

# COMPLETE GUIDE TO



In Support of the City of Newburyport



Developed by ACES (Alliance of Climate and Environmental Stewards)



Aces Website: <https://www.aces-alliance.org>

## RESOURCES FOR COMPOSTING MADE EASY:

Program Description, Frequently Asked Questions and References.

# Why Composting in Newburyport is Important

*“One of our most significant challenges for society and our community is disposing of the ever-increasing volume of waste of all forms. As you may be aware, organic waste from the production of foods, as well as, from our tables and kitchens is adding to the weight of our trash and disposal costs. Composting this organic waste not only reduces costs but also reduces methane emissions and enhances soils, water retention and provides carbon sequestration. We thank the current residents who are already composting and encourage all others to review this guide and make a decision to participate in the "COMPOST for a Healthier Newburyport" program in the way that works best for you and your family.”*

Molly Ettenborough, Recycling and Energy Manager, Newburyport



Waste disposal presents an increasingly difficult and costly problem for municipalities.

- Landfills are full and closing, and incinerators are near 100% capacity.
- There is a state moratorium on building additional incinerators.
- Some Massachusetts waste is being shipped out of state; and
- Municipalities face rapidly rising and uncontrolled costs for disposal, collection and hauling.



Organic waste is estimated to account for 25-50% of the weight of solid waste and presents an opportunity to divert significant tonnage out of the trash and recycling waste streams. Accordingly, at the prompting of the City Council and in support of the City's Toward Zero Waste program, the Alliance of Climate and Environmental Stewards (ACES) established a project team to develop this plan for increasing composting in Newburyport.



## Newburyport composting practices today

Currently almost 600 Newburyport households subscribe to Black Earth’s curbside composting service. Additionally, A new composting firm, MONA, has recently begun operations in the city. A number of residents also drop off compostable waste at a designated location in the city, and about 100 Earth Machines (composting bins) have been purchased from the City. There are an unknown number of people practicing backyard composting through means other than Earth Machines.



A recent survey of Newburyport residents indicates an interest to increase knowledge about composting and awareness of composting. Survey results also show a willingness among non-composters to pay for a curbside composting service.

We believe by working with current composters across the City, we can encourage others to join this endeavor. We plan to launch an education and awareness campaign targeting Newburyport residents, as well as businesses and non-profits serviced per the City’s waste disposal contract.

## Goals for increasing composting in Newburyport

- **Vision 2030:** Composting will be widely practiced among all residents, non-profits, businesses and public entities across Newburyport.
- **Phase One Goal:** At least 900 residential households, nonprofits, and businesses on the City waste disposal contract will regularly practice composting.
  - This will be achieved via the roll out of an education and awareness campaign, to include non-profits and churches who provide meal services.
  - We will evaluate the results of the campaign by May 2021 in preparation for Phase Two.
- **Phase Two Goal:** To support the City Council, Mayor and relevant city departments in collaborating to develop policies designed to further incentivize composting among residential, public, non-profit and commercial entities.

## Program Resources

Recognizing the significant budgetary issues faced at the local, state and federal level due to Covid-19, the campaign will be run at minimal cost, relying on volunteers and with any funding needs secured through available state grants.

# Composting in Newburyport: Frequently Asked Questions

## 1. Why compost at all?

Composting can significantly reduce the volume of disposable trash other than recycling, therefore having a significant impact on overall disposal costs. Composting reduces strong greenhouse methane gas emissions (compared to landfilling) and puts carbon in the soil as humus, a rich nutrient-filled material.



## 2. How can I compost in Newburyport?

There are at least three ways (others can be found online).

