

IOWA FOOD WASTE REDUCTION PROJECT

Case Study

Food Displaced = WASTE

Small Private College and Local Farmer Divert Food Waste from Landfill

THE PROBLEM

In Iowa, Grinnell College was in the planning stage to build a brand new facility to serve as a central gathering place, campus offices, and dining halls and kitchens. To accommodate the college's sustainable ideology, Grinnell was able to plan their dining facilities and kitchens to include food waste reduction and diversion operations. In 2006, the Joe Rosenfield Center officially opened. Jeanette Moser, associate director of dining services, stated that "Building a new facility helped implement our plan to reduce food waste because we are committed to do the right thing."

Grinnell College's Dining Services feeds approximately 2230 students, faculty, staff and visitors per day in their Marketplace cafeteria. Serving this many people results in food waste. However, instead of simply sending their food waste to the landfill, Grinnell College took an environmentally conscientious step and found an alternative for their pre- and post-consumer food waste.

FACTS AT A GLANCE

Grinnell College is able to divert approximately 1,500 pounds of food waste from landfills every week.

McDonough's efforts enable him to produce enough compost for himself and projects throughout the City of Grinnell.



THE SOLUTION

First, food left on trays and plates from the dining center as well as food scraps from the kitchen are scraped into a food pulper that grinds down the food and removes excess water. The food waste is then deposited into numerous large recycling containers which are picked up by the college's facilities management and transported to a local farm owned by Howard McDonough once per day.

Situated on McDonough's property are giant piles of compost with peppers, onions, avocados, and other foods peeking out of the fresh deposits delivered from Grinnell College. McDonough mixes bedding material from the local 4H Fairground with the food waste from Grinnell. Each pile is turned with an end loader once a month until the compost fully matures into a nutritious soil amendment that will eventually benefit plants and crops.

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THE RESULTS

McDonough believes the nutrients in the compost give him great crops. He spreads the compost on his pumpkin field and also uses it for community projects where landscaping and flower beds are needed in the city of Grinnell. McDonough could not be more pleased with the end product but he does have one complaint – the Starlings. They are a nuisance and love to eat from his compost piles. Otherwise, rodents are never an issue for the Grinnell farmer and odor is only noticeable for a short time after he turns his compost pile.

This beneficial partnership is just one way in which food waste diversion can occur easily and beneficially. Grinnell College is able to divert approximately 1,500 pounds of food waste from landfills every week and McDonough is able to produce compost for himself and projects throughout the city of Grinnell.

In the future, McDonough would like to see more paper products composted. He believes newspapers, coffee filters, paper plates and towels are some of the items that would compost easily and should be included to increase waste diversion from the landfill. He would also like to see more farmers throughout the state implement a similar composting program that would help reduce the amount of food waste entering Iowa landfills.



COMPOST PERMIT REQUIREMENTS

In the state of Iowa, compost operations that receive less than two tons (4,000 pounds) of food waste and yard waste from outside sources per week are not required to apply for a permit through the Iowa Department of Natural Resources. They are required to follow some basic guidelines such as written notification and an annual report provided to the Iowa DNR, permanent posted signage, and careful location of the facility. For further information, please see the category **REGULATORY INFORMATION** on our website for composting facilities with permit exemptions.