Trash, grass, and erosion: Top 3 reasons to compost

As the county’s population continues to grow, residents grapple with some serious issues. Nearly 6,000 tons of trash rumble down county roads to the landfill six days a week. Land disturbance for road expansions and new buildings causes widespread soil erosion. Home and business owners struggle to grow lawns and landscape plants on construction damaged soil.

Fortunately, we can mitigate all of these problems with one simple process: backyard composting.

What is composting?
Composting is a natural process that turns organic waste like food scraps and yard trimmings into a valuable product that many of us buy in bags at the garden center. With just a bit of help from us, a variety of organisms – some that we can see and some that we can’t – consume and digest plant-based materials in the compost pile. Over time, this aerobic, odorless process significantly reduces the original volume of material. What remains is an organically-rich residual that can literally save earth.

Top 3 ways compost saves earth
Home composting keeps waste out of landfills. As a nation, we create 200 million tons of trash each year. According to Environmental Protection Agency estimates, 20-30 percent of the trash we send to landfills is compostable organic material. If we composted grass clippings, vegetable peels, leaves from landscape trees, and the like at home, we could keep 40 to 60 million tons of waste off the roads and out of landfills every year. Reducing the volume of material going into landfills helps to extend their usable life and delays the need to open new landfills. Better yet, finished compost is a valuable soil amendment.

Compost reduces erosion. Land disturbance creates bare soil that wind and rain readily carry away. Soil loss from construction is 100 times greater per acre than soil loss from crop production. Eroding soil from construction sites is a major source of sediment pollution in streams. Applying a blanket of compost to bare soil, however, dramatically reduces erosion. The rich, organic matter of compost absorbs water from rainfall, stopping 50-80 percent of runoff.

Compost improves damaged soil. Many of us are trying to grow lawns and landscape plants in eroded, compacted soil that completely lacks an organically-rich layer of topsoil. Left to nature alone, replacing
an inch of lost topsoil takes 100 years or more. We can speed up that process, however, by working compost into the top few inches of soil. Compost restores missing organic matter and improves soil structure, creating pore spaces to let water flow into the soil to reach plant roots. It reintroduces living organisms that release nitrogen and improve fertility. Soil organisms like earthworms, ants, and beetles tunnel through soil to relieve compaction. This opens avenues for air, water, and root movement, all of which are critical for healthy plants.

**How do I start composting?**

Starting a compost pile can be as easy as raking up fallen leaves. The basic recipe for compost is:

- Dead leaves and other brown stuff (two-thirds of volume)
- Vegetable scraps, fruit peels, and other green stuff (one-third of volume)
- Water to keep moist

Layer materials in a pile or bin that’s at least 3-feet long by 3-feet wide by 3-feet high. Locate the pile in a shady spot, if possible, to help retain moisture. Once the bin is full, stop adding new material. Every 2-3 weeks, turn the pile to add air, bringing matter from the middle of the pile out to the edges and stirring edge material into the middle. Add water as necessary to keep materials moist, but not wet.

The microorganisms, earthworms, and beetles that digest plant matter work year-round. They need moisture to stay hydrated and move around, but too much water drowns them. After a few weeks, when you can’t tell a banana peel from a leaf, work the finished compost into garden beds or apply as a topdressing to lawn areas.

**Plan and prepare for spring planting**

Although it’s still cold outside, seed and garden catalogs are showing up in our mailboxes. The photos of blooming flowers and prize-winning vegetables are tempting, but to get the best performance out of our spring and summer gardens, we need to do some planning and prep work.

**Goals and design**

Whether we’re considering seasonal color beds, vegetable gardens, or landscape additions, we need to determine what goals we want to achieve. Are we planting to hide an ugly spot, create a shady oasis, or grow food for the family? What kind of plant can meet that goal?

For the ugly spot, we probably need an evergreen bush that keeps its leaves year-round. Next we need to decide how big the bush needs to be to do the job – and at what size the shrub overwhelms the space. Once we determine the functional aspects, we can consider aesthetics. Does this space need a precisely pruned form, or natural growth? Do we want flowers, and if so, what color?
Site assessment and soil testing

Once we’ve determined plant function and form, we need to analyze the characteristics of the planting area. Every landscape contains several microclimates. One area may be shady and cool, while another is sunny and hot. High areas might be exposed to windy conditions, and low spots may stay wet.

To assess the environmental conditions of the selected area, visit it several times a day and note whether it gets morning sun or afternoon sun, and for how many hours the sun shines on that spot. Note which direction the wind blows, measure the temperature, and feel how moist the soil is. Another important thing to note is the location of overhead utility lines and underground infrastructure, such as sewage, gas, and cable lines. Call 811 to have a crew come out and mark where infrastructure is buried in your yard; it’s a free service.

Soil conditions can also vary throughout the landscape. Soil analysis from the University of Georgia soil laboratory provides information on soil pH, the availability of nutrients, and advice on amending the soil to meet the needs of specific plants. Winter is a good time to apply amendments, such as lime and compost, to get soil into good condition to support healthy plant growth.

Select the right plant for the planting space

The final step is selecting the ideal plant for a specific planting site. Plants are adapted to thrive in particular environmental niches; that’s why we can have beautiful shade gardens, vibrant pollinator gardens, and stunning water gardens. But plants in the wrong environment suffer from stress. They may be more susceptible to pest problems, and they almost never live up to our expectations of beauty or productivity.

