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ᄰ INTRODUCTION

The Maryland Department of Environment (MDE) created this toolkit to help schools reduce, donate, and recycle surplus food to avoid waste, feed those in need, and promote healthy soils. The tool kit contains information and resources to help administrators, educators, and staff plan curriculum and policies for their students to learn about and engage in environmentally sound approaches to daily living. There are immediate actions individuals at any age can take to make positive changes, especially revolving around the enormous food waste problem in the U.S. Here we highlight what actions students can take at school, and knowledge they can share at home.

The Food Waste Crisis

Forty percent of food in the United States goes to waste – this amounts to \$218 billion each year spent on food that is never eaten, or an average of \$1,600 a year for a family of four. The majority of this wasted food ends up in landfills, where it produces harmful greenhouse gases – 20 percent of total U.S. methane emissions come from landfills - and contributes to states and localities running out of landfill capacity.



One-third of all food produced for human consumption is lost or wasted. Photo by Foerster/Wikimedia Commons

MDE estimated that in 2017 in Maryland, more food was disposed of than any other single material in our everyday trash, at 17.9 percent of waste disposed.

While the first part of the food crisis could be considered an environmental problem, the second part of the food crisis is that one in seven people in our state is "food insecure." Maryland is home to over 650,000 people, including over 200,000 children, who don't always know where they will find their next meal. Of the estimated 125 to 160 billion pounds of food that goes to waste every year in the U.S., much of it is perfectly edible and nutritious. By diverting wholesome food to places where food insecure people can gain access to it, we help solve the second part of our nation's food crisis. As we have shown, the two problems are interrelated, and the bottom line is, food is

simply too good to waste. In terms of overall waste diversion, Maryland has made significant progress in recycling during the past two decades and currently recycles at a rate of 42.9 percent, exceeding the national average of 34 percent, according to the latest EPA report. Still, Marylanders continue to dispose of more than half of all waste they generate.

In adopting better habits to reduce, reuse and recycle in our daily lives, people of all ages can help the earth by lowering the amount of greenhouse gases that contribute to climate change, conserving energy and natural resources, creating green jobs and protecting public health and the environment. Children are demonstrating all over the world that they want to grow up on a healthy planet. They are changing everyday behaviors that add up to big improvements in society; for one, they are tackling an enormous issue adversely affecting land, water, and air, humans and animals – the food crisis.

Why Food Recovery is Important for Schools

Schools provide an ideal setting to begin to tackle the food waste problem. Schools both generate

food scraps that can be recovered and present the opportunity to instill an awareness of food waste issues among students and their families.

The typical American student disposes of 67 pounds of lunchbox packaging waste every school year. That equals around 18,700 pounds of waste per year at an average-sized elementary school. In the U.S. alone, an estimated \$1.24 billion in food is wasted annually in schools. This wasted food could instead be used to feed students or others in the community or to create compost, and much of the single use packaging waste can be avoided altogether.

Food waste minimization and recovery also are excellent ways to teach students about a variety of environmental and social science topics. For example, composting is a great topic of study for students because it is hands-on, For the serve just enough
Serve just enough
Serve just enough
Serve just enough
Serve vhat will keep
Serve sown is best

inexpensive to demonstrate on a small scale, can be tailored to any age group, and incorporates a number of topics in science such as chemistry, biology, waste and resource conservation, soil and water quality, and climate change.

We offer this toolkit to administrators and teachers to help create an environmentally conscious culture at schools, and to help tailor a program that your students will be proud to embrace.

Did You Know?

The average U.S. household produces 650 pounds of animal or plant-based waste a year. In fact, 40% of all available food in the U.S. is wasted and sent to a landfill. That's enough to fill a football stadium every day!

Food waste has an impact on the economy; cost of disposal, overpurchasing and lost energy cost us more than \$100 billion annually. A person wasting food is throwing away about \$2,000 a year on average.

