

Macalester College 2025 Campus Race to Zero Waste Case Study

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Focus of Case study:

As part of our food recovery efforts, we recovered and redistributed a significant quantity of food through infrequent large-scale food recovery events at strategic times.

Detailed description of campaign or effort:

At Macalester college, the prevention of food waste has been a prioritized project for several years. Like many college campuses, Macalester produces hundreds of pounds of organic waste each day in the form of uneaten food and food scraps. Still, we know that food insecurity is increasing both on college campuses and in our local community. In addition to these seemingly paradoxical challenges of food waste and food insecurity, uneaten food is also a major driver of climate change due to both emissions produced by rotting food in landfills as well as wasted inputs invested into producing, storing and transporting food that is ultimately never eaten. Food recovery programs that capture and redistribute uneaten food suitable for human consumption before it enters the waste stream help to reduce greenhouse gas emissions and prevent food waste while also addressing food insecurity in our community.

Macalester college students started doing food recovery to capture the uneaten and unserved food that is not used in the dining hall. Typically, students participate in food recovery by coordinating with campus dining services to collect and donate uneaten cafeteria food once per week during the semester. These weekly food recovery efforts typically result in 50-120 lbs of uneaten food being redistributed for human consumption each week. This year as part of our food recovery efforts and through discussions with campus chefs, we discovered that we were able to recover and redistribute a significant quantity of food through infrequent large-scale food

recovery events conducted at strategic times. These times included: after major campus events like home-coming, and at the end of the semester when dining services close operations for semester breaks.

Since December 2024 the Macalester College Sustainability Office organized three large food recovery events. This food was leftover from the end of the semester, graduation and reunion. It also included produce from the dining hall that was unused during the semester and would not stay fresh over the break from classes. Through these three events, we were able to recover 4070 lbs of food for human consumption. During food recovery events, teams of 4-7 people packaged the food into aluminum foil containers labeled with the date and the name of the food. These containers were then put into reusable tote bags for transportation. They were driven to a local nonprofit called Loaves and Fishes which collects and redistributes uneaten food to food pantries and community meals.

Planning steps & timeline to implement:

- 2023: Macalester College applied for, and received, a county-funded Food Recovery Grant. The grant allowed Macalester to pay for the supplies and hire student workers to organize and sustain campus food recovery efforts. Macalester students also re-started the Macalester chapter of the Food Recovery Network. This allowed them to access additional resources to support campus food recovery efforts.
- 2024: Discussions with campus chefs from our dining service Provider Cafe Bon Appetit resulted in the idea
 to do large-scale food recovery events at the end of the semester to collect uncooked produce that would
 have gone to waste during school breaks. This idea then expanded to collecting food after large campus
 events such as graduation and homecoming which typically also produce large quantities of uneaten food.
- December 2024: At the end of the semester, we recovered food that would not be used because the dining hall closed down. We recovered 1512 lbs of food.
- May 19th 2025: After the end of the semester we recovered the food from commencement. We recovered 566 pounds of food.
- May 22nd 2025: We worked with Cafe Bon Appetit to do another end of semester kitchen cleanout focusing on produce and unserved food leftover from the dining hall closing at the end of the semester. We recovered 1092 pounds of food.
- June 13th 2025: Excess food was leftover from homecoming so we arranged for another large food recovery. We recovered 900 pounds of food.

Resources and stakeholders involved:

This project required collaboration with the dining hall and Bon Appetit dining services company. The Cafe Bon Appetit Chefs set aside the unserved food for food recovery and coordinated with us to plan the food recovery events. A grant from Ramsey Washington County and funding from the food recovery network helped provide financial support for the project. A student coordinator was paid to facilitate and participate in food recovery. The coordinator also organized a group of volunteers. Sustainability Office Staff and Student volunteers participated in food recovery by packaging the food. Student Staff then drove the food to local nonprofit Loaves and Fishes. Loaves and Fishes collects uneaten food and redistributes it in the community.

It is important to note that not all uneaten food is suitable for human consumption. When looking to address the challenge of uneaten food, Macalester College follows the United States Environmental Protection Agency's Food Recovery Hierarchy (Figure 1). Macalester sends its remaining food waste from the dining hall from both food

preparation and uneaten plate waste to feed pigs through a partnership with a food waste collection service called Barthold Farms. Barthold farms collects uneaten food waste twice a week. The food waste from the dining hall would have been sent to Barthold farms, but because of our food recovery program we are able to feed more people. By doing larger food recovery events at the end of the year, we ensure more food is distributed for human consumption.

All other compostable waste produced on campus such as compostable bags, cups, and plates and any organic material produced outside of the dining hall is sent to an industrial composter (SET Environmental in Roseville Minnesota) for processing.

Describe the Results of this campaign component:

We redistributed unserved uneaten food from the Macalester dining hall. We also collaborated with the dining hall to create larger food recovery events. These events brought student workers and volunteers together to work collaboratively. Students are then given the opportunity to practice skills that will help them in their future careers. Organizing and participating in food recovery helps prepare students for jobs in environmental fields.

Between the Fall and Spring semesters we recovered 6,585.89 pounds of food. Out of that 6,585.89 pounds of food 4,070 pounds of food were from the larger food recovery events at the end of both semesters. In Fall 2024 we collected 1512 pounds of food at our end of semester food recovery. In Spring 2025 we recovered 2558 pounds of food from our larger food recovery events. After graduation, we had two food recovery events where we recovered 1658 pounds of food. A few weeks later after the Macalester Reunion we recovered 900 pounds of food.

What would you do differently in the future?

One problem that we came across was at the end of the semester some of the food set aside for food recovery was too old to be donated to Loaves and Fishes. In the future we could communicate more with the dining hall about when the food will expire. Then we can adjust the date of our food recovery so that the most food can be delivered to Loaves and Fishes.

In the future, we could reach a larger audience of students by advertising our larger food recovery events. Then students could get involved and be able to see where the leftover food from the dining hall is going. Tabling at events could help reach a larger audience.

As a next step in this project, we want to expand food recovery by being able to access food from catered events on campus. The catered events use the same dining company Bon Appetit. These events produce large amounts of leftover food that we could capture and could be used for human consumption. In addition, we want to continue to focus on overall food waste reduction so we don't have to recover as much food. We will do this by working with the chefs in the dining hall to come up with strategies to reduce the overall amount of extra food produced.

What advice would you give to another college that wanted to do a similar effort?

The advice we would give to another college that wanted to do a similar effort would be to build a positive relationship with your dining hall. These Food Recovery events went well when we were able to communicate with the kitchen staff and the staff of the Bon Appetit dining company. It is also important to know the food safety legislation and resources in your state.