White Plains' Residents' Guide to

BACKYARD COMPOSTING

Backyard composting offers an impactful way to transform your kitchen scraps and yard waste into a valuable, nutrient-rich soil amendment. This "black gold" will dramatically improve your soil's structure, boost its water retention, and deliver essential nutrients to your plants, all while keeping waste out of our solid waste stream.

Why Compost?

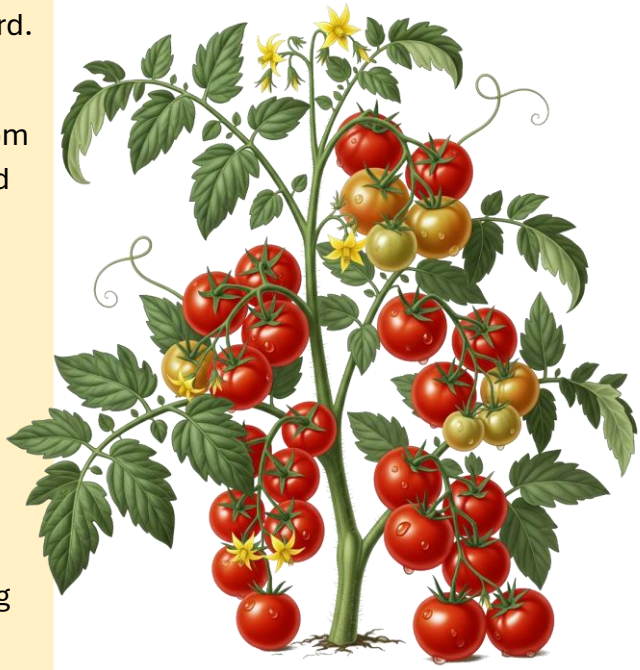
Composting is an easy, impactful way to benefit your garden and the environment. By turning food scraps into a nutrient rich soil amendment, you create a powerful resource right in your backyard. Here are the key benefits of composting:

Reduces Waste: Diverts food scraps and other organic waste from the waste stream, reducing transportation and the emissions and costs associated with it.

Improves Soil Health: Finished compost enriches the soil with vital nutrients, improves its structure, and helps retain moisture, leading to healthier plants and gardens.

Saves Money: Provides a free, natural alternative to expensive fertilizers and soil amendments, significantly reducing your need for store bought products.

Benefits the environment: Completes natures cycle by returning valuable organic matter and nutrients to the soil. This preserves resources that would otherwise be lost at the County's Waste-to-Energy Facility



The Science Behind the Pile

The science behind a compost pile is all about providing the right environment for microscopic organisms. Composting is the natural process of decomposition carried out by billions of aerobic, or oxygen-loving, microbes. As composters, we help these microscopic helpers thrive by giving them plenty to eat, along with the ideal amount of moisture and oxygen. The end result is compost: a dark, crumbly, and wonderfully earthy-smelling material that looks and feels like rich soil.

The Composting "Recipe“, Greens and Browns: A successful compost pile needs a balance of two main ingredients, often called "greens" and "browns." These aren't just colors; they're shorthand for materials rich in **Nitrogen (Greens)** and **Carbon (Browns)**. The microbes that break down the materials need both to thrive. The ideal ratio is about **2-3 parts browns to 1 part greens.**

Greens (Nitrogen-rich): These materials provide the protein and moisture for the microbes. Too many greens can lead to a smelly, slimy pile. Some examples are:

Fruit and Vegetable Scraps

Coffee Grounds and Teabags

Grass clippings

Houseplant Cuttings

Browns (Carbon-rich): These materials provide the energy and bulk. Too many browns will slow down the decomposition process. Examples of Browns are:

Fall Leaves

Straw

Woodchips

Shredded Newspaper

Do NOT Compost: Meat, bones, and fish, dairy products (milk, cheese, butter, etc.), fats, oils, and grease, diseased plants or weeds that have gone to seed, pet waste (dog or cat feces) Treated wood or coal ash

Storing Fall Leaves

Leaves are the perfect "brown" material and are a fantastic, free resource. Instead of putting them to the curb in the fall, rake them into a pile or bag them to save for later. Shredding them first will speed up their decomposition. This will give you a steady supply of browns to balance out your greens (like food scraps and grass clippings) throughout the year, ensuring your compost pile stays active.

The Importance of Porosity (Airflow)

Porosity refers to the air pockets within your pile. Just like us, the microbes in your compost pile need oxygen to do their job. If the pile is too dense and compacted, it becomes anaerobic (lacking oxygen), which leads to foul odors and a very slow decomposition process. Adding coarse materials like small woodchip or straw and regularly turning the pile helps maintain good porosity and ensures oxygen can reach all parts of the compost.

The Role of Moisture

Moisture is absolutely essential. The microbes live in a thin film of water on the surface of the compost materials. The pile should feel like a **damp sponge**—not dripping wet, and not bone dry. **Too dry** and the composting microbes will go dormant, and decomposition will stop. **Too wet** and water will fill the air pockets, creating an anaerobic environment and causing bad odors.

GETTING STARTED

Step 1: Choose a location and bin: A bin is highly recommended to contain materials and deter pests. The bin should have plenty of small holes or narrow slats for good air circulation, and its openings should be no larger than a dime to keep animals out. Place your bin in a well-draining area that is away from your house and partially shaded. For composting in colder weather, a bin of at least 80 gallons is ideal, as larger piles are better insulated.

Step 2: Start the pile: Begin with a layer of coarse, brown materials like small woodchip or straw at the bottom for aeration. Then, start adding your greens and browns in alternating layers, making sure to chop or shred larger pieces to speed up decomposition. **Remember to use a ratio of at least 2 parts "Browns" to 1 part "Greens" by volume.**

Step 3: Maintaining Your Compost Pile: Periodically turn you pile to ensure your microbes have plenty of oxygen to do their work, and to distribute greens and browns evenly through the pile. Turning less frequently is perfectly fine, though it will result in a slower decomposition process. For quicker results, aim to use a pitchfork or an aerating tool to mix the materials and introduce air every week or two. Don't forget to maintain proper moisture: the pile should feel like a damp sponge—not dripping wet, and not bone dry. If it's too dry, add some water; if it's too wet, add more browns to absorb the excess moisture.

Troubleshooting Common Problems

Bad odor: This usually means the pile is too wet or has too many greens. Try adding more dry browns (like shredded paper or leaves) and turning the pile to add air.

Attracting pests: This is often caused by adding meat, dairy, or other "do not compost" items. Remove the offending items and bury any new food scraps deeply in the pile. Use a compost bin, and ensure no accessible areas to the bin.

Not heating up: This could be due to a lack of nitrogen (greens), a lack of moisture, or insufficient pile size. Add more greens and water, and make sure your pile is at least 3x3x3 feet to help it retain heat.

Once the compost looks and smells like rich, dark soil, it's ready to use!

The City of White Plains
Department of Public Works
Composting Program