

SIERRA CLUB Washington, DC Chapter - ZERO WASTE COMMITTEE

COMMERCIAL COMPOSTING GUIDE

Reduce waste, attract customers, and build a more sustainable future for DC



**SIERRA
CLUB**

WASHINGTON D.C.



Introduction

Composting is the sustainable way to manage food scraps. This Commercial Compost Guide addresses opportunities to compost food scraps at restaurants, offices, schools, and apartment/condo buildings. Food scraps represent the largest portion of recoverable materials in most organizations' waste. Collecting and composting food scraps helps mitigate global warming by reducing greenhouse gas emissions and may save money on waste hauling costs by taking food out of the waste stream. Composting on-site or signing up for commercial compost collection transforms food scraps into a valuable soil amendment for growing food instead of being wasted in a landfill or incinerated.

The DC Chapter of the Sierra Club is proud to present this Commercial Composting Guide. Based upon the experiences of restaurants, offices, and many organizations across DC, the Guide is a toolkit to help you start and grow a successful food scrap compost program at your organization,

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Note on terms

Throughout this report, you will see different terms for what can be composted (e.g., food scraps, food waste, compostable materials, and organic waste). In many cases, these terms are interchangeable. However, some potentially compostable items that are also organic in nature (e.g., paper products) may not be accepted by some compost programs. Additionally, please note that organic material does not refer to “organic” agricultural practices. It merely refers to items that were made from products derived from nature. Lastly, these organic wastes do not include any human or pet waste, as they are not accepted by any commercial compost programs.

This Guide was developed by the Washington, DC Sierra Club Chapter Zero Waste Committee.

I. Introduction

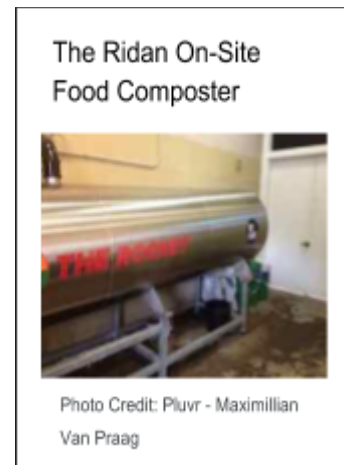
A. Understanding Commercial Composting

Many people have heard of home composting, through which food scraps from our kitchens can be transformed into rich soil for use in landscaping and nourishing our gardens. Composting can be performed on a much larger scale by businesses, ranging from the smallest coffee shops to large offices with hundreds of employees.



Commercial composting refers to large-scale composting designed to handle high volumes of organic waste from businesses and organizations. One approach to commercial composting involves restaurants, grocery stores, offices, apartment/condo buildings, universities, and other organizations sending the food scraps and other compostable waste generated by their business, employees, customers, residents, or students to commercial facilities for processing and reuse. These facilities, in turn, produce compost from the food scraps and sell it to farms and nurseries, municipal landscaping facilities, or individuals.¹ To learn more about the operations of the largest commercial composting facility in the region and how food scraps are turned into compost, visit the website for [Prince George's County Organics Composting Facility](#).

In another primary option for commercial composting involves composting food scraps are composted where they are generated, on-site at the restaurant, office, grocery store, university, and other locations. Establishments can use in-vessel composting systems engineered and designed for on-site composting (such as the one see pictured to the right). There are numerous vendors marketing a variety of these systems. To learn more about in-vessel composting, visit the website for the [EPA Guide on Types of Composting](#).



Today, **commercial composting is serious business**. In the United States, the commercial composting industry brings in over \$3 billion in profits annually.² Businesses that contract with commercial composters may see benefits to their bottom lines, too. Many are able to reduce the size of their trash containers and the frequency of pick-up, lowering the cost of traditional waste removal.³ Businesses also report their composting efforts demonstrate their commitment to sustainability, enhancing their relationships with the growing segment of green-minded customers. For restaurants, composting can help identify inventory and production issues that may lead to less food waste overall.

The **benefits of commercial composting extend far beyond economics**. Large-scale composting benefits society: it reduces greenhouse gas emissions by diverting organic materials from landfills, sequesters carbon better than other forms of soil, improves soil health and structure, increases crops' drought resistance, and reduces the need for added water and pesticides.⁴

¹ Olivia, L. (2016, Dec. 2). *What is Commercial Composting?* Retrieved from <https://medium.com/@compostwindrow1/what-is-commercial-composting-2ec208348b30>

² Royte, E. (2017, Feb. 17) *The Compost King of New York*, retrieved from <https://www.nytimes.com/2017/02/15/magazine/the-compost-king-of-new-york.html>

³ Food Waste Disposal (date unk.) *Benefits of Commercial Composting*. Retrieved from <http://www.wastefwd.com/benefits.html>

⁴ EPA (date unk.) Reducing the Impact of Wasted Food by Feeding the Soil and Composting. Retrieved from <https://www.epa.gov/sustainable-management-food/reducing-impact-wasted-food-feeding-soil-and-composting#benefits>

B. Composting in Washington, DC

The DC government is committed to expanding access to composting resources.

