



SCHOOL FOOD WASTE DIVERSION AND COMPOSTING

This collection of resources is meant to support your school's learning and implementation of food waste diversion efforts. Resources are broken into 4 categories,

1. The core trainings are a series of videos, educational webinars and in person events. All video links are provided and additional documents can be found through the online guide.
2. The resources are documents referenced during the core training or highlighted as example resources.
3. The videos are webinars and short films that have been highlighted for use in the classroom or to further your school's learning.
4. Additional resources are valuable repositories or references for further inquiry or support.

Each resource is given a short description (Pages 3-10) and kept in the same order throughout the manual for your reference. An online version of this guide can be made available to you by contacting UVLSRPC.

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To submit feedback or suggestions on any of these resources, please contact

Olivia Uyizeye

Email: ouyizeye@uvlsrpc.org

Phone: 603-448-1680





SCHOOL COMPOSTING MASCOT

It takes a community of organisms to turn food into compost. With all this hard work to be done, why not have a little fun? Why not hire a MASCOT?

MEET COREY

Corey is a super compost worm who loves learning almost as much as they love your food scraps. Corey is handmade and would love to visit your school to learn, educate and energize. Please contact UVLSRPC to learn more about how Corey can visit – either worn by a school community member or UVLSRPC staff.





CORE TRAININGS

1. Introduction and Overview

Description: Meet the trainers Natasha Duarte (Composting Association of Vermont) and Cindy Sterling (Northeast Resource Recovery Association) who lead the core training resources. 6 minutes

Youtube: <https://youtu.be/HciQnAwG6rc>

2. Why Food Waste Diversion?

Description: Learn why food waste diversion is important for our environment, economy, and communities. 7 minutes

Youtube: https://youtu.be/TjNFnJ_3Gok

3. Understanding NH State Regulations on Composting

Description: Learn about the current state of NH state regulation as they relate to composting. 5 minutes

Youtube: https://youtu.be/z6_2CNvjzl8

4. Sizing Up Your Food Waste & Off-Site Options for Diversion

Description: Learn about two methods to assess and monitor your quantity of food waste – the quick and the thorough. Also, if you want to send some or all of your food waste off site, learn about some of the options available to you and elements to consider in this process. 25 minutes

Youtube: <https://youtu.be/IIyRfwW5laI>

5. A Food Waste Vision for Your School

Description: Hear about techniques your school can use to form a vision for your school's food waste both in the near and long term. 7 minutes

Youtube: <https://youtu.be/xFGCcNYM0W4>

6. Closing the Food Loop

Description: Learn about the Closing the Food Loop resource guide, including data collection techniques and PreK through 8 lesson plans. 10 minutes

Youtube: https://youtu.be/R5VJ9tH_CeY

7. At School Composting: System Choice & Site Planning

Description: If you have or are planning for on-site composting, this training orients you to the site elements you need to consider when setting up. You will also learn about different composting systems to manage your food waste and winter system considerations. 40 minutes

Youtube: https://youtu.be/8fyqIkm_HqQ



8. **At School Composting: Managing Ingredients, Critters and Safety**

Description: If you have or are planning for on-site composting, this training discusses management of your system. What is in the compost recipe? What do you need to know about temperature? Critters? Safety? 30 minutes

Youtube: <https://youtu.be/D1fXs-jpxxc>

9. **Program Tracking: The STAR Assessment for Recycling Efforts**

Description: How might you go about evaluating the successes and challenges of your compost and other recycling efforts? This assessment takes you through 5 core elements to do just that. 20 minutes

Youtube: <https://youtu.be/Iuf5mm3cR94>

10. **Changes Do Happen: Program Adaptation and Resilience**

Description: Learn how to flow with the bumps, build up for the long run, and make needed changes without letting it derail you. 5 minutes

Youtube: https://youtu.be/_ALVQRcHeiY

11. **Q&A Webinar with the Trainers Recording**

Description: Participants ask our trainers their questions.

Youtube: Find on our Food Waste for Corey channel

12. **Site Visit Highlights from the Ludlow VT Community Garden**

Description: Learn about different types of compost systems and management techniques.

Youtube: Find on our Food Waste for Corey channel

13. **School Compost Leaders Roundtable**

Description: A presentation from Cat Buxton with Grow Less, Waste Less and discussion about school experiences from Plainfield Elementary School and Thetford Elementary School compost team members.

Youtube: Find on our Food Waste for Corey channel



RESOURCES

1. School Composting - Let's Get Growing: A guide for student leaders and teachers (Cornell Waste Management Institute)

Description: A 16-page one stop guide on school composting programs including starting one and forming a team, curriculum integration, site consideration, and examples of successful programs.

