You’ve probably heard about it, but what exactly is composting?

Composting is nature’s way of recycling. Microorganisms break down organic material – like yard trimmings and food scraps – into a dark, crumbly, soil-like amendment that can be used in your garden and on your lawn.

Composting is a simple way to help protect the environment and save money at the same time.

Plus, it’s easy to get started.

Learn more inside.
Why compost?

- **Waste less.** About 30 percent of what South Carolinians throw away is yard debris and food waste. Composting keeps this material out of landfills and turns it into a product you can use.

- **Go natural.** Reduce or eliminate the need for chemical fertilizers and pesticides. Compost contains valuable nutrients that feed your plants. It also helps suppress plant diseases and pests.

- **Save money.** By making your own valuable compost at home, you can reduce your need to water and buy products such as chemical fertilizer, pesticides and bags for garbage and leaves.

- **It’s easy!** To start, all you need is a little time, a little space and this guide to help create your own compost.

What do I need to get started?

- **Bin or pile?** A pile works great for leaves and grass clippings, but when you want to incorporate food waste, consider enclosing your pile to keep out rodents. Homemade bins can be built easily with materials you already have such as scrap wood, chicken wire or even concrete blocks. If you want to buy one, manufactured bins come in different shapes and sizes and some rotate to make mixing easier. Look for a bin that has a lid and air vents, is rodent-resistant, holds heat well and has a bottom door to remove finished compost. Check your local nursery or garden center for a bin that fits your needs.

- **Space.** Select a dry, partly shady spot near a water source and preferably out of sight. Be sure to keep your pile or bin at least 2 feet away from structures like your house or a fence. Ideally, your compost area should be at least 3 feet wide by 3 feet deep by 3 feet tall (one cubic yard). This size provides enough food and insulation to keep the organisms in the compost working hard.

- **Browns.** Compost requires a good mix of carbon and nitrogen-rich material. “Browns” provide carbon and include material such as paper, cardboard and paper rolls, dry yard waste, straw, sawdust and used potting soil. Add about twice as much brown material as green material to your bin or pile.

- **Greens.** “Greens” provide nitrogen and include material such as wet yard trimmings like fresh grass clippings and green leaves, vegetable and fruit scraps, coffee grounds and tea bags.

- **Air.** Bacteria need air to break down the organic material in your compost pile. Without it, your pile may decompose slowly and produce odors. Turn your pile by rotating your bin or using a shovel or pitchfork. You can even use a compost turner, which is specially designed to fit inside a compost bin.

- **Water.** The right amount of moisture is important to keep your compost pile active. Too little moisture will cause the pile to decompose slowly. Too much moisture will cause the pile to smell. Here’s a simple rule to follow: keep your pile damp – like a wrung-out sponge.

Storing Food Scraps

A plastic or metal container with a lid is great for storing scraps in the kitchen until you are ready to take them outside. Empty the container every two days so food scraps don’t start to reek.

To avoid odors and flies, you also can sprinkle sawdust, peat or coconut coir on top of food layers or store your food scraps in the freezer.
How do I make compost?

There are two types of composting – passive composting and active composting. Although the basic principles are the same, each method requires different amounts of material, time and effort.

**Passive Composting**

Passive composting requires minimal effort. Because the pile decomposes slowly, it may not heat up well and therefore won’t kill weeds. It also will take longer to produce finished compost.

1. **Add your brown and green materials as you collect them.** Try to maintain a ratio of about two parts browns to one part greens, covering greens with browns as you go.
2. **Check your pile every week or two to maintain good air flow and moisture.** Add water or turn as needed.
3. **Your compost should be finished in 6 to 8 months.**

**Active Composting**

Active composting requires more intense management but will get hot enough to kill weeds or diseases. It will produce finished compost much faster than passive composting.