In 2014, the DC Council passed the [Sustainable Solid Waste Management Amendment Act](#). This law requires the District to develop a plan to achieve **80% diversion from landfills and waste-to-energy facilities** and to report on progress towards this goal each year. In pursuit of this goal, the city commissioned a [compost feasibility study](#), which found a growing demand for composting in the city, but a “composting infrastructure that hasn’t kept up,” according to the Washington Post.⁵

Today, DC is working to expand access to composting for its residents by investing in improved composting education and infrastructure. Initiatives include allowing DC residents to drop off their home compost at dozens of farmers’ markets around the city, passing the Home Composting Incentives Amendment Act of 2018 (providing rebates for residents), searching for a location to build a commercial composting facility for the District, and launching the new [Zero Waste DC website](#) to assist DC residents in understanding and accessing resources to reduce their waste footprints. In addition, the District’s Department of Parks and Recreation spurred the creation of more than 50 community compost cooperative sites at community gardens and schools.

A Call to Action for Business Owners

Where do businesses fit into DC’s composting landscape? DC’s compost feasibility study estimated that **DC businesses produce nearly 1.15,000 tons of food and other organic waste** per year. That represents almost **70% of DC’s total organic waste** production. Per DC’s compost feasibility study, “These sectors can provide [an] excellent opportunity for low contamination collection in what is often referred to as ‘back door collection’ or ‘back of house collection,’ referring to collection that occurs in the kitchens of restaurants, schools, colleges and universities.”

Enterprising and civic-minded business owners have a chance to lead the charge in driving DC’s composting efforts forward. Businesses that begin composting programs now will be ahead of the curve, serving as pillars of the community, attracting sustainability-focused clientele, and becoming advisors to the city as it invests in making DC a nation-leading composting locale.

In this report, you will:

- Find guidance for establishing a commercial composting program at your business,
- Explore case studies of other business owners who’ve led the way, and
- Read answers to your peers’ most common questions about the opportunities and challenges associated with composting.

⁵ Stein, P. (2017, Aug. 7). DC wants to give every resident a bin for composting and offer curbside pickup in five years. Retrieved from: https://www.washingtonpost.com/local/dc-wants-to-give-every-resident-a-bin-for-composting-and-offer-curbside-pickup-in-five-years/2017/08/07/ff58086a-7847-11e7-9eac-d56bd5568db8_story.html

II. Answering Your Questions

A. **Why Compost?** The benefits of composting for businesses

Be Green: When food scraps are sent to the landfill or incinerator, their decomposition or combustion generates greenhouse gas and other harmful emissions. Composting not only reduces emissions but also creates a soil amendment to grow more food. Composting contributes to a circular economy - farm to table to farm.

Save Money: While waste handling is often an afterthought for many businesses, hauling costs are not cheap. By separating food scraps from the trash and composting them, your business can reduce the size and frequency of trash collection. In many cases, compost collection and on-site in-vessel composting are less expensive than trash collection.

B. **What can be composted?** Getting down to the nitty gritty

Specific materials accepted vary by compost technology. While industrial compost facilities can handle many more materials than what can be put into a backyard/home compost bin, it is important to verify that the materials accepted by the compost hauler aligns with the needs of the restaurant, company, or organization. The same applies for in-vessel compost systems.

In general, most commercial compost haulers collect the following materials:

All food scraps and food waste. Fruits, veggies, eggs, meat, cheeses, rotten/spoiled food, seeds, and pits.

Limited (check with the individual composter). Fats and oils, food soiled paper, pizza boxes, paper towels, compostable paper products, compostable/PLA plastics (including compostable bin liners), compostable utensils. Where possible, we urge businesses and organizations to provide or use reusable utensils and other food service ware, so compostable food service ware would be a secondary option..

Prohibited items. Pet wastes, diapers, medical waste, non-compostable plastics, glass, metal.

C. **How do I get my team on board?** Getting employees trained and engaged in composting

1. Conduct a waste audit to identify the volume and types of organic waste produced in your business. A waste audit may not be practical for all businesses. *If you know what wastes you generate, go to step 2.*

To conduct a waste audit, a typical day's garbage is separated into a minimum of three categories: 1. organics (compostable materials), 2. recyclable materials, and 3. trash. Larger companies can sort a sample of the waste generated in one day. These three categories may be further divided based on your organization's needs. For example, you may want to separate food scraps from food soiled paper. Place the

materials into buckets or bags so that they can be weighed accurately.⁶ Most waste haulers will provide support to complete a waste audit. It is important to wear proper protection (e.g., gloves and glasses) when handling waste. This is the first step to understanding what is being “wasted” in your business. This is an opportunity to identify opportunities to reduce waste from being generated in the first place (i.e., source reduction) – especially for restaurants.