2. Composting Onsite at Schools (Institute for Local Self-Reliance)

Description: A 24-page guide that introduces the basics of onsite composting at K-12 schools that have been equipped with 2- and 3-bin composting systems. Learn why composting is important, the basic ingredients needed to produce good compost, steps to getting started, and how to troubleshoot problems that arise.

3. Composting at NH Schools: a "How to" Guide (NHDES)

Description: This guide is designed to provide users with background information to help decide if they want to start composting, as well as how to set up, operate and promote a school composting project. The appendices include information sheets, tracking forms, etc. (Guide Contents list included here. See full resource guide through the online resource library.)

4. Composting at Rural Schools (VT)

Description: An overview of compost systems, models, best practices, and service learning tools. (Guide Contents list included here. See full resource guide through the online resource library.)

5. School Compost System Startup Steps (Cat Buxton)

Description: Starting a school compost system is no small task. A committed team from the school and beyond is needed to ensure success. This document is designed for your team to create a compost system on your own by problem solving through commonly asked questions and ideas.

6. Implementing Rural Community Composting: Local Opportunities, Issues, and Priorities Evaluation (Northeast Recycling Council)

Description: The evaluation is designed to encourage compost teams to work together on a series of exercises that will assist in establishing and maintaining their community composting site. It is also intended to be a "work in progress". It will assist participants to - develop their mission/vision, goals and priorities; identify community or neighborhood resources, strengths, opportunities, and challenges; assess their compost team strengths and needs; and plan the composting site design, composting system(s), and maintenance needs.



7. SMART Goal Setting (Adapted from: How to Start a Community Garden, Kairsten Nitsh, The Garden Works Project)

Description: A 1-page summary of the SMART acronym that can help us remember the components of an effective goal. Specific, Measurable, Achievable, Realistic and Timely.

8. Mapping Reciprocal Partnership (Natasha Duarte)

Description: A group exercise to map out the partnerships that do/could be part of your food waste diversion program.

9. Estimated Food Scrap Generation (UVLSRPC)

Description: Estimate your school's generated food waste based on number of students in elementary, middle and high school grades. (See interactive sheet through the online resource library)

10. Waste Characterization Study (Maine DEC)

Description: For many school systems, food scrap collection offers a great opportunity to reduce waste streams and save real money. The easiest way to measure this impact is to conduct a system wide characterization study. During this process, all aspects of the food service operations are carefully evaluated to find ways to recover compostables.

11. Waste-Less Lunch Activity (SF Environment)

Description: Students analyze their lunches and learn how to conserve natural resources by packaging a "waste-less" lunch.

12. Waste Assessments and Waste Audits (Northeast Recycling Council)

Description: A 2-page summary of waste assessments and waste audits. A waste assessment can be used as a tool to identify wasteful practices and create opportunities to increase efficiency, reduce waste, and lower costs. A waste audit is a hands-on activity to characterize the types, quantities, and origins of the waste generated in the school

13. Site Inspection Form (Natasha Duarte)

Description: A 4-page worksheet to evaluate current site conditions for an onsite composting system. It is also a useful reference when establishing a new system.

14. Supplies and Equipment Needs for Onsite School Composting (Northeast Recycling Council)

Description: A 1-page summary of materials needed from cafeteria to promotion to compost bin.



15. Volunteer Job Training and Recruitment (Northeast Recycling Council)

Description: Volunteers provide crucial compost site operations support and it's important that they be provided a range of opportunities for getting involved. This tip sheet provides ideas for the different roles and volunteer activities that are needed for a successful composting site.

16. Health and Safety Guidance for School Composting (Northeast Recycling Council)

Description: A 2-page guidance document to make composting a safe environment and address/reduce potential risks.

17. Health Precautions for Composting during COVID-19 and beyond (Composting Vermont)

Description: Practiced safely, composting brings communities together while allowing social distancing, provides healthy outdoor activity, and fosters other positive activities, including gardening. Adopting simple, low cost, health measures can keep composters safe. Handling feedstocks that may be contaminated with COVID-19 is the primary concern of composters. Accordingly, precautions focus on practicing good hygiene and using personal protective equipment.

18. Vermicomposting Guide for Teachers (UCANR)

Description: A one stop resource on vermicomposting including how to do it, what critters are involved, activities for the classroom, and additional materials for your reference. (Guide Contents list included here. See full resource guide through the online resource library.)

19. Vermicomposting (VT)

Description: Learn the basics of composting with worms as well as common problems and solutions.

20. Do the Rot Thing: A Teacher's Guide to Compost Activities (VT CVSWD)

Description: A full list of activities to use in K-12 classrooms. Each activity is noted for the appropriate grade level. Topics span from building a compost pile, worm bin exploration, to students teaching about composting. (Guide Contents list included here. See full resource guide through the online resource library.)