Let’s say that, through the design analysis, you decided the perfect plant to hide the ugly spot is an evergreen bush that grows to 5-feet at maturity, and has a naturally rounded form so you don’t have to spend too much time pruning it. Flowers are optional. Through the site analysis, you determined that the planting site gets full afternoon sun, stays fairly dry, and is well away from buried utilities. The soil analysis shows slightly acidic soil and moderate fertility.

Now it’s time to select a shrub that meets your aesthetic needs and is adapted to the environmental conditions of the site. One great resource for landscape match-making is the UGA publication Landscape Plants for Georgia. Plants are categorized by type (tree, shrub, groundcover, etc.) and size. Plant descriptions offer information about hardiness zones, exposure, mature size, form, growth rate, texture, flower color and size, as well as comments from UGA horticulture specialists.
Forsyth County Extension is also offering a [Gardening in Georgia and Plant Propagation Workshop](#) on February 28, 2018. Registration deadline is February 20, 2018.

**The art of pruning**

Many people approach pruning with confusion, dread, or a chainsaw. I suggest approaching the task with a little knowledge, patience, and artistic vision. Appropriate pruning maintains plant health and promotes flower and fruit production. Timing, tools, and technique are important.

**Timing**

People often call the Extension office asking when they should prune. Let’s start with when not to prune: It’s rarely a good idea to prune late in the fall. Pruning stimulates plant growth. A flush of growth in late fall 1) uses up carbohydrates stored in the plant’s roots that it needs for healthy growth next spring; 2) is likely to be damaged by frost and freezes; and 3) is not what we want when plants are preparing for winter dormancy.

Otherwise, pruning timing depends on the plant. Things that benefit from pruning at winter’s end are plants that bloom and fruit on new growth, such as:

- Abelia
- Beautyberry
- Camelia
- Chaste tree (Vitex)
- Crape myrtle
- Floribunda and Grandiflora roses
- Fruit trees
- Hydrangeas (arborescens and paniculate)
- Japanese barberry
- Japanese spirea
- Muscadine and grape vines
- Nandina
- Rose of Sharon
- Sweetshrub

Wait to prune spring blooming plants like azaleas, blueberries, dogwoods, and forsythia until after they finish blooming.

**Tools**

Pruning tools include hand pruners, loppers, and a variety of saws. Use sharp, clean tools. Pruning cuts made with sharp tools heal more quickly than cuts that result in crushed stems, ragged ends, or torn bark. If you’re dealing with disease issues, sanitize tools between each cut by dipping the blades in a solution of one part bleach and nine parts water.

**Technique**

In addition to stimulating growth, pruning helps maintain plant health, size and form. Pruning opens the canopy to allow sunlight to reach interior spaces or filter to the ground. Interior thinning also allows air to circulate and dry dew and rain from leaves. Wet leaves create an excellent environment for fungus.

Pruning requires vision. Before you begin, step back and really look at the plant. Decide how you would like it to look. If plants have been neglected, take a three-year view. It may take this long (or longer) to train and form them into the shape you want, since removing more than one-third of plant material can severely stress plants.
Begin by removing dead and diseased branches. Next, take out branches that grow toward the interior of the plant. If you see branches that cross and rub together, one of them needs to go. Rubbing damages the bark and opens the plant to pests and pathogens. Select the branch to keep based on strength, health and desirable growth habit.

For large branches, use a three-cut process. Make the first cut on the underside of the branch about 12 inches from the trunk of the tree, sawing one-fourth of the way through the branch. This undercut keeps the falling limb from tearing bark away from the tree. Make the second cut on the upper side of the branch 2-3 inches outside of the first cut. As you make this cut, the branch will swing downward toward the undercut. With the final cut, remove the stump at the branch collar, the thickened ring where the branch joins the trunk. You don’t need to paint pruning cuts with wound sealer.

At this point, step back and give the plant another assessment. Starting at the plant’s base, lop off suckers arising from the root system. Moving upward, clip off low-growing branches and watersprouts, those shoots that grow straight up.

Now comes the most important part. Stop. Repeat next year. Art can’t be rushed.

Want some hands-on instruction? Forsyth County Extension is hosting a Small Orchard Management Workshop on March 10, 2018.

Prevention as cure: Lawn weeds
Keep summer annual weeds out of your lawn this year with a timely application of pre-emergent herbicide. Pre-emergents keep the weed seeds that fell last summer from germinating this spring. Follow label directions and apply late February to mid-March while soil is still cool.

Let’s Listen: Spring Peepers chorus at night
Have you ever wondered what makes that high-pitched whistle during winter nights? It’s the Spring Peeper (Pseudacris crucifer). This tiny, nocturnal tree frog is one of 14 species known to live in Forsyth County. Spring peepers breed from October to March in Georgia. Males chorus at night to attract females. They live in woodlands or areas with brushy growth, and they like temporary ponds, so with all the rain we’ve had recently, they may be quite active. Step outside this evening and listen for them, or listen here.

Got Questions?
Visit UGA Extension Forsyth County for answers, articles, upcoming events and classes, and lots more useful information.