2. Identify the materials you will use for the compost program. This will require matching your organic waste with the capabilities of a compost hauling company (see suggestions on following pages) or an on-site in-vessel composter solution.
3. Once you identify an organics solution for your facility, schedule a general training for employees. Most area composting businesses provide this service as a part of their contracts. Use this opportunity to gather input on the best places to put compost collection containers (e.g., back-of-the-house for restaurants, office kitchens) and to address employee concerns (such as bugs or odors)

4. Purchase or repurpose existing containers. The most successful programs have color-coded bins (**green for compost, blue for recycling, and grey/black for garbage**). The containers should include clearly labeled signs in appropriate languages with pictures (see image to the right courtesy of the City of Palo Alto, CA Zero Waste Program). Check with your composter to see what bin liners, if any, are acceptable in their program. Note on recycling: Verify whether bagged recyclables are accepted by your commercial recycling hauler.



5. For restaurants, place compost containers close to the kitchen prep stations in the back-of-the-house.

Pro tip 1: For restaurants, use clear containers for food waste in prep areas so that you can monitor for contamination.

Pro tip 2: Consider purchasing front-of-the-house items that can be composted (paper wraps instead of plastic or foil). Many restaurants that have done this have eliminated the front-of-the-house garbage collection and only have compost and recycling containers.

Pro tip 3: Replace single-use disposable items (e.g., plates, cutlery, cups, and mugs) with reusable and durable items whenever possible. This will save your business money on purchasing and disposal costs.

D. What does it cost? The dollars and cents of composting

The costs of composting will vary based on the volume and frequency of collection. Contact the composters listed on the following pages for details on costs. An intentionally managed waste program can divert

⁶ For more information about how to perform a waste audit, visit <http://www.sustain.gatech.edu/sites/default/files/documents/how-to-conduct-a-waste-audit.pdf>

organics from the landfill or incinerator at no extra cost and, in some cases, can lead to cost savings. Composting may also be an affordable way to better mitigate existing pest and odor issues.

E. What can go wrong? Preempting the challenges associated with composting

The material that you will put into the compost container was previously in your trash. You are just moving the food scraps from one container to another. However, it is important to keep your compost containers clean. Consult with a composter on recommended bin liners for compost containers and frequency of collection. The compost should be picked up frequently and containers should be placed away from direct sunlight when possible. If bugs, rats, or odors become an issue, please contact your composter immediately. Compost collection containers should be sized so that they close completely when full.

Regular training for employees is vital to reduce contamination. Post training materials such as posters in multiple languages indicating what is compostable and what is not. Some haulers will not process compost that is contaminated. Since your food scraps will become a soil amendment, keeping it free of contamination is essential.

Work with your compost hauler or in-vessel composter provider or operator to obtain the tools to keep your compost collection operating successfully.

F. How do I get started?

The following pages include a list of commercial compost haulers and in-vessel composters operating in DC. The Sierra Club does not endorse the services provided by these companies; rather, the information provided below is for reference only and is based on interviews of the compost haulers conducted in 2017 and public information from the companies' websites. Please contact the haulers directly for additional detail on accepted materials and pricing.

Commercial Compost Haulers and Composters Operating in Washington, DC

Company Name	Phone	Company Location	Website	Customer Type	Materials Accepted
Bates Trucking	(301) 773-2069 (240) 832-8872	MD	www.batestrucking.com	Restaurants, Offices, Apartments, Special Events	All Food
Compost Cab	(202) 695-2020	DC	www.compostcab.com	Restaurants, Offices, Apartments	Plant-based food only
The Compost Crew	(301) 202-4450	MD	www.compostcrew.com	Hotels, Hospitals, Grocery Stores, Restaurants, Offices, Special Events, Apartments, Condos	All Food, Food Soiled Paper, Paper Towels, Pizza Boxes, Food Oils, Compostable Plastics
EnviRelation	(202) 734-3721	DC	www.envirelation.com	Restaurants, Caterers, Hotels, Markets, Schools, Offices, Hospitals, Health Care Facilities	All Food, Paper and Wax-Coated Cardboard
Institute for Local Self-Reliance	202-898-1610	DC	www.ilsr.org	On-site composting solutions, community composting and training	Varies on need
Loop Closing	(202) 367-6360	DC	www.loopclosing.com	In-vessel systems set-up and operation at the Restaurants, Offices, Not-for-Profits, Schools, Universities, Multi-unit Residences, Museums, Theaters	All Food
Onsite Compost Consulting	(703) 980-0667	MD	www.onsitecompost.com	Onsite composting solutions for institutions such as retreat centers, schools, universities, prisons, places of worship, zoos	All Food
Organic Waste Haulers	(301) 755-9286	MD	www.organicwastehaulers.com	Not specified	All Food, Food Soiled Paper, Paper Towels, Yard Waste
Pluvr	(202) 679 -4227	DC	www.pluvr.com	Restaurants	All Food and Compostable Plastics
Veteran Compost	(888) 932-6676	DC, MD, VA	www.veterancompost.com	Residential, Commercial, Restaurants, Offices, and Special Events	All Food Compostable Plastics and Paper Containers

* Note on the Case Studies: Completed primarily in 2017; some information may have changed since then.

