



Overview of TDEC Food Waste Reduction Efforts

Presentation Overview

- Overview of OSP
- Food Waste Education and Outreach
- Food Waste Policy and Research
- Community Engagement and Funding Opportunities

OFFICE OF SUSTAINABLE PRACTICES & SMALL BUSINESS ENVIRONMENTAL ASSISTANCE PROGRAM

Our mission is to provide programs, resources, and services that maximize positive environmental, social, and economic impacts for Tennesseans. We also provide technical assistance to small businesses to help them gain and maintain compliance with environmental regulations.



- Provide Environmental Technical Assistance
- Facilitate Recognition Programs
- Implement Sustainability in State Parks
- Promote Food Waste Reduction
- Administer Sustainability Programs
- Encourage Environmental Stewardship
- Increase Radon Awareness
- Engage in Community Outreach

Get Food Smart TN



ABOUT

ACT

RECOGNIZE

ASSISTANCE

RESOURCES

NEWS

FOOD WASTE PREVENTION WEEK

TAKE THE PLEDGE

Promoting using food wisely

and enhancing the sustainability of Tennessee's food resources.

LEARN MORE

Get Food Smart is the state of Tennessee's primary food waste reduction, recovery, and diversion program. Find information on the program's efforts, how to help, and additional resources in the sections above.

getfoodsmartrn.com

- Provide tips and tricks for various sectors on how to reduce food waste.
- Create and share educational resources.
- Host quarterly informational newsletter.

Example Educational Resources



SMART FOOD STORAGE

STORE YOUR GROCERIES IN THE BEST LOCATION TO PRESERVE SHELF-LIFE, REDUCE SPOILAGE, AND SAVE MONEY.

Freezer:

- >Meats
- >Fruits & Veggies
- >Sauces
- >Bread/Dough
- >Cheese
- >Cooked Grains

Pantry:

- >Potatoes
- >Onions
- >Garlic
- >Winter Squash
- >Eggplant

Counter:

- >Bananas
- >Pineapples
- >Tomatoes
- >Avocados
- >Peaches

Fridge Shelves:

- >Mushrooms
- >Asparagus
- >Herbs
- >Watermelon

High-Humidity Crisper Drawer:

- >Artichokes
- >Berries
- >Broccoli
- >Brussel Sprouts
- >Cabbage
- >Carrots
- >Cauliflower
- >Celery
- >Corn
- >Cucumbers
- >Green Beans
- >Kale
- >Peas
- >Peppers
- >Radishes
- >Spinach
- >Summer Squash
- >Turnips

Low-Humidity Crisper Drawer:

- >Apples
- >Blueberries
- >Cherries
- >Grapes
- >Grapefruit
- >Lemons
- >Limes
- >Melons
- >Oranges
- >Green Onions

- Freeze fruits, vegetables, cheese, and other items that won't be used within a few days. Wrap and label meat, fish, and poultry.
- Store leftovers and snacks on the highest shelf of the fridge. Juices, non-dairy drinks, and lunchmeats can also be stored here.
- Store dairy and eggs on the lower shelf, towards the back where it's colder. Store meat on the lowest shelf in a sealed container to prevent leaking.
- Drawers are the best option for fruits and vegetables. Vegetables require higher humidity, fruits require lower.
- Well-preserved foods, such as condiments, jams, non-dairy beverages, and wine should be stored in the door of the fridge.
- Canned goods and grains should be stored in the pantry.
- Keep potatoes and onions in a cool dry place, but separated.
- Keep bananas, tomatoes, peaches, and avocados out on the counter, but separate. Place tomatoes and peaches in the fridge after 3-4 days.



UNDERSTANDING Food Date Labels



Did you know that most food labels do not actually indicate whether that food is safe to eat? Lack of uniformity in food date labels used by manufacturers can cause confusion over the meaning of them, which can lead to wholesome food being discarded.

TYPES OF FOOD PRODUCT DATING

Open-Dating



A calendar date applied by the manufacturer or retailer that tells you the period of time that the food will be at its best quality.

Closed-Dating



A code that consists of a series of letters and/or numbers applied by manufacturers to identify the date and time of production.