- a. **CURBSIDE PICK UP SERVICE** Black Earth Compost - <https://blackearthcompost.com/composting-guide-and-faq/> - the subscribed curbside program you see around the city. Composting this way allows all food, including meat, cheese and bones, but you would not be making your own compost. The cost for this weekly pickup program is \$1.89/month. A citywide program to increase subscriptions may lower the cost of curbside service in the future. Most people use a 13-gallon latched bin (13" w x 13" l x 27" h) with locking lid and wheels available from Black Earth for \$24.00 with biodegradable bag inserts. Many find a second 3-gallon size kitchen countertop container convenient. A benefit of this program is you have the option of receiving a free bag of Black Earth compost annually for your garden.



Figure 1. a. 13-gallon curbside compost bin b. 3-gallon kitchen counter composting container with liner.  
c. Earth Machine for backyard composting

- b. **BACKYARD** The Earth Machine is a durable backyard compost bin designed to compost food and yard waste. It will produce an all-natural soil conditioner, which provides gardens with much needed nutrients, while helping to retain moisture in the soil. Typically, it has an 80-gallon storage capacity, has a twist locking lid and is easy to maintain. Of course, it produces larger amounts of compost material for your garden. Earth machines may be purchased by residents of Newburyport at the Yard Waste Facility at a subsidized rate. <https://blackearthcompost.com/composting-guide-and-faq/>
- c. **FREE DROP-OFF** A third composting option is similar to option a. except that instead of curbside pickup, when your compost container is full, you can drop its contents off at a free compost collection bin located at 115 Water Street, the Newburyport Waste Water Treatment Facility. Phase Two will include an evaluation of additional drop off sites.

**3. Isn't composting smelly?**

Does your kitchen trash bin smell? Now consider removing all organic matter including spoiled food, leftovers, coffee filters, meat, bones, dairy, lobster shells, soiled pizza boxes, paper towels, napkins and certified compostable service ware from that kitchen trash. They can be put in a countertop compost container on your kitchen counter and then in an outdoor composting bin. Composting bins have locking lids with tight seals that trap any smells inside (see pictures of the bins in Fig.1 and p.3). Compare this to your kitchen trash bin which only has a top that overlaps the sides of the bin and you will realize that putting your compostable food in compost containers and removing it from the kitchen more frequently will actually *reduce* unwanted kitchen odors. In a recent [Newburyport survey](#), composters indicated odor was not an issue.



**4. Isn't composting a health hazard attracting wild animals?**

No. As described above, the sealable design of the compost bins' lids reduces odor, so there is no smell that would attract animals. Users of curbside composting have not reported animals breaking into their composting bins, as animals might when attracted to food waste in standard trash cans.



**5. What about recycling? Doesn't that help?**

Yes, but not enough. Recycling helps protect the environment and conserves natural resources. Recycling also saves energy, creates jobs, and creates new demand. The City and its residents are required by State Law to recycle, as there are more than a dozen waste bans that bar residents from disposing of paper, many plastics, cardboard and other material in the trash (<https://www.mass.gov/service-details/waste-recycling-laws-rules>). However, at present *we are paying for recycling*. The end materials may be purchased, but prices vary depending on the global market.



## 6. What constitutes much of our food waste?

In the U.S., an amazing 30-40% of our food is thrown out! Natural byproducts of eating include peelings, cores, spoiled food, bones and leftovers. Natural food waste and



related materials are the heaviest part of our garbage, accounting for between 25-50% of the weight. Food waste usually ends up in one of two places: a landfill where it produces methane, which is 100X more warming to our atmosphere than carbon dioxide, or an incinerator where the heat has to be cranked way up for it to burn, a process which uses more energy and emits gases.

## 7. How do we know composting would work here in Newburyport?

From 2015 to 2017, the City ran a curbside composting pilot in partnership with Black Earth Compost. Approximately 429 households participated over the course of the pilot, receiving free curbside composting pick up during this period. Based on both quantitative and qualitative feedback from participants, the program was a resounding success. Residents loved participating, felt good about their efforts, noted a drastic decrease in their trash volume and weight, and wanted to continue with the program. Most felt it should be mandatory and integrated with city trash and recycling collection services. Two key findings from periodic surveys to the pilot group found that nearly 30% of the group decreased the volume of their trash output by 50% or more by participating in the program. An additional 44% of the group reported at least a 20% decrease in trash. About 600 households now subscribe to this curbside service. Our goal is to substantially increase the number of subscribers.

