

From Fork to Farm: A Food Waste Audit

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Abstract

New York State's food donation and food scraps recycling law, as of January 1, 2022, requires institutions of higher education to compost all food waste. Supported by a NYP2I (New York Pollution Prevention Institute) grant, SUNY Potsdam, in collaboration with six North Country universities, conducted a food waste audit during the week of February 20-24, 2023. A small group of students worked with PACES staff and student volunteers to collect pre- & post-consumer food waste and overproduction from campus dining facilities. Data collected included the number of meals sold and number of plates contributing to composting. Collected food waste was weighed and sent to a local composting farm. The number of meals collected for the week was 2,337 (or 18.54% of 12,608 total meals). Waste collected amounted to 1,897.21 lbs. Estimated uncollected waste amounted to 1,965.52 lbs. This data will help campus authorities combat food waste in the future.

Introduction

The on-campus audit was used to calculate how much food waste is produced. The waste was collected from different dining facilities across campus, and our goal was to find out how much food is wasted and where the most food is produced. We collected and analyzed data for how much food waste was generated; We distributed waste produced by pre-production, overproduction, and post-consumer waste management. The waste tracked was used for composting, it was sent to a composting facility of Whitten Family Farm. The total weight and meals were collected daily from Becky's, Bowman Kitchen, PAC, Starbucks, Student Union, Thatcher.

Methodology

A group of students worked with PACES staff and student volunteers to collect pre/post-consumer and overproduction from dining facilities across campus. We collected data for the number of meals sold, and the number of plates contributing to composting.

Materials-

- Green compost toter
- 5-gallon compost buckets
- Hand scale
- Floor scale
- Clicker/counter
- Signage/posters

Process-

- We tabled for one week prior to the audit to advertise and gain volunteers
- The duration of the audit was 5 days, Monday through Friday, where the interns and volunteers would be stationed at each of the 3 dining halls collecting food waste. This process included instructing students to dump their uneaten food into a green bucket along with their napkin. Every time someone either scraped their plate into the bucket or threw their empty plate away we would count one click to signify one meal. When the buckets became full, or between breakfast/lunch/dinner shifts, the interns would first weigh the bucket and submit the weight and its corresponding dining hall information into a Google Form. The bucket would then be dumped into a toter. At the end of each day, an intern would go to each dining facility and get the total weight of the toter and then would bring the full toter to the loading docks to be taken away to the composting facility.

Results

The number of meals collected for the week was 2,337 out of 12,608 total meals, or 18.54%. Waste collected equaled 3008.84lbs. Estimated waste not collected was 1,965.52lbs.



What's Next

Since completing the audit, SUNY Potsdam does meet the New York State's, food donation and food scraps recycling law. Currently, a grant is under way to implement a 3-bin compost/recycling/trash bin for the dining halls proposed for next spring.

By providing education on composting and the importance of food waste reduction will improve management practices and awareness on sustainability practices. The WISER Center plans to have an increase on outside bins/tomato cages for composting for individuals on and outside of campus.



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Types of waste	Student Union	Becky's Place	PAC	Thatcher	Bowman	Starbucks	Campus
Pre-consumer lbs.	48.9	40.1	14.26	503	409	40	1055.26
Overproduction lbs.	1159.65	273.5	208.4	X	X	X	1641.55
Post-consumer lbs.	257.13	50.8	4.1	X	X	X	312.03
Total Weight lbs.	1465.68	364.4	226.76	503	409	40	3008.84

Table 1: Food was collected by weight, along with type of food waste and collection locations.