III. Case Studies

<p>A. Large Environmental Non-Profit</p> <p>Organization Type: Non-Profit / Charitable Organization Neighborhood: Downtown, Washington, DC</p>	<p>Contact & Learn More Not Available</p> <p>Compost Hauler Used: n/a</p>
<p>Background: This large, global non-profit has an office in DC which accommodates 1,300-1,500 staff as well as a cafeteria that serves 1,000 meals per day. Waste reduction is a part of the organization’s overall mission, and composting began in their kitchen cafeteria before 2005. More than ten years ago, composting was expanded to compost food left on trays and then to each floor of the building. By 2015, there was at least one compost bin on each floor of the organization.</p>	
<p>What is Composted: This organization currently composts food waste, bones, flowers, cups and plates. They do not compost “compostable” cutlery, as the composter has said that these will not compost. As straws are not recyclable, they have purchased paper straws for the cafeteria. Cashiers keep these at their stations and they are only available upon request. Initially, it was hard to find paper straws, but now because of more awareness, they are easier to find.</p>	
<p>How it Works</p> <ul style="list-style-type: none"> ● Bin locations: There are composting bins located in the cafeteria kitchen, and on each floor of the office section of the building. Compost is emptied daily into a bin behind the office and is picked up three times per week. ● Employee and staff education: The composting program has grown through positive reinforcement, standardized bin colors for various waste streams, signage in elevators and lobby, photos of types of waste above each type of waste stream bin, fliers, meetings, educational emails. The organization also has an active staff sustainability group that staff can join. Facilities staff have provided training to office staff on composting – and recycling. The compost program is advertised in their cafeteria and rental space to increase their customers’ and employees’ awareness of the program. ● Additional stakeholder engagement: The organization has worked with cleaning crews to ensure they know how – and are able and willing – to handle the compost, and have made sure that bins aren’t too heavy for cleaning crews to lift. The organization works with catering companies to ensure composting and recycling service and plastic bottles are not used. ● Measuring success: The organization measures all waste streams. “Success” is measured by monitoring the office’s diversion rate (recognizing that the diversion rate also includes the recycling). 	
<p>Challenges & Solutions</p> <ul style="list-style-type: none"> ● User education: Using the right bins has been essential to the success of the program. The organization has learned to standardize the color and signage of their various waste streams (green is compost, blue is paper, etc.) to help employees and customers visiting their cafeteria know which bins to use. ● Cost of bins: The cost of bins was initially a concern for the organization. It was very happy to find aesthetic bins that can evolve as a company’s recycling/composting program changes, thereby avoiding the expense of buying new bins every time the waste stream changes. ● Vermin: The organization experienced some problems with insects inside the building and rats on the loading dock, but ameliorated this problem by removing compost from each floor daily and hauling it away from the loading dock three times per week. Plastic compost bins from each floor are hosed out daily. 	
<p>Takeaways: Providing clear and consistent signage ensures employees, clients, and customers know what goes where. Bins can incur additional cost, but buying bins that can evolve as recycling and composting programs change help offset the price.</p>	

<p>B. World Wildlife Fund</p> <p>Organization Type: Large, Global Non-Profit Neighborhood: West End, Washington, DC</p>	<p>Contact & Learn More: n/a</p> <p>Compost Hauler Used: Veteran Compost</p>
<p>Background: The World Wildlife Fund (WWF) US began their composting program in 2009 with coffee grounds. These grounds were picked up weekly by a Community Supported Agriculture (CSA) program that delivered vegetable shares to the office. In 2011, WWF contracted with Veteran Compost and the compost program was expanded to all foodstuffs. WWF took on the composting program due to staff interest and a feeling that the program was in line with the organization’s mission. WWF US owns their building in DC’s West End neighborhood. While the composting program was originally available only to WWF offices, the program is now available to all clients in the building.</p>	
<p>What is Composted: WWF, through Veteran Compost, composts food waste, bones and flowers. They do not compost cutlery, plates, and cups.</p>	
<p>How It Works</p> <ul style="list-style-type: none"> ● When it’s collected: Compostables are collected in approximately 7-gallon covered plastic bins located in each of WWF’s nine kitchens. Compost is collected weekly by Veteran Compost directly from the bins in the kitchen. There is no holding area for the compost other than the bins in each kitchen. ● Employee education: Staff have been educated about the composting program through emails, staff meetings, and other special meetings. There is also information about the program on the WWF intranet site. The program was very easy to implement and staff have been very receptive to the program. ● Measuring success: Progress is measured by weighing WWF’s waste diversion rate (the amount of refuse diverted from the landfill). WWF advertises the existence of the composting program on advertising material for office space rental. 	
<p>Challenges & Solutions</p> <ul style="list-style-type: none"> ● Vermin: There have been some pest infestation problems caused by staff not affixing the lids firmly on the compost bins. The problem has been addressed by applying insecticide and sending staff reminders about the importance of ensuring that the lids are firmly affixed to the bin. ● Contamination: People (understandably) want to compost compostable cutlery, plates and cups, but Veteran Compost does not accept all of this material. These items fill up the bin, causing them to overflow by week’s end. 	
<p>Benefits: The program was very easy to implement and staff have been very receptive to the program. Providing ongoing education/reminders to staff helps ensure success of the program.</p>	