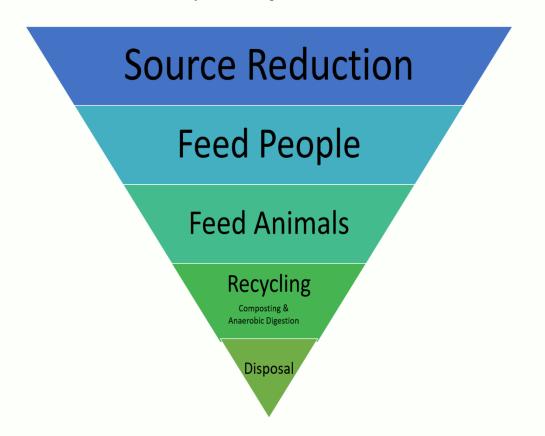
Organics release methane in landfills, which is 72% more powerful than carbon dioxide per ton of emissions in terms of its climate change impact. Composting a five gallon bucket of food scraps prevents greenhouse gas emissions equal to burning a gallon of gas.

How to Use This Toolkit

The first part of this toolkit will explain how to design and plan a food recovery program at your school. The parts that follow contain descriptions and resources for specific actions that you may choose to incorporate into your program. In developing your food recovery program, you should feel free to tailor it to the particular needs of your school. Some of the actions described in this toolkit may be a good fit at your school, while others may not or may be longer term initiatives. Additionally, while food recovery programs can and have been successfully implemented with students of all ages, some resources and activities in this toolkit are targeted to particular age groups, where so noted.

The Food Recovery Hierarchy

In planning food recovery programs, schools should consider the following hierarchy, which lays out the most to the least desirable ways of dealing with food.



Think of how to deal with excess food starting with the source reduction – that is, stopping waste before it happens, as the most effective action, then work down towards disposal in landfills and incinerators as the last resort. The state endorses this hierarchy in its effort to alleviate unnecessary waste, conserve resources, and improve the health of students. For younger students, the following is a simplified hierarchy that communicates the same basic principles.

By following and teaching others **the 3 "R's" – R**educe, **R**euse, **R**ecycle, together we all can contribute to a healthier world.



😼 PLANNING A FOOD RECOVERY PROGRAM

Identify Your Green Team

To ensure that a school food recovery program is successful, it is important to identify a team to be its champion. This "green team" will take the lead on planning, establishing roles and responsibilities, communicating the benefits of food recovery, and troubleshooting any issues.

Best practices for establishing your green team:

- Where it exists, an environmental club can make a good green team by involving students and faculty with an existing interest in environmental issues.
- Make sure to involve a passionate adult at the school to help guide the students and be the team leader!
- Science teachers are great members of the green team because they can help communicate the environmental benefits of reducing and recovering food waste, as well as help explain the science of composting.
- Ask you School Food Service Director and cafeteria staff for support. They can share information about food waste management strategies used in the school food programs.
- Remember to include facilities staff, and parent volunteers.
- You can invite MDE to assist as we have done in the past for elementary schools.
- Contact your local government, including the Health Department and Department of Waste Management. They can provide guidance and local regulations for your area.

Once you have assembled your green team, hold a kickoff meeting to discuss the goals of the program and why food recovery is important.

- For inspiration, show your green team <u>"The Extraordinary Life and Times of Strawberry"</u> video to follow the journey of one extraordinary strawberry from vine to plane to palette to grocery aisle and all the way to the bottom of a garbage bin.
- For younger students (k-5), show PBS' <u>"Kids Go Green: Reducing Food Waste</u>" video for a short explanation of how food waste impacts the environment and what can be done to prevent it.

Conduct a Waste Audit

In order to develop a good plan, your green team must first understand the scope of the problem. Conducting a food waste assessment (audit) in your school cafeteria before you begin your food recovery program will help answer many questions as to why food is being wasted.

A waste audit will help the students and everyone involved to visualize and be able to compare before and after results so they can see their success. Conducting waste audits can be a hands-on educational tool. Tip: Don't let your students know when you're going to do it so they will pack their typical lunches.

