

Materials Management - Composting Basics

***By
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Composting allows citizens to live a more sustainable lifestyle. Have you seen a compost bin in someone's backyard or have you heard about composting and want to make an impact in reducing harmful greenhouse gas emissions? Do you just want to live more sustainably and promote a healthier lifestyle? We all have our own reasons for exploring composting, which can be tailored to meet each of our individual situations and goals. The impacts of composting are not just felt on an individual level though, whole communities and regions benefit as well.

According to a 2018 Environmental Protection Agency (EPA) report, food waste accounts for 24% of Municipal Solid Waste (MSW) that ends up in landfills. About half of that comes from residential sources, which means that composting at a local level can make a big difference. Getting restaurants and businesses on board can make an even greater impact and can foster community sustainability. Locally grown crops can be used by local restaurants and the food waste can then be composted and returned to the local growers as fertilizer for their crops. Native plants invite local pollinators and vegetation serves as a frontline defense against erosion and water runoff into stormwater drains. Through photosynthesis, these plants pull carbon dioxide (CO₂) and water (H₂O) from the air and soil, release oxygen and store the energy. Everyone can incorporate composting into their daily lives.

Composting serves many important functions and is a great example of circular thinking by diverting unwanted food and yard waste from landfills into compost bins. This includes broccoli the kids just would not eat, the banana and orange peels from the fresh fruit you ate, and food that spoiled before it could be eaten. These materials take up unnecessary space at landfills and when they degrade, they produce methane, a powerful greenhouse gas, which accelerates planetary warming. Also, compost can be used to fertilize existing soil, helping seeds and young plants grow. This soil can be your own, or it can be the community garden's. The benefits are exponential.

When I moved to Oakmont 8 years ago, I was fortunate to have a compost bin left behind by the previous owner. I didn't know what to do with it at the time, but I wanted to learn, so I began my research. It turns out, bin operation is minimal, depending on your needs. For a single home dwelling, one bin is usually sufficient. To maximize efficiency, place the bin in an area that is exposed to sun and rain, because heat and moisture facilitate the composting process. According to Grow Pittsburgh, materials placed in the bin should generally follow a 1:3 ratio, one-part green materials to 3 parts brown materials. Green materials include leafy vegetables, fruit, weeds, coffee grounds and grass clippings. Brown materials include paper towels, shredded paper/newspaper/cardboard, pizza boxes, leaves, and woodchips. This ratio is important, as an improperly maintained compost bin can be odorous or ineffective. As you fill the bin, the materials inside should be turned to speed up the decomposition process. With time you'll notice a soil-like mixture at the bottom of the pile. This is the fruit of your labor. The

compost can then be removed from the bin and mixed in with soil to provide nutrients to gardens and plants. If you do not have a bin, there are many ways to get one. Compost bins can be purchased online or built from materials you may have around the house and yard. If you live in an apartment complex or condominium, ask your landlord or Homeowner Association (HOA) about starting a garden and having a communal compost bin or see who else in town is accepting food waste for their compost bins. There are many possibilities, but most important is that any composting effort, big or small, has a positive impact on our communities and the environment. By composting, you are helping to create your own small sustainable community!