



Thinking outside the bin

These Glen Hills Middle School students take the lead in helping their schoolmates sort cafeteria waste for composting, recycling or disposal.

KATIE STACKKE

SCHOOLS AROUND WISCONSIN ARE CLOSING THE COMPOST LOOP.

Cindy Koepke

In Washburn, Wisconsin, high school students get hands-on experience in food waste diversion. This Bayfield County public school uses its salad bar food scraps to feed its biology room animals, and composts food waste from cooking classes and school breakfast. They also have an extensive compost program for their garden, greenhouse and landscape waste.

Washburn High is an example of a growing number of Wisconsin schools that are reducing food waste and diverting it from landfill disposal by composting it instead. Some schools are doing small projects with classroom worm bins, which teach students both how the decomposition process works and how composting is nature's way of recycling biodegradable materials. Other schools have committed to larger composting efforts and are seeing good results, especially when combined with a comprehensive recycling program.

As a participant in Green & Healthy Schools Wisconsin, Washburn High has received Sapling School recognition for its natural resource conservation and education efforts. Their food waste diversion is part of the school's ongoing sustainability work that includes setting up a monarch oasis and native species garden, growing food in a high tunnel greenhouse, and having biology students do all their field work outside on the school grounds. The school has 186 students and is aiming toward the highest level of Green & Healthy Schools recognition, Sugar Maple.

Started in 2004 by the Department of Natural Resources, Green & Healthy Schools Wisconsin has grown into a partnership between the agency, the Department of Public Instruction, and the Wisconsin Center for Environmental Education at the University of Wisconsin-Stevens Point. The program is voluntary and self-paced. Participat-

ing schools set their own goals and use GHSW to connect with people and organizations statewide for resources to achieve their goals and curriculum to connect them to the classroom.

"Green & Healthy Schools Wisconsin gives recognition to schools for sustainability projects already completed or currently in progress," says Susan Schuller, senior outreach specialist for the Wisconsin Center for Environmental Education. "We do not prescribe what schools must do; instead we create a framework organized around nine topics to encourage natural resource conservation, a healthier school community, and connecting education to the outdoors."

Popular entry points to the GHSW program are energy conservation, recycling, outdoor education and school gardens. There is an increasing interest in composting, which many schools start as an offshoot of their gardening.

In the suburban city of Glendale, Glen Hills Middle School has a student-led Green Team that monitors lunchroom collection of cafeteria food waste to be composted from the school's 540 students. They also compost landscape waste and bathroom paper towels. Because they work with Compost Crusader, a regional compost collection business using an offsite commercial compost site, Glen Hills is able to collect

all types of food waste from school and home lunches and snacks. Their composting efforts have diverted 250 gallons per week of food waste that would have previously gone to the landfill. By combining composting with their previously established recycling program, Glen Hills is diverting over 50 percent of its solid waste from landfill disposal. Glen Hills Middle School recently achieved Sugar Maple status in Green & Healthy Schools Wisconsin for its many sustainability projects and conservation education.

Sugar Maple school Colby Elementary in Clark County composts its cafeteria and landscape waste in a closed bin. Their 320 students are involved in many aspects of waste management: overseeing other students emptying milk cartons before recycling, teaching each other what to compost and recycle from school and home lunches, and emptying the cafeteria's compost collection bucket into the outdoor compost bin along with a bucket of wet paper towels.

"The fourth graders are in charge of the program and we have our new kindergartners trained by Thanksgiving what to put in the compost bin and how to 'drink it dry' so the milk carton can go in the recycling," says Co-Principal Brenda Medenwaldt.

Student volunteers mix the compost, and weigh and chart the amounts of food waste collected. Colby closes its composting loop by using finished compost in the school's cold frames where students grow vegetables that are used in school lunches.

Conserve School, a private semester high school near Land O'Lakes, makes composting and recycling a standard practice for its students and staff. The school boards approximately 60 students in grades 10 and 11 each semester. With its emphasis on outdoor learning across the curriculum and incorporating conservation and sustainability into daily activities, the school was awarded Sugar Maple status through GHSW. Waste from school meals and landscape maintenance is composted in a classic three-bin system.

The school's success in composting and recycling relies on students to motivate each other. Past projects include posters, humorous skits, lunchtime announcements and friendly competitions between residence halls to see which produced the least food waste at meals. Student coursework covers reducing, recycling, reusing, composting and other waste management topics in environ-



McKinley Elementary School students work with Compost Crusader to sort cafeteria waste.

MELISSA TASHJIAN



Washburn High School students build compost bins.

SEAN AUGUSTYN

mental science and stewardship courses, and art classes often use recyclable and found natural materials. Staff has been trained in waste management and gardening topics, which support composting efforts. This all adds up to over 64 percent of Conserve School's solid waste being diverted from landfill disposal.

In Oconomowoc, students at Silver Lake Intermediate School separate their lunch waste into compost, single-sort recycling and trash. Their 720 middle schoolers compost approximately 60 pounds of cafeteria waste each school day. This Seedling School conducted waste audits in 2015 with their waste hauling contractor and local recycling program, and their district green team has been out to support increasing composting and making a strong push on recycling.

Recycling milk cartons is part of their successful schoolwide recycling program, and signs with pictures help students get waste into the correct bin. Activities such as making castles out of recyclable items and having students collect and weigh a week's worth of waste teach the reasons for the school's waste reduction work. The school recycles and composts over 44 percent of its solid waste. Silver Lake used to fill 16 garbage bags in its lunch room daily before start-

ing the compost program in 2013 and is now down to two bags; the school has also been able to eliminate one trash pickup each week.