COMMONLY USED DATE-LABELING PHRASES

- Best if Used By/ Before** Indicates when a product will be of best flavor or quality. It is not a purchase or safety date.
- Sell By** Date that tells the store how long to display the product for sale for inventory management. It is not a safety date.
- Use By** Date that is recommended for the use of the product while at peak quality. It is not a safety date.*
- Freeze By** Date that indicates when a product should be frozen to maintain peak quality. It is not a purchase or safety date.

*Infant Formula is the only product that is Federally Required to have a "Use-By" date label. Several states have passed laws creating "use by" dates for other foods, such as shellfish. Tennessee is one of the few states that does not have any state-level "use by" labeling requirements for foods.

In an effort to reduce food waste, it is important to know that food products can still be safe to consume past the date on the label, if they are stored and handled properly.

- Use your senses to evaluate foods past their prime. Spoiled food will look different in texture and color, smell unpleasant, and taste bad.
- Nonperishable items like grains, dried goods, and canned foods can be used well past their label dates.
- Meat, dairy, and eggs have shorter shelf lives and are less safe to use after label dates. For example, milk is often good a week past its due date, however if you notice a sour smell or curdling, dispose of it.



SOURCE: U.S. DEPARTMENT OF AGRICULTURE - FOOD SAFETY AND INSPECTION SERVICES



UNDERSTANDING UPCYCLED FOOD



Upcycled foods have ingredients that otherwise would not have been consumed by people, are procured and produced using verifiable supply chains, and have a positive impact on the environment.

Benefits of Upcycled Food

- Environmental:** reduces greenhouse gases produced from food loss and food waste and utilizes the natural resources to produce food
- Social:** helps feed a growing population with less deforestation and pressure on the environment
- Economic:** creates employment opportunities and more efficiently uses the financial investments made in food production

Examples of Upcycled Food

- Bananas chips made from off-grade bananas
- Chips made from vegetable pulp leftover from juicing
- Butternut Squash seeds made into cooking oil

Examples of Upcycled Food Products in TN

HUMMINGBIRD CRACKER COMPANY

Hummingbird Cracker Company, in Nashville, TN takes the raw pulp leftover from making fresh vegetable juice and repurposes it into crackers that are slowly dehydrated to ensure maximum flavor.



THE OLD FORGE DISTILLERY & THE OLD MILL RESTAURANT

Old Forge Distillery, in Pigeon Forge, TN handcrafts spirits using stone-ground grains from The Old Mill, one of the oldest continually operating gristmills in America. After distilling, Old Forge gives spent grains to The Old Mill Restaurant and Pottery House Cafe, where they are incorporated into breads, hamburger buns, and dog treats.



TOAST ALE

Toast Ale, in the UK, uses surplus bread instead of virgin barley to make their beer, which reduces their impact on land, conserves water and energy, and lessens emissions. All profits go to charities.



The Role of Upcycled Foods in a Sustainable and Resilient Food System

By using food that would normally go to waste to make upcycled food products, more of what farmers grow is used, and farmers get more profit for what they grow.

Restaurants can get more out of the products they already purchase and reduce food waste.

Making and purchasing upcycled food items is a great way for consumers to reduce food waste and support their local food system. 57% of consumers buy upcycled food products.*



Through the Tennessee Department of Agriculture, Pick TN Products connects people to all-the-great things that come from Tennessee's farms and food businesses. Learn more at pick.tnproducts.org.

*Source: www.pick.tnproducts.org

Food Waste Prevention Week 2024

- During Tennessee's 3rd annual Food Waste Prevention Week (FWPW; formerly "Awareness Week") we partnered with 123 organizations:
 - 46 organizations that shared information on food loss and waste with their audiences; several of these organizations planned and led their own events
 - 77 locations that served as drop-off locations for the FWPW statewide food drive



Food Waste Prevention Week 2024

~60,102 Reached

During Food Waste Prevention Week 2024 we reached **60,102 people** through social media, newsletters, in-person events, webinars, and more!



In Person

Five (5) in-person events: in Chattanooga, Memphis, and Nashville (x3) with a combined attendance of **668**.

- Chattanooga Bread to Beer at Oddstory Brewing
- No Food Left Behind Panel at Tennessee State University
- Nashville's Food Waste Prevention Event at Yazoo Brewing
- Earth Month Coffee Crawl across Nashville
- Love Food Hate Waste at Memphis Made Brewing

Digital

At least **59,434** people were reached through social media, newsletters, webinars, and more digital content.

