Vermicomposting Programs

Several schools in Minnesota are using vermicomposting programs to help make use of the food waste generated in their schools.

Composting Food On-Site

Vermicompost is the product or process of composting using various worms, usually red wigglers, white worms, and other earthworms to create a heterogeneous mixture of decomposing vegetable or food waste, bedding materials, and vermicast. Vermicast, also called worm castings, worm humus or worm manure, is the end-product of the breakdown of organic matter by an earthworm. These castings have been shown to contain reduced levels of contaminants and a higher saturation of nutrients than do organic materials before vermicomposting. Vermicompost is an excellent, nutrient-rich organic fertilizer and soil conditioner.

What schools are doing

Garlough Environmental Magnet School - West St. Paul

Garlough Environmental Magnet School has an assembly at the beginning of the year to educate and remind students how they handle trash differently. They have labels on every trash, compost, and recycling bin in the building. Their naturalist teaches lessons about composting. Students have worm bins in their classrooms to handle class food waste. The Student ROT Rangers oversee correct separation of lunchroom waste. The Livegreen Student Group creates posters and fliers for distribution in the school. Booths at their Environmental Fair highlight ways to handle food waste and how to compost outside of school. The school has hosted intermittent guest speakers to promote all aspects of responsible waste reduction, both in and out of school. This year the school had the "Leave No Trace" program to educate students about reducing waste and leaving outdoor spaces as pristine as they found them.

Vermicomposting programs are especially beneficial for schools that have a school garden.

Stowe Elementary School - Duluth

All lunchroom waste is categorized and then removed from our Waste Reduction Table. Each bin separated by waste composition is designated for the most sustainable method of disposal. Compostable food waste is taken to the 'Red Wiggler Worm Farm, or vermicompost site,

Pictured above: Stowe's Worm Shed and their product; nutrient rich liquid fertilizer.

in our worm shed on the school grounds. Non-compostable food waste is separated and picked up weekly by a local farmer to be used as animal feed. Students titled Lunchroom Cadets in third and fourth grade are responsible for physically removing food-waste from the lunchroom and taking it to its designated location for disposal. Non-food waste is separated into recyclables and garbage. Recyclable goods are separated, rinsed clean, and then placed into the most appropriate of the six recycling carts at Stowe. Finally, all other waste is placed in one six-cubic-yard dumpster and picked up weekly by a local garbage service.

The Waste Reduction Program at Stowe Elementary School significantly reduces the amount of food waste produced. Stowe's Waste Reduction Table has bins separating its contents for sustainable disposal. In two of these, food waste is separated into vermicompostable and non-vermicompostable waste.

Resources

Worms, Worms, Worms Video

http://recycleminnesota.org/htm/ReWorm.htm

Worm Away Your Cafeteria Scraps
(North Carolina State University)

http://www.bae.ncsu.edu/topic/vermicomposting/pubs/worms.html

Vermicomposting Curriculum Guide Grade 5 (North Carolina)

https://www.bae.ncsu.edu/topic/vermicomposting/pubs/ag-464-vermi-curriculum.pdf

The Worm Guide (California)

http://www.calrecycle.ca.gov/Publications/ Documents/Schools/56001007.pdf

Eagle Bluff ELC has a program with vermicomposting that they share with schools

http://www.eagle-bluff.org/top/projects/foodwise/