bare soil, and then add small pieces of material that will slowly be consumed by the microorganisms already in the soil. Build the pile – starting with about three inches of dry "brown" materials. Chop the leaves a bit; make sure those twigs are really small and broken up. This base layer will help aerate the pile and provide a platform for the next layers. Next add a one-inch layer of moist, fresh, "green" materials like vegetable peels, kitchen scraps that do not contain meat or dairy products, fallen fruits, tea bags, coffee grounds along with the used paper

filters, freshly mown grass blades (but not crabgrass or grasses that spread through stolons or runners), weeds and garden clippings without seeds. The nitrogen from the "green" materials will provide the building blocks for many plant proteins and enzymes.

Keep the depth of layers at 3:1 – you need a lot more brown than green. A dry pile is easy to keep slightly moist. Continue building the pile, alternating the "brown" stuff which is dry, and the "green" stuff which is moist, finishing up with a layer of "brown" on top. A wet pile (too much green) gets slimy and smells bad. If necessary, you can add "brown" to a pile while you are turning it by tossing in shredded paper (from your office paper shredder) or torn up strips from newspaper or paper bags.

A "hot" pile turns into compost quickly. It is "hot" because the microbial activity in the pile raises the internal temperature of the pile to about 150-160 degrees Fahrenheit. A "hot" pile gets thoroughly digested by the microbes in four to six weeks because someone (you) is turning the pile over and over, like stirring up a cake mix, on a regular schedule, and keeping it moist with fine sprays of water as it is turned. A "cold" pile is usually left alone or turned only occasionally. It may never get above 100 degrees Fahrenheit. You need to make sure it gets aerated – either by that occasional turning, or by sticking rods or pipes through it to make holes for the air to reach the center. It can take up to a year for a "cold" pile to become compost.

Adding compost puts nutrient-rich humus into the soil. It revitalizes poor soils and enhances plant growth. It also adds beneficial organisms to your soil – those small to microscopic animals and fungi and bacteria that have digested the tough materials you added to your compost pile and helped create this rich and fragrant soil additive.