1. **Start with enough material to fill your compost bin, or create a pile about one cubic yard in size.**
2. **Place several inches of greens followed by several inches of browns in alternating layers.** Moisten each layer with a hose as you add material.
3. **Cover your pile or close your bin to trap moisture and heat.**
4. **Every week, turn your pile and check the moisture.** The pile should be as damp as a wrung-out sponge.
5. **Compost should be finished in 8 to 12 weeks.**

When is my compost ready?

When material at the bottom is dark and rich in color, with no remnants of your food or yard trimmings, your compost is ready to use. It will be the rich brown color of good soil and smell earthy. If you are actively composting, you will notice your pile begin to cool down just before the compost is finished.

What can I do with my compost?

- **Mix compost into your soil before you plant.** Dig in 2 to 4 inches of compost at planting time.
- **Use compost as mulch.** Spread 2 to 3 inches around plants, trees and shrubs to help the soil retain moisture.
- **Add compost to potting soil.** Mix one part compost to two parts potting soil. Be sure to screen compost to remove large pieces before mixing.

What can go into my compost pile?

While many materials can be composted, some items should not go in your home compost pile to keep it odor-, pest- and disease-free.

**WHAT TO ADD**

- **Greens:**
  - Uncooked or cooked fruits and vegetables
  - Breads
  - Coffee grounds and filters
  - Grass clippings
  - Tea bags (with the staple removed)
  - Hair and fur
  - Chicken, rabbit, cow and horse manure

- **Browns:**
  - Dryer and vacuum cleaner lint
  - Eggshells
  - Nut shells
  - Fireplace ash
  - Sawdust and wood chips (untreated)
  - Hay and straw
  - Yard trimmings (e.g., leaves, small branches, twigs)
  - Houseplants and used potting soil
  - Shredded newspaper, cardboard and paper

**WHAT NOT TO ADD**

- Metal, glass and plastic
- Fruit and vegetable stickers
- Dairy products
- Fats, grease, lard or oils
- Meat, bones or seafood scraps
- Dog, cat or human waste (including diapers)
- Fresh weeds or weed roots
- Diseased or infected plants
- Trimmings that are toxic to other plants (e.g., black walnut, hemlock)
- Coal or charcoal ash
- Treated or painted wood
Be a ‘Smart Gardener.’

Now that you’ve considered composting, how else can you go green in your backyard? The “S.C. Smart Gardener Handbook” is designed to help you take sustainable gardening to the next level.

The handbook includes information, tips and guidance related to a variety of topics including healthy soil, natural lawn care, smart watering and pesticide reduction. All of the practices featured will help conserve resources, protect South Carolina’s environment and maybe even save you money.

For a copy of the handbook or for more information about composting in South Carolina, call 1-800-768-7348 or visit www.scdhec.gov/compost.

Troubleshooting for Backyard Composting

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<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
<th>Solution</th>
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</thead>
<tbody>
<tr>
<td>Rotten egg smell</td>
<td>Too wet and/or not enough air flow</td>
<td>Turn your pile and add browns if it’s soggy.</td>
</tr>
<tr>
<td>Ammonia smell</td>
<td>Too much nitrogen</td>
<td>Add browns and turn your pile.</td>
</tr>
<tr>
<td>Pile not decomposing</td>
<td>Too wet</td>
<td>Add browns and turn your pile.</td>
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<tr>
<td></td>
<td>Too dry</td>
<td>Add water. Your pile should be the consistency of a damp sponge.</td>
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<tr>
<td></td>
<td>Lack of nitrogen</td>
<td>Add greens and turn your pile.</td>
</tr>
<tr>
<td></td>
<td>Pile too small</td>
<td>Add more material (greens and browns). Your pile should be about 1 cubic yard in size.</td>
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<tr>
<td>Rodents</td>
<td>Meat, dairy and/or fats in pile</td>
<td>Remove or bury animal products. Make sure your pile is enclosed or in a rodent-proof bin.</td>
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<tr>
<td>Flies/gnats</td>
<td>Exposed greens</td>
<td>Cover with browns, finished compost or soil.</td>
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