

FOOD SCRAP AND YARD WASTE RECYCLING IN ORANGE COUNTY

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ABSTRACT

Lack of composting food scraps and yard waste creates overloaded landfills, the release of methane gas, and greenhouse gas. In Orange County, 18% of total municipal solid waste is food waste. The US Environmental Protection Agency estimates that about 96 billion pounds of food are wasted each year in the U.S. costing one billion dollars to manage. A collaboration between Orange County Department of Health (OCDOH) and a local food pantry was established to create a full cycle compost system available to residents. A compost bin was placed at the local food pantry for twice-weekly resident use. Every Friday and Saturday rotten fruits, vegetables, cardboard, plain paper, paper towels, and other compostable materials were collected to be appropriately composted and recycled. Composted soil is used for onsite gardening of produce grown for the pantry. Development of a concrete collection system of food scraps from the food pantry is underway. Progress, outputs, and outcomes are documented weekly as more food scraps and yard waste is collected and composted. The pantry has seen a decrease in their weekly trash collection resulting in reduced trash entering the dumpsters. Composting food waste reduces overflow in landfills as well as creates nutrient-filled soil to aid in the production of strong, healthy crops. To date, anecdotal qualitative behavioral data has been collected from food pantry staff members to measure how often compostable waste is being thrown out. Next steps will include OCDOH creating a toolkit to replicate efforts to expand composting onsite to additional food pantries throughout Orange County. The toolkit will include a flyer on tips and tricks, an implementation plan, and other composting resources available in the county.

BACKGROUND

Orange County Department of Health provided a composter to the Deacon Jack Seymour Food Pantry on Ann Street in Newburgh, to assist their efforts to compost unused produce into garden soil. The site maintains a flower and vegetable garden to help add produce to the food pantry operations. The compost will be used to add nutrients back into the soil used for produce grown onsite at the food pantry. The Healthy Orange Goes Green project purchased the composter and is funded by the New York State Association of County Health Officials (NYSACHO) and New York State Department of Health to address climate and health.

- **40% of food produced in the U.S. is sent to landfills**
- **30% of food scraps and yard waste together are thrown away and could be composted instead**
- Compost is organic and maintains microorganisms that can be added to soil to add nutrients and help plants grow
- Composting reduces materials out of landfills and reduce methane which is a greenhouse gas 23x more potent than carbon
- Soil depletion is occurring 18x faster than it is being created in nature
- Only 13 years of landfill capacity remains... compost can help extend the capacity of landfills worldwide

Source: U.S. Environmental Protection Agency (USEPA) & U.S. Department of Agriculture (USDA) Natural Resources Conservation Service

Time is Running Out: the U.S. Landfill Capacity Crisis (<https://nrra.net/sweep/time-is-running-out-the-u-s-landfill-capacity-crisis/>)

OBJECTIVES

1. Differentiate what's compostable and what is not before throwing away all food scraps, yard waste, and various other compostable materials that can be recycled.
2. Recognize how big of an impact one household can make by reducing materials in landfills, reducing methane, and greenhouse gas.
3. Resources to begin your own compost and recycle food scraps are available at SaveTheFood.com and [Composting Food Scraps & Yard Waste | Orange County, NY \(orangecountygov.com\)](http://Composting Food Scraps & Yard Waste | Orange County, NY (orangecountygov.com))

METHODS

The compost tumbler was installed at the Deacon Jack Seymour Food Pantry on August 11th 2023. Every Friday and Saturday for the month of August and September 8 carts full of rotten fruits, vegetables, cardboard, plain paper, paper towels, and other compostable materials have been collected to be composted instead of thrown out. Volunteers at the pantry have been educated on composting and the importance of it as well.

