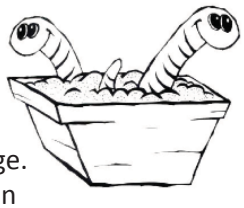
School Composting

Schools all over the country are starting to compost as a part of a nation-wide movement to incorporate waste reduction, nutrient cycling and food system awareness into our education system. Involvement ranges from simple classroom worm bins to large, school-wide operations that produce tons of compost a year.

At Wisconsin Homegrown Lunch, we have focused our energy on classroom composting with worm bins, but there are plenty of examples of successful school composting projects going on around the country at every level of involvement. See our resource guide on the following page for more information.

Classroom composting



A classroom worm bin acts as an introduction to natural sciences and recycling for students of any age. Worm bins are the easiest transition into composting, even for an indoor setting like a classroom. They are cheap and quick to construct, fun for kids (hundreds of classroom pets!), they don't produce any foul odors, and they are a source of endless lessons and activities. Teachers across the country are realizing the valuable lessons present in a bin full of worms and decomposing organic matter!

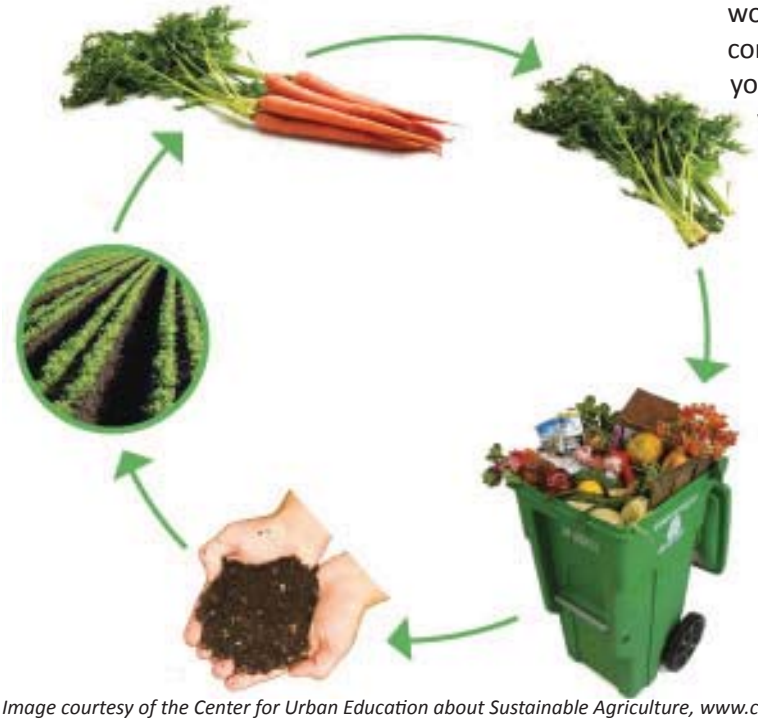


Image courtesy of the Center for Urban Education about Sustainable Agriculture, www.cuesa.org

What is Compost?

Composting is the natural process of organic matter, anything that comes from a plant or animal, breaking down into nutrient-rich soil, called compost. This process is carried out by millions of "decomposer" organisms such as worms, mites, fungi, and microscopic organisms. Composting transforms organic waste from an unstable and rotting state into a stable, rich, earthy state.

Why Compost?

Nearly 25% of the waste from American households that ends up at landfills is comprised of food scraps and yard debris. This means that 59 million tons of the waste that is sitting in our landfills, emitting tons of methane gas into the atmosphere, is the very same waste that can easily and quickly be converted into nutrient-rich soil. When we compost, we avoid wasting all those valuable nutrients that are infinitely useful for gardens and farms.

It's Easy!

Whether you want to get involved by constructing a worm bin for your classroom, putting a simple wire compost bin in the back of your school, or encouraging your school district to implement a district-wide zero waste program, there is somewhere for everyone to start.

Step 1 **Choose** your composting system. Depending on time, money, and community support, this could be an indoor or outdoor worm bin, a compost tumbler, a plastic compost container, a multi-bin rotation system, or many others.

Step 2 Learn to **separate** compostable waste from other waste. This is perhaps the most valuable life-long lesson that kids gain from school composting.

Step 3 **Rally up support** in your community. Parents, local students, and other groups are often willing to help.

Step 4 **Construct** your compost system and start composting!

Wisconsin Homegrown Lunch is a joint project of:

R.E.A.P. REAP Food Group: www.reapfoodgroup.org

UW-Madison Center for Integrated Agricultural Systems: www.cias.wisc.edu

School Compost Web Resources

The school composting movement is taking off across the country! For someone looking to start a school composting project, it can be overwhelming to try to navigate the vast array of resources available. We have put together the following list of success stories and how-to resources as a useful place to start.

School-wide composting

Success Stories and Tips

Alice Ott Middle School in Portland, OR has successfully implemented a compost project for over a year now:
http://waste.environmental-expert.com/resultEachArticle.aspx?cid=6042&codi=31084&idproducttype=6

KidsPeace, an alternative school in the Town of Muhlenberg, PA, started a compost program with red worms. They cut trash volume by 80% and reduced trash pickup from 6 times per week to once, saving about $6,000 per year.
http://readingeagle.com/article.aspx?id=123630

How-to Guide

Mansfield Middle School in Mansfield, CT started a composting project in the fall of 2000. This how-to manual addresses reasons for composting, developing a plan and gathering support, school community involvement, infrastructure, day-to-day, and what to do with finished compost:
http://www.ct.gov/dep/lib/dep/compost/compost_pdf/schmanual.pdf

All About Compost

Mansfield Middle School's Composting website has great information about compost and its benefits, as well as links to further resources:
http://www.mansfieldct.org/schools/mms/compost/index.htm

Growing Power in Milwaukee, WI is at the forefront of Urban Agricultulture. Using materials readily available within the city, they compost 100,000 pounds of waste every week!
http://www.growingpower.org/compost.htm
http://www.growingpower.org/worms.htm

Classroom composting

Teaching with a Worm Bin

Our **"Worm Bin Exploration Lesson"** focuses on the nutrient cycle and the connection between healthy soil, healthy plants, and healthy people. It includes instructions for how to make and care for a worm bin and a Nutrient Cycle Diagram. An electronic copy of the lesson can be found on the WHL Educators page:
http://reapfoodgroup.org/farmtoschool/educators.shtml

Cornell University has put together a comprehensive resource for teachers, including info on why to compost and example science projects:
http://compost.css.cornell.edu/schools.html

How to Build a Worm Bin

The **New York City Compost Project** has a great step-by-step set of instructions with pictures:
http://www.nyccompost.org/how/wormbin.html

Success Stories and Tips

Staff and students at **Oneida Nation's Turtle Elementary School** in Wisconsin proudly care for thousands of worms that process food scraps and old newspapers into valuable compost. Check out pages 17-19, "Students and Teachers Worm up to Vermicomposting":
http://www.epa.gov/epawaste/wycd/tribal/pdftxt/twj-4.pdf