

Food Waste and the Environment

We all waste food: think of the last time you cleaned your refrigerator. No matter how diligent we are, there's always mushy lettuce to (hopefully!) toss in the compost bin, a shriveled lemon at the back of the produce drawer, condiments with expired "best by" dates we might immediately toss (more on this topic below).

We live in a country with the cheapest food in the world, thanks in great part to our government's (controversial) subsidizing of factory farming; unfortunately, we also lead the world in percentage of food wasted, according to the *World Economic Forum*. Simply put, the US produces more food than our population can consume, in spite of the vast amounts produced for foreign markets.

Many sources agree that one in nine people on our planet do not have access to sufficient food -- while nearly one-third of all food produced is lost or wasted. In this country, according to the US Department of Agriculture, 30-40% of our food supply, or 133 billion pounds of food, is wasted each year (the Food and Agriculture Organization of the UN reports a staggering 1.3 billion metric tons worldwide). A 2016 article in *The Atlantic* claimed that **50% of all produce** grown in the US is wasted.

This waste has far-reaching impacts on

- Food Security. In 2018, over 11% of US households, or 37.2 million people, faced "uncertainty of providing enough food for all household members due to insufficient funds or other resources for food" (USDA data). Wholesome food that could help food insecure families is being sent to landfills.
- Resource Conservation. Vast amounts of water, energy, and labor are used to grow/process/store and transport this eventually wasted food.
- Climate Change. Food waste is the single largest component in our landfills, and it quickly converts to methane gas.



Where does food waste occur?

- The bulk of food waste happens in the supply chain (between the producer and the market).
- Consumers intentionally discarding food that has reached its expiration date.
- Oversupply of/unsold food in the marketplace. **XX**

Whatever the cause and wherever it occurs, food waste ends up in a landfill - and there it produces methane (CH₄), a greenhouse gas far more powerful than carbon dioxide (CO₂).

What about **greenhouse gases**? **XX**

Of the several identified greenhouse gases, the most concerning are those attributed to human activities, specifically

- carbon dioxide (CO₂) is released into the earth's atmosphere primarily by burning fossil fuels
- methane (CH₄), up to 25 times more powerful than CO₂ at trapping radiant energy, is produced in the production and transport of fossil fuels, livestock and other agricultural practices, and decay of solid waste in landfills.

What can we do? As food consumers, we can work toward reducing methane production by **reducing our own food waste**. Need motivation? This explanation of what happens to our food in a landfill from Earthday-365 may help. <https://earthday-365.org/fight-food-waste-fight-climate-change/>

A topic that's currently getting attention is Food Product Dating, or the ubiquitous and confusing ("use by, best by, best if used by") dates stamped on food products. The USDA's Food Safety and Inspection Service (FSIS) is seeking to eliminate the confusion. In an open letter to the food industry in May 2019, the USDA requested the phrase "Best If Used By" become the norm, as it indicates the optimal life of a food product, but also allows for later and safe consumption of properly-stored food items.

Evan Lutz is CEO of the Baltimore-based Hungry Harvest, a company devoted to alleviating food waste by rescuing "ugly" produce and delivering boxfuls to subscribers' doors. In his recent article in the *Baltimore Sun* he encourages us to think about our "foodprints" — the environmental impacts associated with growing, producing, transporting and storing of all the food we consume. He also includes several practical tips for limiting what we toss in our trash bins (freeze produce or leftovers as they "age," make soups, store produce sensibly).

http://digitaledition.baltimoresun.com/infinity/article_share.aspx?guid=00cf187f-8072-4653-8649-9ab9369aaff5

What else can we do? **COMPOST, of course!**

The benefits of composting are many and potentially huge. From massively reducing the solid waste stream, to amending soil and improving its chemistry, to reducing methane gas production, composting is considered by many gardeners to be miraculous: it literally puts carbon back into soil. This article from the Institute for Local Self-Reliance lists the rewards of composting <https://ilsr.org/benefits-composting-compost/>

A well-tended compost container will not produce methane. Methane gas forms under anaerobic conditions, where no oxygen is present – as in a buried landfill. The composting process is an aerobic (oxygenated) environment and will produce carbon dioxide, not methane gas.

Composting does take a bit of tending on our part. EarthEasy has a comprehensive guide for beginning composters <https://learn.eartheasy.com/guides/composting/> and here's an article on how to compost even if you don't have a garden. <https://www.thekitchn.com/composting-without-a-garden-189247>

Large-scale food waste recycling works!

- Many US cities, including San Francisco and Seattle, have in place large-scale food waste composting operations.
- New York City's GrowNYC offers 150 food scrap collection sites. Scraps are transported to composting sites to become fertile soil amendment.
- World Economic Forum relates the story of South Korea's enviable (and mandatory!) recycling of 95% of its food waste. <https://www.weforum.org/agenda/2019/04/south-korea-recycling-food-waste/>
- **The Green Team is investigating the feasibility of a pilot food waste composting site in Havre de Grace.**

There are many paths we can take in an effort to reduce our own food waste. Composting is great, but how much better to simply reduce the waste leaving our kitchen? From purchasing just enough food, to cooking just enough at each meal (unless you love leftovers), to using produce in the order it will spoil (CSA members know about this!), to considering the condition of the food product along with its expiration date – all of these steps will point us in the right direction for our planet – away from the landfill.

SOME GREEN THOUGHTS

“Landfills store our waste – they don’t break it down!”

- earthday-365

“Not only is food waste a moral and economic travesty, it is one of the largest threats to the environment today.”

- Evan Lutz, CEO of Hungry Harvest

“We are trashing our land to grow food that no one eats.”

-Tristram Stuart, author and food waste activist