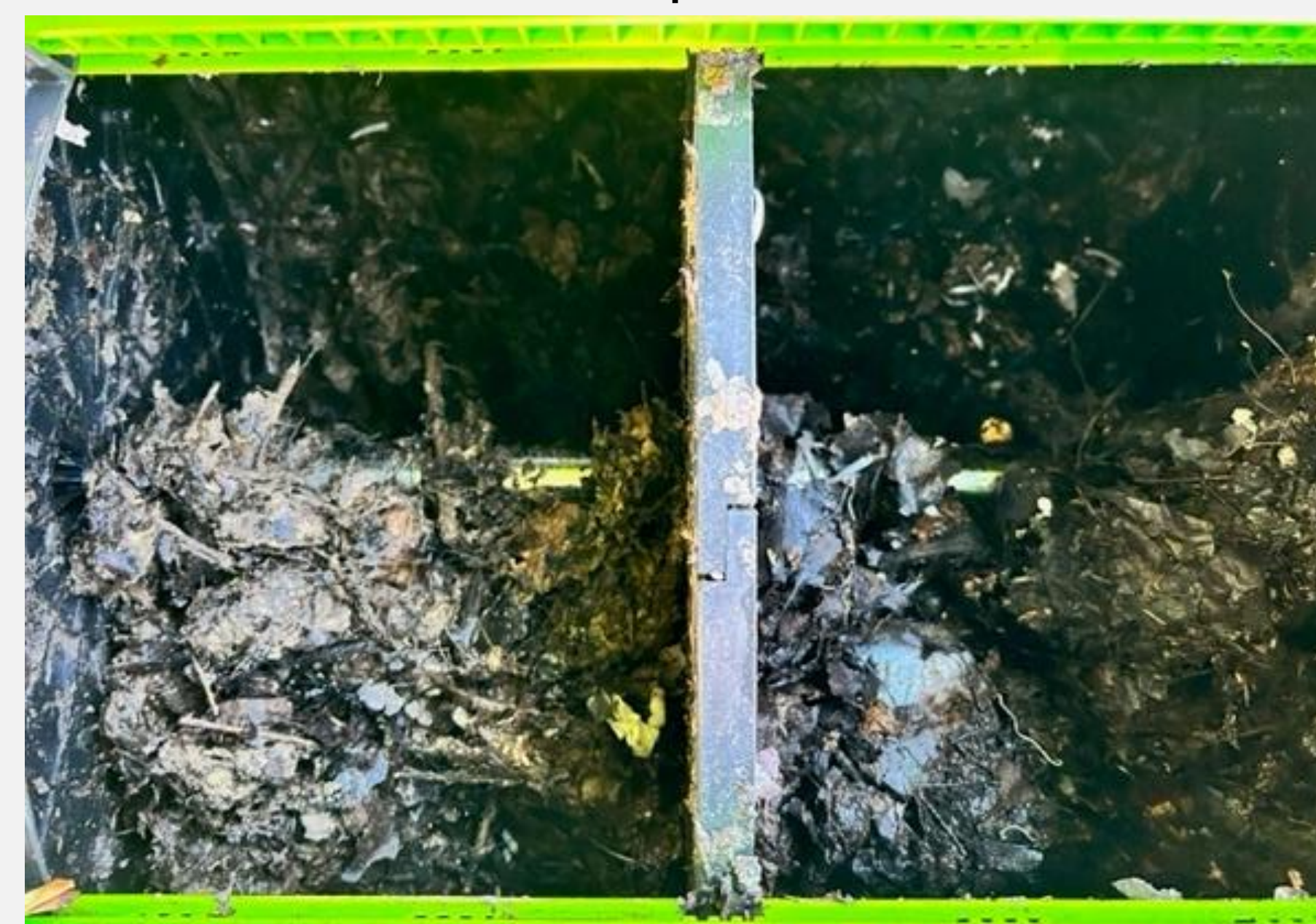
Week 1

Left Side & Right Side of the Composter



Week 12

Left Side & Right Side of the Composter



Collected fruits and vegetables that were rotten upon arrival at the food pantry.

Paper towels, napkins, paper bags that corn was packaged in, and the bottoms of banana boxes were shredded and used in the tumbler as well.

Featured from left to right: Paul Zalanowski, Meg Oakes, Ava Marsich

RESULTS

- Approximately 5.6 cubic yards of compost will be available
- A volunteer stated "I enjoyed taking out the trash without smelly fruits and vegetables weighing down the bags and knowing the food was being recycled"
- Materials including a brochure, flyer, and further resources are available at orangecountygov.com under Composting Food Scraps and Yard Waste to replicate the composting process

BROWNS VS. GREENS

Sources of Carbon

- Dry grass clippings
- Leaves
- Twigs
- Wood chips
- Straw
- Old weeds
- Shredded paper
- Dryer lint
- Shredded brown paper bags

Sources of Nitrogen

- Green grass clippings
- Fruits
- Vegetables
- Eggshells
- Tea bags
- Coffee grinds
- Bread
- Rice
- Pasta
- Fresh weeds

3 parts brown to 1 part green is required for microorganisms to thrive, heat up, and begin to decompose the materials into composted soil. Layer a larger amount of browns compared to greens and make sure to aerate the pile weekly with a pitchfork and water when dry spells occur to maintain an environment for microorganisms to thrive.