The EPA and the USDA have created <u>a step-by-step guide</u> for conducting a school food waste audit. MDE provides a fillable form to use.



In addition to measuring how *much* food is wasted, try to identify *why* food is waste. Conduct a



survey of some of the kids who seem to leave a lot of food uneaten; ask them why they didn't eat a particular item or two and record their responses. The step-by-step guide above contains sample questions to ask. After studying the data, your green team can develop and implement food-waste reduction strategies that make the most sense for your school.

You might want to take pictures during the process to use in your school newsletter, social media, etc. We would love it if you shared photos with us at MDE – we have our own social media accounts! Send to <u>lisaajones@maryland.gov</u>.

A follow-up food waste assessment (audit) after your program is underway can reveal how successful your school was, and what changes you might want to make going forward if you decide to implement an on-going program.

Create Your Action Plan

Once you have the results of your waste audit, you can create a plan for how to address the waste that you observed.

In developing your plan, you may wish to contact your local government recycling coordinator to understand what, how, and when your school should be recycling, since this can vary by locality.

Your event action plan should include:

- What actions the school will take to reduce wasted food, donate uneaten food, and recycle food that cannot be eaten.
- How and when you will communicate with parents, staff, and students.



- Who will be responsible for each aspect of the action plan.
- How to evaluate success and troubleshoot any issues that arise.

For examples of other school's action plans, see the following:

- Westernport Elementary School's cafeteria waste reduction plan
- Minneapolis Public Schools' food waste action plan
- Frederick County Public Schools Lunch Out of Landfills! in fourteen schools.

Once you have a plan, show your commitment to implementing it by signing <u>MDE's Waste-Free School pledge</u>.

For those buying lunch at school, cafeteria workers should note what is being wasted, so they can purchase foods henceforth that will yield less waste.

Depending on how many students you have, you'll need at least one trash can, a recycling bin, a couple of buckets for liquids, and a composting bin. Clearly mark each bin for its purpose: TRASH, RECYCLE, LIQUIDS, COMPOST. Recycle whatever is possible – *follow the policies of your local government and school*.

In order to see the impact that your waste-free lunch efforts had, you can measure the quantity of materials disposed, recycled and composted and compare it to the results of your baseline waste audit (discussed above).

The following are additional resources to help with a waste-free lunch event:

- Watch one or both of these <u>very informative Waste-Free Lunch slideshows</u> at Wastefreelunches.org
- <u>Tips for Parents on Waste Free Lunches</u>
- Environmental Protection Agency's (EPA) Guide on How to Pack a Trash-Free Lunch





😼 FOOD DONATION OR SHARING

Use food as a source for good deeds! *Reuse or repurpose food* products and materials – set up a **share table or pantry**, or **donate** to the community. Redirecting excess food to people or animals provides immediate benefits to public health and the environment. Federal and Maryland law provide certain civil liability protections for a person who donates, prepares, dispenses, or serves food in good faith and without "gross negligence" for use or distribution by a nonprofit corporation, organization, or association. For information about the federal Bill Emerson Good Samaritan Food Donation Act, read <u>this fact sheet</u> from the Public Health Law Center. Check with your local government, including the health department, to see if there are any resources or restrictions for donating or sharing food in your area.

If your school participates in the National School Lunch Program, ask your School Food and

Nutrition Director for resources and restrictions for food sharing in Child Nutrition Programs.

Set up a Share Table

A share table is a station or table in a school cafeteria where students may place certain food and beverages that they do not want to eat for other students to take. Many states have developed guidance for schools establishing share tables, including <u>Vermont</u> and <u>Washington DC</u>. The USDA has also <u>published</u> <u>guidance</u> on share tables in the context of the National School Lunch Program.



Start a Food Donation Program

Watch a video about donating food. Find a food pantry in your area to donate to. Perhaps your

school can partner with a food pantry or nonprofit in your area. Sustainable America hosts a nationwide "<u>Food Rescue</u> <u>Locator</u>" where you can type in your location to see who in your area can accept food donations. Many food pantries accept fresh food, so explore those avenues first before throwing food out. MDE has a <u>"Food Recovery Hauling and</u> <u>Recovery</u>" list on its site.