C. United Therapeutics

Contact & Learn More:

Sustainability Lead Dapo Awe

Neighborhood: Downtown Silver Spring, MD

Organization Type: Large Global Business

Compost Hauler Used: Veteran Compost

Background: United Therapeutics is a biopharmaceutical company operating globally with its world headquarters located just outside Washington, DC in Silver Spring, MD. The company's CEO, Martine Aliana Rothblatt, has always believed in sustainability and has encouraged the organization to pioneer efforts in creating a more earth-friendly office environment. Sustainability Lead Dapo Awe began efforts to recycle organics at the headquarters location by initiating a compost program in 2014 at their employee campus café. This included buy-in not just from management, but also from the onsite food service vendor who operated the café. This initial pilot began with behind-the-counter compost and then expanded in 2017 to include all the office kitchenettes. United Therapeutics' zero waste efforts go beyond food composting to providing compostable cutlery, coffee pod recycling, light bulb recycling, Terracycling of office electronics (nearly 10,000 lbs. were recycled in 2016) and desk-operated surge protectors to reduce idle electricity use.

What is Composted: All food organics and compostable cutlery are composted onsite in the café and all the kitchenettes. In addition, old plants are also composted.

How it Works

- **How it's collected:** Throughout its campus, United Therapeutics has installed 3-bin units to collect organics, recyclables and landfill waste. Each unit includes graphics and instructional language to aid in ensuring participation and reduce the risk of contamination for organics collection.
- **Employee education:** Employees are trained to separate organics properly, helped in part due to lunch-and-learn sessions hosted by its sustainability lead. Management has also invested in signage throughout the campus as to assist in education as well as to assist the behavioral change needed for employees to participate.
- **Additional stakeholder engagement:** The effort has included training its contractor cleaning service crew to ensure that the organics collection bins are lined with the special compostable liners and that full bins are taken to the special loading dock area for compost pickup. Each evening the cleaning crew places the full bins in the service bay and replaces the liners. Veteran Compost picks up organics on a weekly basis from the loading dock area.
- **Measuring Success:** Veteran Compost provides metrics to United Therapeutics on the volume of compost, which has reached 1,000 lbs./ month. Combined with reports from their landfill and recycling collection service, United Therapeutics can measure its compost program success.

Challenges & Solutions

Cleanliness: As a healthcare company, United Therapeutics is required to keep its operating locations extremely clean in line with FDA requirements. It was especially critical that their composting system eliminate any chance of rodents. Veteran Compost provided lockable canisters for the loading dock to assist with this issue.

Benefits and Reflections: The slow evolution of the compost program from the behind-the-counter café pilot to its more widespread application has reduced challenges significantly. Employee education and contractor training has been an important part of United's composting strategy, and United has been surprised and thrilled to see so much positivity from staff in response to the program.

D. Glen's Garden Market

Contact & Learn More: www.glensgardenmarket.com

Neighborhood: Downtown Washington, DC
Organization Type: Small, Locally-Owned
Grocery Store

Compost Hauler Used: Organic Waste Haulers

Background: Glen's Garden Market, a local grocer that showcases produce, beer, wine, cheese, charcuterie, meat and groceries from the states of the Chesapeake Bay Watershed, has made "zero waste" a core principle since it was founded. A woman-owned and women-run store located in Dupont Circle, Glen's has always believed in the importance of creating a positive impact on the community it serves—which includes being mindful of waste and the environment. That means Glen's closely monitors its ordering to avoid throwing food away, and sends food that's tasty but not pretty (like older or bruised produce) to its kitchen to be used in prepared food. Glen's has implemented sourcing standards to ensure the vendors it partners with treat their animals, land, and workforce with respect. Glen's has partnered with the Chesapeake Conservancy to create an annual program to plant trees along the banks of the Chesapeake Bay to absorb carbon dioxide and mitigate non-point-source pollution. It comes as no surprise that Glen's sees composting as core to its mission of achieving zero waste. In addition to making composting available to customers in the store, Glen's allows members of the community to bring in compostable items from home as part of its community compost program.