West Middleton Elementary composts fruit and vegetable waste from its cafeteria and has trained kitchen staff to reduce waste during food preparation. Some teachers are also sending snack waste to their three-bin compost setup.



Many students, like these Silver Lake Intermediate school students, start learning about composting with a classroom worm bin.

KATE WINKLER

Their Green Team students are leaders in teaching other students about composting. Books on composting are kept on hand for students and staff to check out. Middleton-Cross Plains Area School District has a recycling and waste reduction policy followed by all its schools. West Middleton's 470 students use trash cans that are labelled "landfill" that sit next to recycling bins. The school recycles milk and juice cartons and composts its paper napkins with the food waste.

Nick Smith, head custodian at West Middleton, says, "The program has succeeded at getting students and staff to be more aware of their waste and where it belongs, which was the main goal. We've cut our lunchroom landfill waste amount in half and doubled our amount of recycling and now have materials to start school gardens with the compost we are creating!"

Overall, West Middleton diverts 53.5

percent of its solid waste from landfilling. They also donate unopened packaged food and milk to a local food pantry, part of the 30,000 pounds of food contributed each year by their district.

After decades of success in recycling, Wisconsin is making steady progress toward similar success in composting and food waste diversion. Food waste reduction and landfill diversion efforts are making news on the national scene, and composting is a big part of that work. While composting has been part of agriculture and home gardening for years, interest from other sectors is growing. Wisconsin's Green & Healthy Schools, making a habit of "thinking outside the bin," and their communities are composting leaders we are proud to celebrate. 

Cindy Koepke is a natural resources educator in the DNR Division of Environmental Management and is the contact for the Green & Healthy Schools program.



FOUR LEVELS OF GHSW RECOGNITION

Green & Healthy Schools Wisconsin offers four levels of recognition for participating schools.

- To be a Sprout School, applicants complete a registration form and briefly write about their school's individual goals or current efforts.
- Seedling level means a school has also documented achievement in one of the nine GHSW focus areas.
- A school showing achievement in five specific focus areas (energy, environmental health, recycling and waste management, school site and water) will be recognized as a Sapling School.
- Sugar Maple Schools have made significant accomplishments in all nine focus areas.



SCHOOLS AND BUSINESSES WORKING TOGETHER: COMPOST CRUSADER AND RECYCLING CONNECTIONS

Compost Crusader, a Milwaukee business, works with five K-12 schools, Milwaukee Area Technical College, businesses and restaurants to collect food waste for off-site composting. Waste is taken to a DNR-licensed commercial compost facility which can accept meat, dairy, pasta, sauces, paper products soiled by food, compostable bags and other types of food waste beyond the fruit and vegetable waste suitable for home or schoolyard composting. In 2015, Compost Crusader collected over 850,000 pounds of compostable waste from 35 customers.

Melissa Tashjian got started in community composting with a nonprofit organization. After about five years, when it was time to scale up that work, she started Compost Crusader. Tashjian finds it rewarding to make community and school connections through her business while diverting food waste to make a significant reduction in the amount ending up in landfills.

McKinley Elementary in Wauwatosa, an elementary school with 400 students, collected 5,100 pounds of compostable material during the first four months of working with Compost Crusader. "Cafeteria Rangers" monitor the collection bins and guide their fellow students along. A schoolwide assembly with information and a fun sorting game helped everyone get involved in this successful program.

Compost Crusader also serves Milwaukee public school Fernwood Montessori, which composts its cardboard meal trays with its food waste, and three Green & Healthy Schools: Greendale High School, Canterbury Elementary in Greendale and Glen Hills Middle School in Glendale. Next steps for Compost Crusader include working with a Greendale High School student entrepreneur to make a video on the details of implementing food waste composting and finding a curriculum focused on municipal solid waste to share with its school customers.

Working elsewhere in Wisconsin is Recycling Connections Corporation, based in Stevens Point. RCC works with schools statewide on waste audits, recycling programs, composting and food waste reduction. RCC has already begun working with Washington Elementary, a recent Sprout School in Stevens Point.

Compost Crusader and Recycling Connections have joined the Green & Healthy Schools Provider Network to connect with participating schools and be featured in the program's newsletter and social media. Nature centers and any business or organization with services or knowledge to offer Green & Healthy Schools are welcome to become a Provider Network member. Contact Green & Healthy Schools for further details by emailing DNRGHSWisconsin@wisconsin.gov.



GETTING STARTED WITH COMPOSTING AT HOME OR AT SCHOOL

Composting has a lot of benefits. It reduces waste hauling costs and associated pollution and landfill disposal costs. Composting helps lower greenhouse gas emissions from decomposing landfilled organic material, uses biodegradable materials more efficiently, reduces the need for fertilizer and soil amendments in gardens, and improves soil structure, organic matter content and moisture holding capacity.

Curious about how to compost at home or school? The Department of Natural Resources has excellent composting information free of charge; go to dnr.wi.gov and search "Compost." Check in with your municipality or county to see if they have compost bins available, or make your own from ideas in the DNR publications. It's easy, and you'll immediately see a reduction in what you send to the landfill. Green & Healthy Schools team members are also happy to refer you to resources on composting or joining the recognition program; go to dnr.wi.gov and search "Green and Healthy Schools."