Consider starting a food pantry in your school. The <u>Maryland</u> <u>Food Bank created a guide</u> to help schools create and maintain a pantry program. There are now at least <u>200 school</u> <u>pantries</u> in Maryland! Find out if your school district already has a school food pantry program!



You might discuss the possibility of donating food scraps to

Maryland's farm animals. Food scraps donation is a commonly accepted practice among farmers. Animal food scraps donation can save farmers money. Check with your local county and the Maryland Farm Bureau.

COMPOSTING (It's a form of recycling!)

The average American throws out 1,200 pounds of organic material (mostly food) that could have been <u>composted</u> instead of put into a landfill. Because landfills are being stretched to capacity, composting is gaining public interest. <u>About two-thirds of our trash could be</u> <u>composted</u>.

Composting is a controlled process in which organic materials, including food scraps, are allowed to decompose with the right amount of oxygen and moisture, creating compost. Compost is a cost-effective, simple-to-make, nutrient-rich soil amendment for household and garden plants. Food scraps can be saved and naturally processed to eventually become a rich soil additive that is great to grow vegetables! At schools, composting can help to reduce disposal of inedible food scraps that cannot be donated, and also makes a great topic for science classes.

There are two approaches schools can take to start composting programs. First, a school can compost food scraps and other materials on site. The benefit of this option is that it allows students to be involved in the composting process, providing a hands-on learning opportunity. On-site composting also provides a compost product that the school can use, such as in a school garden to grow vegetables. This is a great example of "closed loop" recycling. Composting on site will require some planning, space and attention, though as described below, there are simple and low-cost ways to compost on site at a small scale.

Second, a school can collect food scraps and send them off site to a commercial or community composting facility to be composted. This option may not be available in all areas of Maryland

yet, but can be a good opportunity for schools that aren't ready to delve into on-site composting for space or other reasons.

Compost Food Scraps From Sack Lunches Too!

Below are some tips on implementing a composting program using each of these two approaches.

Compost On-Site

There are many great guides to composting at a small scale, including at schools specifically. These resources are included at the end of this section, but for any composting method, it is important to understand the basics of how composting works.

During composting, microorganisms (tiny living things, like bacteria or fungus) consume and decompose the food and other material to create compost. In order to support those microorganisms to allow composting to happen, a compost pile needs the following things:

- Carbon-rich material ("brown" materials shown below)
- Nitrogen-rich material ("green" materials shown below)
- Air
- Water

Browns

- Leaves
- Hay or straw
- Wood chips and twigs
- Sawdust
- Non-recyclable paper

Greens

- Cafeteria scraps
- Fruit and vegetables
- Coffee grounds
- Green plant trimmings
- Animal manure

Note: Before starting your on-site composting program and selecting the materials to be composted, check with your local government to see whether there are any restrictions on what materials can be composted. Under state law, composting of any of the materials above, if done properly, is allowed on an area of up to 5,000 square feet without the need for a permit. However, local governments may have additional requirements or limitations, so it is important to consider that in advance. Your <u>county recycling coordinator</u> is a good contact to start with.

Many states and organizations have created step-by-step guides for school composting. Because there is so much great information on this topic, it can be difficult to know where to start. We recommend beginning with one of the following guides:

- Connecticut Department of Energy and Environmental Protection's <u>School</u> <u>Composting...the Next Step in Recycling</u>
- The Institute for Local Self-Reliance's <u>Composting On Site at Schools</u>

If you are interested in trying vermicomposting (composting with worms), the check out EPA's website on <u>how to create and maintain an indoor worm composting bin.</u> Additional guides and information on school or small-scale composting include:

- Green Mountain Farm to School, <u>A Guide to Starting a Composting Program in your</u> <u>School</u>.
- <u>Composting School Cafeteria Food Scraps</u>. A how-to video on YouTube (9:29)
- <u>Construct A Compost Pile</u>. Tips from the Chesapeake Bay Program
- <u>Composting for Kids.</u> An animated teaching guide on YouTube (5:56)
- <u>Center for EcoTechnology, Composting in Restaurants and Schools</u>. This toolkit provides simple step-by-step instructions for planning and implementing a composting program at a restaurant or a school, complete with the estimated time needed to carry out each step.
- <u>University of Maryland, Campus Sustainability</u>. The University of Maryland website shows a brief video and photos of the school's bins and signage for collecting recyclables and compostables at the dining halls and student union. Similar methods could be adapted for a K-12 school setting.
- <u>Northeast Recycling Council, Composting School Food Scraps and Soiled Paper</u>. This concise guide outlines the steps and considerations to planning a composting program for typical cafeteria scraps.
- <u>Northeast Recycling Council, School Composting Options</u>. This presentation is a companion to the above guide by Northeast Recycling Council. It describes in more depth (and with pictures) the planning and siting process, options for composting bins, and methods of collecting the food. Troubleshooting tips are also included.

For tips on integrating the science of composting into lesson plans, see the following resources:

- <u>Cornell Waste Management Institute, Composting in Schools</u>. This website includes information on school composting, classroom activities, labs, projects, background on the basic science of composting, and a composting quiz.
- <u>CalRecycle, Vermicomposting Classroom Activities</u>. This selection of activities is designed to be used in conjunction with a class vermicomposting project. It includes worksheets for students to record their observations about the worms, games, and

experiments. composting and recycling (e.g. how to correctly source-separate various items).

- <u>Central Vermont Solid Waste Management District, Do the Rot Thing: A Teacher's</u> <u>Guide to Compost Activities.</u> This guide provides compost-related activities grouped into categories, including basic composting, worm composting, and spreading the word (compost marketing and publicity). Each activity has a recommended grade level range.
- <u>Connecticut DEEP, Composting Video Downloads</u>. These free videos show how to compost at home and also show how yard trim is processed at a larger-scale composting facility.
- <u>Trautmann, Nancy and Marianne Krasny, Cornell University, Composting in the</u> <u>Classroom: Scientific Inquiry for High School Students</u>. This extensive guide was developed through the combined efforts of high school science teachers and scientists at Cornell University. It provides teachers the scientific background on composting that is necessary to support their students in conducting composting research. It also provides a guide to composting research projects, including example experiments. This guide would be useful in preparing for a science fair or similar program.
- <u>Keep America Beautiful Compost Office</u>. Grade 3-8 interactive lessons.
- <u>Cornell Cooperative Extension, Composting: Wastes to Resources</u>. This guide is designed for teachers and 4-H leaders and explains the basics of how composting works and how to get started. It includes ideas for composting "investigations" and templates for students to record their observations.
- <u>"Best Ever" Compost Recipe</u> from Cornell Cooperative Extension.

Worried About Odors and Pests?

A well-maintained composting pile ordinarily will not cause significant odor problems. If you notice excessive odors, your pile may be too wet, have too much nitrogen-rich (green) material, or have too little oxygen (brown). Try turning the pile to add oxygen or adding fluffy, dry, carbon-rich material. If your pile is attracting pests, make sure that all food scraps are mixed into the pile rather than on the surface, consider covering the pile with finished compost or other cover, and consider keeping meat scraps out of the compost pile.

Send Food Scraps for Composting Off-Site

Another option for schools is to contract with a private hauler or composting facility to collect school food scraps for composting elsewhere. If you choose this option, be sure to ask your contractor where the food scraps are taken for composting. Some composting facilities may allow field trips for students to see the composting process, even if the school does not have on-site composting.

MDE maintains a list of food waste haulers on its website (inclusion on the list does not constitute endorsement and the list may not be exhaustive). A list of the composting facilities in Maryland can also be found on MDE's website

Use Your Compost! Grow a School Garden!