What is Composted: In addition to food scraps, Glen's composts most of the items they provide customers to consume their food, including polylactic acid (PLA) cups and lids, paper plates, paper soup cups and bowls, napkins, wax paper, scrap paper, and scrap cardboard. Glen's took a phased approach to introducing composting for some of these categories, enabling store leaders and staff to absorb lessons learned before adding new items.

How it Works

- **When it started:** Glen's began composting as soon as it opened in April 2013.
- **How it's collected:** Glen's has three bins in its store: one for compost, one for recycling, and one for the landfill-bound trash. The store uses pictures above their bins to help customers identify which waste should go where. At the end of each night, staff brings the compostable bags to bins located about 100 feet outside the store's backdoors. Staff must go outside but not up and down stairs. The bins are serviced three times per week.
- **Staff education:** Glen's leadership team has found the staff's enthusiasm for and rapidly-acquired understanding of composting to be among the most surprising elements of their composting program.

Challenges & Solutions:

- **Vermin:** Early in its composting experience, Glen's experienced a challenge sometimes associated with composting: rodents. Glen's quickly resolved the problem by using traps, asking the building's management to hose down the waste storage rooms, adding an additional bin to avoid food overflow, and ensuring each bin was securely closed at the end of the night.

Future plans: In the future, Glen's may expand its composting program to include compostable cutlery and utensils and hopes to make composting a bigger part of its image. They also plan to conduct a training for staff at the front and back of the store that includes composting, recycling, and waste reduction and intend to implement solutions such as clearer signage to make the system more user friendly and drastically reduce contamination.



<p>E. Locally-Owned Coffee Shop</p> <p>Neighborhood: Multiple Locations across DC</p> <p>Organization Type: Locally-Owned Coffee Shop</p>	<p>Contact & Learn More: n/a</p> <p>Compost Hauler Used: n/a</p>
<p>Background: This locally-owned coffee shop opened its doors in Washington, DC nearly a decade ago. In its first year of operation, the shop contracted a local compost hauler and began composting coffee grounds and old pastries. The shop now operates three locations in Washington, DC, two of which share the same composter while a third, in a separate part of the city, uses a different service. The shop has done business with the same compost haulers for the 9 years they have been in operation.</p>	
<p>What's composted: Each of the coffee shop's three locations currently compost coffee grounds, old pastries, coffee cups, compostable cutlery, and compostable straws.</p>	
<p>How it Works</p> <ul style="list-style-type: none"> ● How it's collected: Each coffee shop has a waste station with three streams: compost, recycling, and landfill trash. Each waste station comprises three compost cans, one recycling can, and one trash can, all of which are stored behind the counter. Organic waste is collected in designated bins provided by a local compost hauler and picked up curbside 3 times a week. Similarly, trash and recycling are picked up curbside two times a week. Baristas and other coffee shop staff are responsible for transferring organic waste from the kitchen bins to the outdoor collection bins and taking these outdoor bins to the curb throughout the week for pickup. ● Customer education: Instructional signage and labels on collection bins help customers identify what they can compost. All staff receive compost training on their first day of work, enabling them to identify the few items provided by the coffee shop which <i>cannot</i> be composted, as most products the coffee shop uses are compostable. ● Measuring success: The coffee shop measures progress in its composting program by celebrating changes to the products it purchases, including switching away from disposable products and opting for compostable cups, straws, and cutlery. The shop's long-term goal is to identify alternatives for all products /packaging that they bring into their stores. 	

<p>F. SuperFd Neighborhood: Catering kitchen in DC and a café in Virginia which serves food from the kitchen Organization Type: Locally-Owned Catering Company</p>	<p>Contact & Learn More: n/a Compost Hauler Used: Veteran Compost</p>
<p>Background: Super Fd Catering, headed by CEO and Executive Chef Robert “Robbie” Wood, is the leading provider for professional sports teams and anyone in the pursuit of health and well-being through nutrient-dense meals. Robbie’s philosophy about food and business includes a triple bottom line with the community and a longtime dedication to farm-to-table freshness (since well before farm-to-table was a household term). SuperFd is becoming well known for its clients which include major DC sports teams such as the Washington Capitals, the Wizards and the Nationals who all count on SuperFd’s dedication to source nutritious ingredients from local farms and prepare healthy meals. Less known is that since June 2016 SuperFd is also donating any leftovers from catering to a local food bank as well as composting any unusable food scraps that would normally end up in a landfill.</p>	
<p>What is Composted: As part of their dedication towards zero waste, SuperFd has been working with local organics hauler Veteran Compost, which has been picking up their food scraps once a week. These food scraps are then carted back weekly to be recycled into compost at Veteran Compost’s facility in Fairfax, VA.</p>	
<p>How it Works</p> <ul style="list-style-type: none"> ● How it’s collected: Veteran Compost provides SuperFd with a set of green, sealable plastic bins along with compostable liners. One container remains in the kitchen prep area and the staff moves the full container over to the bay area just outside the kitchen where it is picked up. ● Employee education: SuperFd’s staff has taken to this whole process “actually quite well,” says Robbie. Signs are posted in kitchen prep areas as well as the bay where the organics and other waste is picked up. It’s always great to hear peer reinforcement in the kitchen, as one staff member reminds another about what to compost, recycle, or trash. 	
<p>Challenges</p> <ul style="list-style-type: none"> ● Forecasting: Occasionally, there’s a larger quantity of organic waste than usual. When this occurs, SuperFd makes a quick call to Veteran Compost to request an additional bin or pickup. During summer months, SuperFd will sometimes store their leftover scraps of meat in the refrigerator until it’s closer to pickup time to make sure the meat doesn’t start decomposing in the bin and cause a nuisance. Contrary to popular belief, SuperFd, like many other businesses in the District who compost, has not experienced any issues with odor or rodents. 	
<p>Benefits: Composting food organic waste is all part of SuperFd’s vision and branding to its clients, and it hopes to expand efforts to position itself as a sustainable leader in the market.</p>	

