



# Home Composting

## GFG Composting Demonstration

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Every year millions of tons of yard and kitchen waste is sent to Texas landfills, where it doesn't decompose. Instead, it produces methane which is a more potent greenhouse gas than carbon dioxide! What if you could send less material to the landfill, plus save money on fertilizer for your garden and lawn? The good news is that you can!

Composting is nature's way of recycling the nutrients in waste. Picture a lush forest floor. Microscopic bacteria and fungi, worms and other insects, utilize air and water to decompose the leaves and branches that naturally fall there to create rich, fertile soil. This is a process that happens naturally, over time.

With a little bit of planning and a few simple tools, we can easily bring this same natural process to our backyards, recycling our own waste to enrich the soil around our homes. You will need to find a good location, some type of bin to hold the compost, access to water, and a tool to turn the pile periodically.

Start by choosing a location that is easily accessible, yet not in your way. In the greater Houston area, a shaded area will retain moisture better in the heat of summer, and be more comfortable for you, as well.

There are many options when it comes to the bin itself. With enough space, you can have an open pile. It is recommended to be 3 feet in height, breadth, and depth. Here at GFG we demonstrate how simple fencing wire can be fashioned into bins that allow air to circulate and are easy to move. Other options are plastic bins or barrels, several of which you see here.

Others build one from lumber, making certain the wood is not treated. (Take note: prior to 2003 lumber for pallets and other outdoor purposes was sometimes treated with CCA as a preservative, which contains arsenic. If you plan to use reclaimed lumber from pallets or other sources, confirm that it is safe.) The choice is yours. You do not need to spend a lot of money.

Next, collect dry leaves, cardboard, and paper to be the 'brown' or carbon source for your compost pile. This dry material will occupy approximately 2/3 of your bin. Run the leaves through your mower or otherwise shred this brown material before adding it to your bin. This increases the surface area available to the microbes and helps it decompose quicker.

Also, collect 'green' material as sources of nitrogen for the other 1/3 of your compost bin. This can be fresh grass clippings, coffee grounds and filters, tea leaves, and fruit & vegetable scraps. Avoid dairy, fats, meat, fish, poultry, bones or pet waste.

Add enough water so that your pile is moist, but not dripping with water. It should be like a wrung-out sponge.

Next, add air by mixing the pile. Here we use an aerator, a tool that you insert into the pile and pull the bottom materials toward the top. You can use a garden fork or fashion your own out of available materials. The goal is to reach to the bottom of your pile and pull the material and microbes and other decomposers to the surface. This aerates the pile, which speeds up the process. Doing this all around the pile, once or twice a week, will help keep your pile decomposing.

A common problem is the pile being malodorous. If you notice this, add more dry or brown material and aerate the pile. It may be too wet, have too much green material, or not enough air.

If decomposition is taking too long, your pile may need more water, more air, or more green material. You will learn how to manage the pile in a way that works for you!

<https://aggie-horticulture.tamu.edu/earthkind/landscape/dont-bag-it/>

<https://aggie-horticulture.tamu.edu>

<https://cdn-de.agrilife.org/extension/departments/hort>

<https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/>

<https://www.epa.gov/ingredients-used-pesticide-products/chromated-arsenicals-cca>

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