21. Teacher's Guide to Solid Waste & Recycling (NRR)

Description: Classroom activities for K-8 on organic waste.

22. Tracking your landfill waste diversion (UVLSRPC)

Description: An example data log to track food waste (by weight or volume) diverted from your trash that goes to the landfill.



23. Data Collection Toolkit (Farming Concrete)

Description: This toolkit was designed to help farmers and gardeners measure all the good things growing on their farm. It has useful techniques for waste diversion, compost production and social data that could be transferable and useful in the school environment. (Guide Contents list included here. See full resource guide through the online resource library.)

24. STAR of Sustainability (Northeast Recycling Council)

Description: Evaluating the sustainability of school recycling programs through five categories of sustainability - collection, education, participation, motivation, and evaluation.



ADDITIONAL VIDEOS

1. **The Messy Truth, 1 hour (NRRRA)**

Description: The Star of Sustainability provides schools with the preliminary tools necessary to assess present waste management practices. Schools get clear, unbiased suggestions for future improvement as well as a baseline for examination of the positive effects of changes.

Discount Code – FREENRRAWEBINAR

<https://www.nrrarecycles.org/resource-library/messy-truth-about-students-and-their-garbage>

2. **Trash on the Lawn Day (NRRRA)**

Description: A thought-provoking service-learning project that assesses a school's waste management issues and opportunities for improvement, while fostering student leadership. Under The NRRRA School Recycling CLUB's guidance, student leaders organize a waste sort of an entire day's worth of trash. This tool for positive change examines waste management practices, purchasing policies, hauling agreements and diversion opportunities.

[https://nrra2017-](https://nrra2017-my.sharepoint.com/:v/g/person/csterling_nrra_net/EVfyiqaf1NVDg9ozYmnD1JABl_QstXZXVqru9N4Q_5pFTg?e=Pul8OS)

[my.sharepoint.com/:v/g/person/csterling_nrra_net/EVfyiqaf1NVDg9ozYmnD1JABl_QstXZXVqru9N4Q_5pFTg?e=Pul8OS](https://nrra2017-my.sharepoint.com/:v/g/person/csterling_nrra_net/EVfyiqaf1NVDg9ozYmnD1JABl_QstXZXVqru9N4Q_5pFTg?e=Pul8OS)

3. **Rotting Watermelon Decomposition Timelapse**

1 minute (Temponaut Timelapse)

<https://www.youtube.com/watch?v=S12zZhdOckc>

4. **Vermicompost: A Living Soil Amendment**

10 minutes (Cornell University)

Description: educational video with great real footage of compost critters close up.

<https://www.youtube.com/watch?v=zTh5Chk4rTk>

5. **School kids Talk Trash... and Composting**

3 minutes (County of San Diego)

<https://www.countynewscenter.com/school-kids-talk-trash-and-composting/>

6. **How Compost is Made**

7minutes (RecycleNow)

<https://m.youtube.com/watch?v=cBkBwVFFEWw>

7. **5 Tips to Keep Animals Out Of Your Compost Pile**

3 minutes (VT CVSWMD)

https://www.youtube.com/watch?time_continue=138&v=tXq67oL4CrA



ADDITIONAL RESOURCES

1. School Recycling Club (NRRA)

Description: The School Recycling Club assists schools in implementing, maintaining and improving recycling programs throughout New England and beyond! On the School Recycling Club pages you will find information about recycling, composting, lesson plans and activities, newsletters, fundraising and many other useful tools for your school. Our Annual School Recycling Conference is a fun, annual event each spring to celebrate recycling in K-12 schools. Membership in NRRA's School Recycling Club (The Club) is FREE for all New Hampshire schools!

<https://www.nrrarecycles.org/school-recycling-club>

2. Toolkit for Reducing Wasted Food and Packaging (USEPA)

Description: This guide and toolkit provides source reduction strategies and case studies of food service establishments turning audit results into actions to successfully prevent wasted food. It can automatically create graphs and data summaries to help identify patterns of waste generation.

<https://www.epa.gov/sustainable-management-food/tools-preventing-and-diverting-wasted-food#packaging>

3. Drawdown: The Most Comprehensive Plan Ever Proposed to Reverse Global Warming

edited by Paul Hawken, 2017

www.drawdown.org

4. Wasted: How America is Losing Up to 40 Percent of its Food From Farm to Fork to Landfill

Dana Gunders, NRDC Report, 2017

5. Northeast Recycling Council - Organics Online Resources

<https://nerc.org/nerc-resources/search-for-resources/>

6. Compost C:N Ratio (Carry On Composting)

Description: This article describes greens and browns. If you scroll about half way down the page, you will see a list of materials with their Carbon to Nitrogen ratios. Browns would include any of those that have a C:N of 35:1 or greater, so not shells down.

<http://www.carryoncomposting.com/416920203>