<p>G. Howard University</p> <p>Organization Type: University Neighborhood: Shaw</p> <p>Composting next to the West Tower dormitory 2255 Sherman Ave NW</p>	<p>Contact & Learn More Howard University Office of Sustainability</p> <p>Composter Used Loop Closing provides turnkey operations using the Ridan in-vessel composter</p>
<p>Background: To understand in-vessel composting, decision makers need to see (and smell) for themselves how they operate to appreciate the feasibility. Hence, ILSR, DPR, Howard University, Compost Cab, Pluvr, and Loop Closing partnered to implement a demonstration site for in-vessel composting systems at Howard University.</p>	
<p>What is Composted: Food waste from Howard students and staff and the neighborhood residents and businesses augmented by deliveries from Compost Cab and Pluvr. It's mostly plant-derived food scraps but animal-derived food scraps have also been successfully incorporated. A small local coffee shop and a bar composted their food waste at the site.</p>	
<p>How it Works: Food waste is mixed with wood chips and placed into a Ridan in-vessel composter (size large). The material is added and manually turned daily to weekly. After about two weeks the processed material exits the other end of the composter. This compost material is no longer recognizable as food, but still needs 1 to 3 months to cure to be mature stable finished compost.</p>	
<p>Challenges & Solutions</p> <ul style="list-style-type: none">● Cost: The initial capital cost of \$6,000 was split among project partners.● Limits: We pushed the limits of the composting system to see how much it can really compost. We learned that at up to 80% of the stated capacity the system operated well. Above that, the material didn't compost as well as needed and we succeeded in breaking the composter. We learned that it was easy to field service and get it operating again.	
<p>Benefits: Operating costs of the on-site in-vessel composter are reduced by avoiding the weekly hauling costs to the centralized composting facility in Prince George's County. Existing rat pressures in the area have been greatly mitigated after starting the composting project and there are no complaints of smells.</p>	

<p>H. Rhapsody Condominium</p> <p>Organization Type: Multi-unit residence Neighborhood: Shaw</p>	<p>Contact & Learn More 2120 Vermont Avenue, NW Washington, DC 20001 (202) 506-1607 omar@tnwlc.com www.rhapsodycondo.com</p> <p>Composter Used Vermicomposting (worm composting) in the basement stairwell landing and garage</p>
<p>Background: 165-unit residential building</p>	
<p>What is Composted: Plant-derived food waste, adding animal-derived food waste in the next phase.</p>	
<p>How it Works: Residents bring food scraps to the trash/recycling room and place them in the provided organics containers, (5-gallon buckets). Staff chops the food into smaller pieces to optimize the composting process and removes any contaminants present. The food is mixed with newspaper and fed to the worm bins located in the basement stairwell. The next phase includes pre-composting the food waste in the garage and roof deck in hot composting systems to include animal-derived food waste and then cure and finish the compost by feeding it to the worm bins, making higher value end product and faster.</p>	
<p>Challenges & Solutions</p> <ul style="list-style-type: none">● Neighbor concerns: Residents were concerned that composting the food scraps in the building would cause pest and odor problems. Educated the residents that this is not the case, showing the existing worm composting bins that have been operating as a pilot for 3 years. Bringing a functioning worm bin to the board meetings to see helped allay concerns and approve scaling for the entire building.	
<p>Benefits: Feasibility demonstrated. Board approved scaling for collecting food scraps building wide. Anticipate that removing the food waste from the landfill-bound waste will reduce the cleaning cost by the janitorial staff in the trash shoot and trash/recycle room and reduce the pest control costs there.</p>	

I. New Deal Cafe

Organization Type: Cooperative Restaurant
Neighborhood: Greenbelt, MD

Contact & Learn More

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Background: The New Deal Cafe is a restaurant and popular music venue, serving craft beer and recently serving vegan food. The New Deal Cafe was named in honor of the Works Program Administration (WPA), a part of Franklin D. Roosevelt's depression era "New Deal", which built the City of Greenbelt. For more than 5 years, volunteers who are members and friends of the Cafe have been collecting and recycling organics from the restaurant. For more than 2 years, all kitchen food waste has been recycled either locally through community composting or at ECO City Farm in Bladensburg, MD. Since March, 2018, three vermicompost "Wigwams" (wormwigwam.com) have been composting food waste on the loading dock of the restaurant. With cooperation from the Cafe Board of Directors and kitchen staff, volunteers collect the food waste in 5 gallon buckets almost daily.