Food Waste Prevention Week 2024



Children learn about preventing food waste with TDEC staff at the Nashville Food Waste Prevention Event



Children learn about composting food scraps with Compost Nashville staff at the Nashville Food Waste Prevention Event

Food Waste Prevention Week 2024



Attendees learn about preventing, diverting, and recovering food loss and waste from eight Nashville organizations at the No Food Left Behind panel

Food Waste Policy and Research Work

- Worked to pass legislation expanding Food Donor Liability Protections in Tennessee in 2019.
 - Continue to explore other policy strategies for addressing food waste.
- Received funding from EPA for a project with The Society of St. Andrew and NC State to investigate on-farm food loss.
- Funded food waste drop-off pilot at Knoxville Convenience Center in partnership with UT-Knoxville and City of Knoxville that was informed by earlier research done in the community.

On-Farm Food Loss Study

BIOCYCLE

MARCH 26, 2024 | BUSINESS+FINANCE, FOOD WASTE

The Unharvested Farm Produce Dilemma

Study measured surplus produce unharvested in the fields on farms in Tennessee, revealing that 76% of the produce left was of marketable or edible quality.



Meets current buyer specs but growers are unable to harvest, typically because the price does not cover harvest costs.

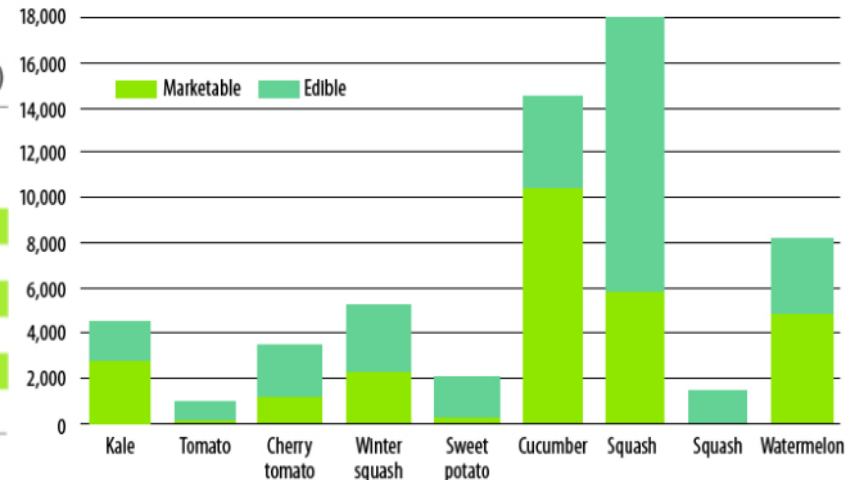
Off-size, blemished, misshapen or mis-colored but not under or over mature. Nutritious and safe.

Damaged, diseased, decayed or over mature. Not suitable for human consumption.

Estimated pounds of unharvested usable produce in Tennessee, 2021-2022 growing season (using measurements made in this study)

Crop	Acreage in TN	Ag data (year or estimate)	Usable lbs/acre	Estimated lbs in TN
Kale	500	Estimated	4,562	2,281,000
Tomato	4,200	2018	2,214	9,298,800
Sweet potato	600	1989	2,033	1,219,800
Cucumber	500	Estimated	14,520	7,260,000
Squash	650	2015	9,196	5,977,400
Watermelon	500	Estimated	8,228	4,114,000
Total lbs, usable produce				30,151,000

Estimated usable pounds per acre



Community Engagement and Funding Opportunities

- OSP has continued to be engaged with regional and local efforts to reduce food waste.
 - Participated in the Nashville Food Waste Initiative Advisory Group since founded, assisted with making introductions that led to formation of the Memphis Food Waste Project.
 - Advisory Committee for the Nashville Food Scrap Pick-up Pilot.
- Partner on WWF grant under EPA's Recycling Education and Outreach Grant – should be getting kicked off this summer, looking at addressing food waste in schools in several major cities (including Memphis and Nashville)
- TDEC submitted a grant under EPA's Climate Pollution Reduction Grant – Implementation Grant that seeks approximately \$95 million for strategies to reduce emissions. If awarded, approximately \$20 million of that proposal would go towards funding food waste diversion and recovery investments in Tennessee.
- Continue to investigate funding opportunities to explore the co-digestion of food waste at WWTP with an anerobic digestion system.

Questions?

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