Growing-Minds.org offers tips on setting up a school garden:

1. Start early. Make plans for your spring garden in January. Think about where and what you're going to plant, as well as resources in your community. Who might donate a few seed packets? Who could help with preparing the seed bed if your students aren't old enough? You may want to contact your local high school or community college. Students in agriculture programs could potentially offer labor, plants and/or planting advice. Local Garden Club



members or Master Gardeners might also offer their time to give you an extra hand.

2. Start small. The first year that you garden with your students, don't feel pressure to have a big harvest. Start with a small space, turning over the soil with a shovel. To reduce weeds remove grass and roots as you turn the soil or cover it will plastic for a month before hand. Most soils that sustain grass are fine for growing vegetables. Incorporate your compost, if available. You don't have to plant lots of different vegetables. Classroom gardens should be more about the experience and magic of growing rather than what is produced. A small successful project is something you can build on each year.

3. Send home a wish list with your students. Many parents have old tools lying around that they don't use or would be happy to donate seeds, gloves, compost, mulch, etc.

4. Tell teachers and administration about what you are doing. Showing your school's administration and other teachers how you are tying the garden into curriculum will build support and encouragement. You might even inspire others to get involved!

5. Choose a few things to plant: Plant "cool season vegetables," which can be directly seeded outside in March or April and harvested before school lets out for summer. (Or, plant in late August/September for a fall garden):

- Chard
- Radishes
- Collard greens
- Squash
- Carrots
- Kale

- Beets
- Spinach
- Peas
- Spring Mix
- Lettuce
- Potatoes

Here are some <u>great examples of different kinds of school gardens</u>, brought to you by City School Yard Garden.

How about <u>a grant for Kids and School gardens</u>? The <u>Whole Kids Foundation online School</u> <u>Garden Resource Center</u> offers a guide and grants whether you're working to build a new school garden or support an existing one. Big Green is a school garden program headquartered in Colorado that works with schools to produce "learning gardens" that can help booster kids' nutrition and academic achievement with healthful produce kids grow themselves! Big Green gardens are located currently in seven U.S. Cities and the program involves more than 100,000 students a day. Big Green will work with interested administrators and teachers and offers this step by step <u>planning guide</u> for getting your produce to your cafeteria.

Buy Locally and Partner with a Farm

"Farm to School" means bringing locally produced foods into school cafeterias; other related

aspects include hands-on learning activities such as farm visits, farmers visiting schools, school gardening, culinary classes, and the integration of food-related education into the standards-based classroom curriculum. Farm to school includes all types of producers and food businesses including



farmers and waterman as well as food processors, manufacturers, and distributors. Implementing farm to school programs in conjunction with food waste reduction, donation, and composting programs can help students understand the entire food cycle and how recovering surplus food helps to "close the loop."

Maryland schools spend **\$18 million** on local food served in schools according the <u>USDA Farm</u> to <u>School Census</u>. Maryland was the first state in the nation to have every public school system participate in the Maryland Homegrown School Lunch, an element of the Maryland Farm to School program.

Contact the <u>Maryland State Department of Agriculture Farm to School Program Director</u>, and the <u>Maryland State Department of Education Farm to School Specialist in the Office of School and</u> <u>Community Nutrition</u> Programs for more information and resources. Visit the <u>Maryland Farm to</u> <u>School website</u> for details of Maryland Homegrown School Lunch Week that takes place every autumn.

CELEBRATE YOUR ACHIEVEMENT!

Once you have implemented your food recovery program, it's time to evaluate and celebrate your success. Consider conducting a follow-up waste audit to measure how much food waste you have avoided. A follow-up waste audit can also reveal foods that are still being wasted, so that you can continue to make progress.

Throw a school wide event celebrating your food waste minimization and recovery success! Choose a meaningful day like America Recycles Day, Earth Day, or Arbor Day. The principal can award certificates to the class or the lunch table that recycled the most, and present certificates to members of the green team. A starter kit for home composting would be a great incentive reward!

Another way to recognize your success is to consider certifying as a Maryland Green School.

