

From Me to We: Beyond the Backyard Fence

Discarding food waste in landfills contributes significantly to the production of methane. Landfills account for more than 20 percent of all methane emissions in the U.S. Methane is third in abundance behind water vapor and carbon dioxide among the greenhouse gases, however it is considerably more potent. It has 21 times the global warming potential of carbon dioxide (EPA).

There are two principal means of reducing the effect of methane gas generated by food waste: pump it or prevent it. The gas may be tapped and pumped directly to locations where it is used for energy production. Although this has “green” energy benefits because fossil fuels are not being consumed, it is ultimately treating the “symptom” of the methane as a by-product. On the other hand, composting organics that might otherwise go to a landfill, results in a net removal of the materials which generate greenhouse gases. (Curbside composting)

There is another benefit to composting food and yard waste. Composting on a large scale produces materials which can be distributed or sold to farmers for soil amendment. According to the Environmental Protection Agency, soil amendment increases drought resistance, improves soil structure, and reduces the need for additional water and fertilizer. The healthier the soil, the more likely people are to benefit from fruits and vegetables produced by local farmers.

In order for there to be significant changes in the amount of organic waste sent to landfills, the practice of composting those materials must be approached on a global scale. Public education on the methods and means of composting, increases people’s awareness and results in more and more backyard composting. However, businesses and apartment buildings generate an enormous quantity of waste that is often sent to the landfill through lack of an organized means of recycling it. It is important that communities and municipalities incorporate reduction of organic waste into their plans for the future.

Many individuals are supportive of the environmental and health issues addressed by composting over discarding organic waste, but often there are reasons why home composting is not practical or acceptable for some of these individuals. These reasons include: aversion to insects attracted to an active compost pile; rodent problems common to dense urban neighborhoods; concern about odors; unwillingness to put in the time required; ignorance of the various methods available.

When people do not want to compost, but ask, “what can I do to help?” one suggestion is that they find ways to encourage composting on a community and/or municipal scale. Although city-wide, curbside collection of food and yard waste is arguably the ultimate goal, and is practiced in more than 150 U.S. cities, that goal is far in the future for many, many municipalities. With a

little ingenuity and research, opportunities for smaller, multi-household composting of food waste abound. Small to large, consider the approach(es) that will best fit the community.

Small

Schools may either already be composting, or be open to starting a program. Some form of gardening is common at the elementary school level, and many high schools have garden areas on the school grounds that are created and maintained as part of the science curriculum. The state curriculum standards for all grade levels are available online at the Public Education Department website. Teachers and administrators can be approached with a proposal for a composting program that supports the state standards. In many elementary schools there is a strong Parent Teacher Organization that would be open to a workshop on composting and to supporting such a program on the school campus.

Community gardens and small urban farms are increasing in popularity and quantity. Investigating what is happening in the neighborhoods could be surprising and enlightening. Find out if any of these gardens have composting arrangements and if they accept food waste donations. If no composting is happening, or only on a limited basis, one can support creation or expansion of a program that could recycle some community food waste by arranging workshops, locating sources for straw bales, or volunteering time.

Investigation of what local restaurants and grocery stores are doing with their food waste could prove interesting. Making others aware of what is being done by near-by businesses to promote food waste reduction is important as well as encouraging people to patronize those businesses and compliment them on making responsible choices.

Medium

Small, curbside food waste recycling businesses have begun to spring up around the country. Individuals searching for a solution to composting without having to do it at home have discovered a demand for curbside pickup and figured out how to make a successful business in the process.

Jeremy Brosowsky in the Washington D.C. area charges households \$8 a week to haul food scraps. Every subscriber gets a compost container with compostable liner for their food scraps; once a week, the liner with the scraps is removed and replaced with a new liner. Subscribers are eligible to receive finished compost equivalent to the raw materials they have provided once they have maintained pickup service for more than 3 months. Brosowsky also sets up drop off stations at local farmer's markets.

The Pedal Coop in Pennsylvania provides compost pickup via bicycle for many Philadelphia residents. They charge \$.83/gallon and provide weekly, biweekly or monthly pickup. All

finished compost is donated to community gardens and urban farms in the area.

In Vermont, Earthgirl Composting was started by Megan Kolbay a young single mom interested in doing what she could to make a difference. Her business provides curbside residential pickup varying in cost from \$10.50 for weekly bucket pickup to \$20.50 for monthly pickup. Commercial pickup services are also available. A 5 gallon bucket is provided to customers when they sign up for services; when a full bucket is collected, a clean, empty one is left as replacement.

Employees at more than 100 Safeway stores along the East Coast work to ship discarded organic material such as coffee grounds or wilting flowers to a return center which then transports the waste to a location where it is recycled into compost.

Large Scale

The number of cities implementing a curbside recycling program is on the increase. More than 150 communities in 18 states now offer curbside collection. This is a 50% increase since 2009 (Curbside Composting). The western states are leading the way with 111 programs in Washington, Oregon and California, but more and more collection programs are starting up in the eastern U.S.

In San Francisco the first mandatory source separation ordinance was passed and implemented in 2009. Residents are required to separate recyclables and organics from the trash. Fines from \$100 to \$1000, depending on amount of waste generated, are imposed for non-compliance.

Seattle WA, has a voluntary curbside composting program. Single-family homes are required to rent a compost bin, the cost varies according to size, or commit to having and maintaining a backyard compost system. There are no penalties imposed for households that do not participate; the monthly charge encourages families to follow through since they are already paying for the service.

In 2011, Portland OR implemented a curbside food-composting program. Residents pay more each month, but the size of the trash container used by the household determines the amount. People with 60 or 90 gallon carts pay about 10% more per month than previously, but 20 and 32 gallon cart customers' rates have remained the same. Organic material collection is conducted weekly, but trash collection is bi-weekly so that residents are additionally forced to consider the volume of material they send to the landfill. Areas in Portland also have a pay-as-you-go system for trash collection so that residents only pay for trash collection as needed.

Many factors affect the starting of a municipal curbside compost collection program:

Cost: Food waste is heavier than general trash and more expensive to transport. Often the nearest composting recycling facility is some distance away, so the expense of transportation is higher. There will be a charge for the processing of material. Additional employees may be needed to oversee the program. A plan for anticipating and meeting program costs needs to be considered.

Processing Location: An existing organic waste processing facility with the ability to meet demand must be located and contractual terms negotiated. If no existing facility is available, the feasibility of constructing one needs to be considered.

Distribution of the finished compost: There must be a means for distribution of the finished product. The recycled material must leave the facility that processes it, or a bottleneck occurs that makes the recycling process impractical.

Education and Publicity: The public cannot do its part if individuals are uninformed or under educated.

Despite the seemingly overwhelming number of things to take in to account as well as the many current and potential hurdles, community and municipal composting programs in the U.S. are making a difference in the amount of organic material which is diverted from the landfills. A part of educating people about the value of composting organics rather than throwing such material out with the garbage should be to make them aware that composting can and has acquired a place beyond the backyard fence.

Me: individual backyard composting

Plus WE: community and municipal composting programs

Equals ...

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