Why Bother to Compost?

By Susan Camp

One of the most difficult truths for new gardeners to grasp is that gardening is hard work. Most gardening programs on TV don't show the digging, planting, sweating, fighting off mosquitos, and checking for ticks after a long day in the garden. They also don't show you how to improve soil that is sandy or filled with lumps of sticky clay, or just a gray dust with the consistency of talcum powder. TV gardening shows definitely don't show you what to do if your soil consists of all three types: sand, clay, and dust.

Unfortunately, you may find these soil types in some regions of Gloucester. In other words, we don't have just one type of soil, which is typical of Virginia's Coastal Plain. The soils in the Tidewater region were deposited as the sea level dropped millions of years ago, leaving poor to infertile acid soil that varies from fine sand to thick, sticky clay. Both sand and clay are problematic, and not just because of lack of nutrients. Sandy soil drains quickly, leaving a thick crust that impedes water flow to plant roots. Clayey soil drains slowly, and plants become waterlogged. Add the gray dust that just blows away, and home gardening can quickly lose its allure for novice and experienced gardener alike.

What is the gardener supposed to do to combat this problem? Some gardeners add lots of fertilizer in an attempt to improve soil quality. Application of commercial fertilizers may help to some extent, but they are simply lab-created inorganic compounds consisting of prescribed concentrations of nitrogen (N), phosphorous (P), and potassium (K). Fertilizers don't contain organic material, and they don't improve soil quality.

Another problem with chemical fertilizers is that some gardeners tend to think, "If the directions say to use this much, I'll just double the amount. That should do the trick." Sadly, not following package directions can lead to polluted wastewater runoff into our numerous creeks and rivers.

The better answer is to begin composting, a process that doesn't carry the hefty price of commercial fertilizers from the local garden center, and who doesn't want to save money in these days of rising costs?

Compost consists of decomposed organic material that develops into rich, dark, crumbly humus and improves the structure of existing soil. The addition of compost to sandy soil increases retention of water and nutrients. In clay soil, compost improves drainage by breaking up heavy material. Compost also decreases the need for chemical fertilizer and provides food for earthworms and beneficial microbes and insects.

Three basic materials are needed to produce compost. "Browns," which are high in carbon, include twigs, branches, and dead leaves. "Greens" are rich in nitrogen, and include grass

clippings and kitchen scraps. The third element is water, which is required to help break down the organic material.

Besides improving your soil, composting is a convenient way to dispose of yard material, but avoid adding straw or weeds to your compost bin. You can compost kitchen scraps, too, including fruits, vegetables, and coffee grounds. Some gardeners compost eggshells, although they may attract unwanted pests. Do not add meat, bones, dairy products, or fats and oils. These materials attract flies and rodents and cause unpleasant odors. You can add well-rotted manure to your compost pile, but ask your supplier if herbicides used to kill broadleaf weeds were applied in the pasture or feeding area. Pet waste and used cat litter might contain harmful parasites and pathogens.

Shredded paper, newspaper, cardboard, sawdust, and fireplace ashes can be composted, too. Avoid adding charcoal or coal ashes and yard waste treated with chemical pesticides, herbicides, or fertilizer to your compost bin or pile.

Next week's column will look at how to begin composting. In the meantime, find more information on composting in Virginia Cooperative Extension (VCE) Publications 452-231 "Compost: What Is It and What's It to You?"; 426-704 "Using Compost in Your Landscape"; and 426-730P "Making Compost from Yard Waste."