## PERSPECTIVES OF [ACES YOUTH CORPS](#) MEMBERS

**Sam Cooper:** Not only does composting teach younger generations to be thoughtful when disposing of waste, it also forces us to learn a crucial lesson we encounter everyday: accountability. While composting waste is beneficial unto itself, we more importantly learn responsibility and honesty which carry over into other aspects of life.

**Sophie Burns:** Composting is a very important practice because it will allow younger generations to actually have a future. Food waste results in 8% of all global greenhouse gas emissions, so deferring that food waste to a facility that can successfully break it down without creating harmful emissions will help diminish the effects of climate change. Everybody needs to compost because even the smallest action can make such a big difference

## Additional resources:

### MOTIVATION:

Food waste including methane output (worse than CO<sub>2</sub>) and overlooked upstream food preparation, growth and delivery impacts: <https://moveforhunger.org/the-environmental-impact-of-food-waste>  
<https://www.recyclenow.com/reduce-waste/composting/why-compost>  
<https://www.mass.gov/doc/teaching-residents-about-composting-outline-talking-points/download>  
<https://www.epa.gov/recycle/composting-home>  
<http://realestate.boston.com/news/2019/04/17/push-curbside-composting-programs/>  
<https://www.recyclenow.com/reduce-waste/composting/why-compost>

### STUDIES:

MA Gov't Info - <https://www.mass.gov/composting-organics>  
MA Solid Waste Plan – <https://www.mass.gov/files/documents/2016/08/nw/swmp13f.pdf>

### GENERAL RESOURCES:

BIOCYCLE - <https://www.biocycle.net/biocycle/>  
Biodegradable Products Institute: <https://www.bpiworld.org/page-190309>  
NY State Programs: <https://www.dec.ny.gov/chemical/98069.html>  
Port Washington, NY <https://www.howgreenismytown.org/municipal-composting-facilities#>  
[GROWING LOCAL FERTILITY: A GUIDE TO COMMUNITY COMPOSTING](#)  
Sam and Summer's favorites:  
[https://docs.google.com/document/d/13eAvQeY8mYbavNeJu0BAnSWB7W1t3RVfO97EYLJ\\_Q5Q/edit](https://docs.google.com/document/d/13eAvQeY8mYbavNeJu0BAnSWB7W1t3RVfO97EYLJ_Q5Q/edit)  
Newbury-based MONA Environmental LLC : <https://www.monaenvironmental.com/>

### ARTICLES:

Boston's Plans to Expand Composting: <https://www.bostonherald.com/2019/06/19/boston-plans-expansion-of-composting-and-recycling-programs/>  
Boston's new rules (2014): <https://www.bostonglobe.com/magazine/2014/09/25/massachusetts-new-composting-rules-what-they-really-mean/SM9KF0Rw7I1Gq8KZTx5dL/story.html>

### PLANS:

Maine's Program: [https://www.maine.gov/dacf/php/nutrient\\_management/compost.shtml](https://www.maine.gov/dacf/php/nutrient_management/compost.shtml)  
Building a Composting Bin: <https://www.practicallyfunctional.com/how-to-build-a-diy-compost-bin/>  
Writing a Plan – The Green Team <https://www.thegreenteam.org/wp-content/uploads/2012/08/Compost-Lesson-Plan-2012.pdf>  
<https://www.nysar3.org/page/nys-organics-summit-100.html>

Program developed by the Alliance of Climate and Environmental Stewardship  
to support of the City of Newburyport and its Toward Zero Waste Program  
Please send any questions to [acesnewburyport@gmail.com](mailto:acesnewburyport@gmail.com)

ACES WEB SITE: <https://www.aces-alliance.org>