What is Composted? Pre-consumer (from the kitchen) food waste is collected for composting. Post-consumer food waste, napkins, or cardboard based items are not included.

How does it work? Kitchen scraps are collected by volunteers daily (approx one full 5-gallon buckets per day). Some of the food waste is stored (in sealed 5-gallon buckets) for later use in the garage of a volunteer, some is "pre-composted", and some is fed directly to the worms. "Browns" are also added to the worm bins in the form of shredded leaves, shredded paper, and shredded and unshredded cardboard.

Challenges & Solutions:

- **High temperatures during the summer:** The location of the Wigwams is not ideal because even though it is covered, it is in a sunny location on the west side of the building. The worms inside the wigwams are sensitive to temperatures above 85 deg F. Not only do they not thrive, but they may start to evacuate the bin if the conditions are not good. The location is highly visible, next to the main parking lot where people enter. For this reason the "stakes are high". Our emergency solution during summer 2018 was to put ice packs into the wigwams every day, and we did manage the bins so that composting continued and so that there were no emergencies. However, this solution is not sustainable and we are looking for a different nearby location for the 3 wigwams. An ideal location would be in a commercial basement.
- **High Volunteer Commitment:** We are a team of about 8 volunteers who live nearby and who can check on and feed the worms regularly. Some members of our team over extended themselves last summer and we all agree that this location is not sustainable. We have been successful at recruiting and training new volunteers.

Takeaways: We have no problem getting kitchen staff on board for separating food waste for composting. The kitchen contractor and the Board of Directors supports this project as long as we don't have problems. We have dedicated volunteers.

Benefits: We have diverted between 3000-3500 pounds of food waste from the landfill since March, 2018. We expect to regularly produce worm castings (vermicompost) in the spring. The dumpsters and indoor trash cans are not as dirty or smelly as they would be if food waste were included. We have learned a lot about vermicomposting and we have been successful. Our next step is to learn more about harvesting, storing, and using the worm castings (vermicompost), and some members may be interested in starting a vermicompost business.

J. Farmers Restaurant Group

Organization Type: Large restaurant group with 8 DMV restaurants

Contact & Learn More

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Compost Hauler Used: multiple

Background: The Farmers Restaurant Group (FRG) story began in 2005 when the members of North Dakota Farmers Union ([NDFU](#)) began looking for ways to bring their products directly to consumers. NDFU soon partnered with two of Washington, DC's most dynamic and passionate restaurateurs, Michael Vucurevich and Dan Simons of VSAG, and with that FRG opened the first of their successful restaurants, Founding Farmers DC in 2008. Composting is part of their sustainability program at all 8 restaurants, with tailored solutions to match each location's constraints and needs.

What is Composted: All back of house food scraps and front of house food that returns to the dish pit.

How it Works: Kitchen scraps are collected in clear buckets and bins at each prep station and on the line. The clear buckets also serves the purpose of auditing the kitchen for usable ingredients being thrown away. When full, the food scraps (along with front of house food) are consolidated into 35-gallon rolling carts that have a compostable can liner. When these are full, the kitchen staff rolls the carts out of the restaurant to the building's common trash room and brings replacement carts.

Challenges & Solutions:

- **Cost:** Trash service fees for non-stand alone restaurants are often based on the restaurant's square footage, not direct usage. While composting is a net cost, FRG has been able to offset some of that by renegotiating their trash fee, which is part of the Common Area Maintenance (CAM) fees from each location's property manager. One location installed a digester called 'The Pig' from BioHiTech. The Pig fits in the restaurant's trash room and leases for \$400-500/month plus \$500 for a one-time retrofit.
- **Scale:** The Farmers & Distillers location fills 18 carts 3 times per week. With this volume of material, missed pickups can cause a serious problem. One strategy that FRG has employed to counteract irregular pickups is to negotiate refrigerated storage on the loading dock or in the trash room into their lease. This allows restaurants to keep compost for longer periods of time without creating nuisances from smell or rodents.

Takeaways: Making it easy for staff is the most important part of FRG's success. This includes ensuring that rolling carts are always used instead of "slim jim" waste bins; preventing bins from being overfilled; and avoiding situations where staff has to lift and remove a full compostable can liner that is at risk of tearing. Food scraps are mostly water weight and are one of the heaviest things that kitchen staff has to regularly move.

Benefits: Composting and sustainability is a key part of FRG's brand.



www.sierraclub.org/dc/zero-waste/compost

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