

New pulper at Oberlin College brings campus closer to carbon-neutral dining

Reprinted with permission from Oberlin College : Amanda Nagy

After several years of research and student input, a new machine that pulps and condenses food waste is being installed in the kitchen of Oberlin's largest dining hall.

The pulper grinds and drains food waste in a self-contained system, resulting in a fine, textured material that will be used as compost at George Jones Memorial Farm. The system will collect all stages of food waste — from food prep to post-consumer scraps — and eventually will handle the corn-based, biodegradable utensils and plates that are in use at dining halls.

Over the last several years, we've been trying to figure out the best way to responsibly deal with food waste," says Michele Gross, Director of Business Operations and Dining Services. "We investigated several different companies and various types of waste processing. We concluded that the most tried and true system is an on-site pulper/extractor."

Gross says Campus Dining Services has investigated the possibility of producing compost material at all of Oberlin's dining halls, but CDS staff decided that starting in Stevenson, which offers an all-you-can-eat buffet, would be an appropriate first step.

The pulping process reduces waste to about one-eighth of the original volume. The machine is not a composter, but it has an extractor that squeezes out most of the liquid, leaving a pulp material that's drier, lighter and easier to work with.

One of the main advantages will be a decreased reliance on garbage disposals,

which require municipal water, electricity and sanitation resources. The pulper is expected to reduce 95 percent of the post-consumer solid waste from Stevenson that enters the municipal sewer system. The system also will reduce water use in the dish rooms by 75 %.

"We currently run a food disposal almost every hour of the day during dining operations," Gross says.

"Our hope is that someday we won't have to run a disposal at all."

The pulped material will be picked up by George Jones Memorial Farm and added to the farm's formal compost or its worm composting program. Since 2004, the college has collected more than 10 gallons of used coffee grounds and 100 pounds of kitchen scraps each week for compost at Jones Farm; CDS also donates 100 percent of its used food-grade cooking oil to Jones Farm, Full Circle Fuels, and Calala's Water Haven, a local nursery that raises and harvests shrimp and other seafood. The cooking oil — about 98 gallons per week — is used for farm machinery fuel.

By having a pulper, CDS can collect meat and bone food waste that normally wouldn't be added to compost. For its second phase in implementing the pulper, CDS intends to collect and grind up the disposable, compostable containers offered for carryout food in Dascomb Dining Hall. While the college prefers that students participate in the reusable container program, adding disposable serving ware to the compost mix will help "close the sustainability circle," Gross says.

Students in the environmental studies program have led the charge in finding practical solutions for composting and reducing food waste in Oberlin's dining halls, says Rick Panfil, General Manager of Oberlin's food service provider, Bon Appetit Management Company. In 2001, Lucian Eisenhauer '03 wrote a paper on the cost savings involved in composting, and in 2003 he followed up his research with a proposal for a formal compost initiative. Meredith Dowling '06, who helped establish Oberlin's Office of Sustainability, also conducted research on a composting facility for dining halls.

Although a compost facility wasn't realized, Panfil says student research has been an integral part of sustainability planning and the decision to purchase a pulper. Bon Appetit has partnered with CDS to reach sustainability goals and find best practices for reducing waste. Bon Appetit has also provided a grant toward the purchase of the pulper. Gross says the total cost for equipment and installation is about \$114,000.

In addition to the Bon Appetit grant, CDS received a sustainability grant from the Oberlin College Green EDGE Fund, and the Class of 2010 chose to support the project with its senior gift, raising nearly \$8,000.

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Somat Company Invited to demonstrate technology to City of **Newport News, VA.**

Food Waste is the second largest waste stream in The City of Newport News, Virginia. The Solid Waste Division of the City of Newport News is intent on spearheading action from both the public and private sector to significantly reduce and divert food waste from the landfill. Recently they turned to Somat Company, based in Lancaster, PA, to further educate the city, residents, and prominent businesses on its technology in food waste reduction and diversion.

Over four hundred invitations were sent out to residents, businesses, and government agencies based near and far from the city. Among the attendees were representatives of University of Virginia, Virginia Tech, NASA, and Jefferson Laboratories. Somat provided their demonstration trailer, complete with technician, and representatives of their Virginia sales team for two days of demonstration and education about their equipment on November 16th and 17th.

According to Daniel Baxter, City of Newport News Business Recycling Coordinator, the primary objectives of this demonstration are simply to educate, inspire questions and further the desire to reduce waste. When asked why Somat was asked to attend and demonstrate, Baxter said,

“When we saw this equipment operate in July, the light bulb went off...we can do this...Since Somat has already built a system for the Department of Defense, the Marine Corps base in Quantico Virginia, they’ve got the credibility we seek.”



Composting is a key component of the City's aspirations. Ultimately they would like to divert all food waste directly to their state of the art composting facility. Somat's technology will be a key component in maximizing efficiency and food waste reduction. Stay tuned for updates on the Newport News demo and what's happened since!

Employee Spotlight:



Todd Keller

Red Goat and Master Disposers.

Somat's featured employee is Todd Keller. Todd oversees both of Somat's disposer companies: Red Goat and Master Disposers. Married for 23 yrs with two daughters Todd isn't shy about his happiness at Somat. A chance encounter with a friend led him to a meeting with Lin Sensenig, who he also knew from school and baseball as a young man, and in a few months he was on board. He really enjoys the "lean" operation on the disposer side as it encourages being able and willing to do anything in order to get the job done. Todd works with two others in

the disposer segment and loves the fact that he gets to do a little bit of everything. He oversees the sales force and pricing structure for both lines but enjoys everything that he's asked to do.

“We operate super lean, that’s what I love about this place. I don’t mind getting dirty, I don’t mind sweating...we’re putting things together and testing them. It’s out the door they go from there”.

A note from Lin:

Hello, Everyone –

I find it positive and a good sign that more and more composting facilities are accepting food waste. People in our industry have known for a long time the challenges that exist for proper food waste disposal. As diversion is becoming increasingly recognized as a “best practice” I’m happy to see that composting facilities are stepping up to the plate and getting involved.

Oregon Dairy, a local facility to our headquarters, is a great example of this. In the fall of 2010 Oregon Dairy partnered with Terra-Gro, of Peach Bottom PA, and installed a manure and food waste composting facility. Oregon Dairy has been operating an Anaerobic Digester since 1985, and the

addition of the composting facility will allow them to take in more compost material from outside their own dairy operation.

Obviously compost facilities and the entities that generate large volumes of food waste are still making decisions relative to cost, cost savings, and potential income. But it is nice to see that more and more facilities are coming online to accept food waste. This will only increase as the demand to decrease our carbon footprint grows louder and the costs associated with diversion make it an easy decision.

We seem to be in a market that has positive motivators surrounding us so I’m very much

looking forward to the future with Somat! Thanks to all of our dedicated employees that continue to look for solutions and solve problems within our industry. Talk to you soon - Lin

Lin Sensewig

General Manager



Website Launch Completed!

By Charlene Goff



Somat Company recently launched a new website that offers improved design and easier navigation. We expanded our equipment information pages and offer a new Services Resources Center.

For consultants, the site provides more complete LEED information on our products as well as an update on our Revit services. Check it out!

www.somatcompany.com