- Founded in 1999, the Maryland Green Schools Program (MDGS) is a sustainable schools program.
- Nationally recognized, the MDGS allows schools and their communities to evaluate their efforts in environmental sustainability. Participating schools empower students to make changes that will reduce environmental impact, encourage sustainability and foster environmental literacy.
- Maryland Green Schools benefit from the instructional support and partnership of Green Centers and Green Leaders. Green Schools have access to an extensive network of partners in their community and statewide resources.
- The program is administered through the MAEOE and funds to help run the program are included in the State Budget, approved by the Legislature and the Governor.
- The MDGS was developed by a diverse team of educators.
- The Maryland Green Schools Award Program recognizes Maryland schools that practice good environmental stewardship and include environmental education in the curricula.
- A new Maryland law (took effect 7.1.19) provides more resources for schools who certify as "green."

Perhaps you can begin with the food reduction and diversion project, and then see if your school can keep going to be the next certified Maryland Green School! For information about becoming a Green School, please visit: <u>www.maeoe.org.</u>



😼 A GOOD EXAMPLE

Chapel Hill Elementary, Charting a Green Future

As part of its 'Waste-Free Lunch' school outreach campaign, MDE staff visited Chapel Hill Elementary during lunchtime in the spring of 2019. The students enthusiastically embraced recycling, and listened about how to reduce their trash output overall by remembering the 3 R's:

Reduce, Reuse, and Recycle. They are now going forth with environmental awareness and sensitivity!

Teacher Jason Shaw leads a green team of elementary students at Chapel Hill (from 4th and 5th grades) and the school now regularly recycles on Wednesdays. Mr. Shaw said, "Before our first Waste Reduction Day, we measured our waste. Our before totals were an average of 17 bags of trash each Wednesday. After we started doing our Waste Reduction Wednesdays, our average total dropped to an average of 14, (but we've gotten down to 9 bags.) We will be implementing an expanded program with selected students manning the liquid/trash/recycle stations this year." The school also received a promo code from a company that makes Bento boxes. Chapel Hill has placed the code on their supply list so that students can get a discount and start bringing lunches that lend themselves to less waste.

Chapel Hill took it a step further by starting its own composting. They began with just two worm bins, one in each of 2 classrooms. Ms. Shaffer and Mr. Shaw spearheaded the program so they used their rooms as guinea pigs to see how the bins would do in classrooms, i.e., smell, flies etc. The experiment worked so well that eventually they were able to install worm bins into 23 classrooms, making 45 pounds of nutrient-rich compost during the school year. Mr. Shaw said, "We will be adding our compost to the pollinator garden that we built at the end of the year."



Cassidy S: "The worm bins were a little smelly, but they were also really cool because we got to see the worms squiggle around and turn our old food into good soil for our garden."

Venessa P: "The best thing about the worm bins was that I was able to name all of the worms, at least the ones that I saw. It was fun to see all my new friends turn food into stuff for a healthy garden."



Chapel Hill Students (above, left) checking out their compost pile. . . and in a few months, their teachers (above, right) showed off the compost - bagged and ready to use in the school garden, which the students used when planting their first garden this fall!





- Maryland Department of Environment (MDE) flyer: Waste Free Lunch
- <u>Wasting Less Food in K-12 Settings: Best Practices for Success</u>
- <u>USDA Creative Solutions to Ending School Food Waste</u>
- <u>Smarter Lunchrooms Movement, and University of Maryland Extension Smarter</u> <u>Lunchrooms</u>
- Great Tips and Nifty Tools for Saving Food from Going to Waste
- Food Waste Warrior Toolkit
- <u>http://www.foodrescue.net/</u> For grades K-12
- <u>State Farm to School Network toolkit</u>
- <u>Guide for Starting Farm to School</u>
- <u>Further with Food</u> (Center for Food Loss and Waste Solutions) Sort by topic
- USDA tips on <u>How to Grow a School Garden</u>
- USDA Choose My Plate "Let's Talke Trash" resource and Infographic
- Edible School Yard Project (Hundreds of free lesson plans and materials)