



Georgia Institute of Technology 2020 RecycleMania Case Study - Styrofoam

1. Contact info (name, department, school, email, phone)

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2. Focus of Case study - This case study focuses on the collection of Styrofoam from labs and move-in for recycling and the partnership created to collect the material.

3. Detailed description of campaign component:

Sparked by the individual collection of an eco-conscience Research Technician, the Styrofoam Recycling Pilot Team formed to create a formalized process to collect foam shipping coolers and inserts from labs at Georgia Tech. In June 2019, the group gathered to create the plans to collect Styrofoam in two research buildings on campus. During the meetings, the group decided to include collecting material during the 2019 student move-in and planned to set up collection areas for Styrofoam packaging. The Office of Solid Waste Management & Recycling pledged crewmembers and transportation after the team decided on the destination vendor. The Center for Hard to Recycle Materials (CHaRM) would take the material, densify it and then send to another vendor where they would produce fake rocks for landscaping. GT Environmental Health and Safety guided the team on what material would be safe to collect and outlined all recyclable foam would be uncontaminated or not exposed to lab elements. The two research buildings provided space for collection and OSWM&R and Office of Campus Sustainability assisted with educating the labs and creating signage centered on safety and removing labels to reduce contamination. Originally, the material was set in Gaylord boxes and then bagged for transportation on a stake-bed truck. We improved this process by purchasing Gaylord liners that simplified gathering the material from the boxes and allowed OSWM&R to reuse them by collaborating with CHaRM. The pilot took off and has not stopped since its full start in July 2019. Due to the interest and success of collection, capacity has increased and caught the attention of other research buildings eager to participate. Currently, OSWM&R is exploring other vendors and potentially purchasing our own densifier for possible expansion opportunities, as we are limited with CHaRM's operating hours and capacity.

4. Planning steps & timeline to implement:

- June 2019 group formed (6 week planning period)
- Mid-July 2019 collection in labs started
- Mid-August 2019 move-in collection
- September 2019 transporting material to CHaRM
- On-going: delivery to CHaRM, education, process improvement, expansion considerations

5. Resources and stakeholders involved

- Jackson, Cindy – Associate Director, Office of Solid Waste Management & Recycling, facilitated logistics for this pilot (Cindy retired in 2019)
- Brodzik, Emma – Campus Recycling Coordinator, Office of Solid Waste Management & Recycling, facilitated logistics for this pilot
- Hunt, Alejandro – Area Maintenance Manager, Office of Solid Waste Management & Recycling, facilitated logistics for this pilot
- Dunham, Shawn – Grounds Foreperson, Office of Solid Waste Management & Recycling, facilitated logistics for this pilot
- Neville, Sarah – Sustainability Coordinator, Office of Campus Sustainability, provided best practices and marketing copy
- Lisk, Ryan – Laboratory and Chemical Safety Officer, Environmental Health & Safety, provided collection guidance
- Dunn, Jason – Facilities Manager, Krone EBB, determined the logistics and collection of Styrofoam within Krone EBB
- Clausnitzer, Logan – Building Coordinator, Krone EBB, determined the logistics and collection of Styrofoam within Krone EBB
- Gibboney, Susanne – Research Technician, Krone EBB, educated other researchers in Krone EBB about the pilot
- Baklini, Blake – Facilities Manager, Petit Biotechnology Building, determined logistics and collection of Styrofoam within the Petit Biotechnology Building
- Wong, Michelle – Assistant Director, Petit Institute, assisted with marketing communications to educate building occupants about the pilot and logistics
- Karen Ethier – Administrative Manager, Petit Institute, assisted with marketing communications to educate building occupants about the pilot and logistics
- Biliya, Shweta – Core Lab Manager, Petit Biotechnology Building, educated other researchers in the Petit Biotechnology Building about the pilot
- Andrews, Wilhemenia – Custodian I, Facilities, worked to collect Styrofoam around the Petit Biotechnology Building during the pilot and provide feedback on the process
- Gresham, Joyce – Custodian I, Facilities, worked to collect Styrofoam around the Petit Biotechnology Building during the pilot and provide feedback on the process
- Archila, Juan – Director of Facilities and Capital Planning, College of Science, provided strategic guidance
- Clarkson, Todd – Facilities Manager II, Ford Environmental Science & Technology Building, helped with the logistics for Styrofoam collection in the Petit Biotechnology Building

The team also included the following students:

- Samie, Sierra – undergraduate student assistant, Office of Solid Waste Management & Recycling, facilitated logistics for this pilot (Sierra graduated in 2019; however, she is still listed in this nomination package to recognize her impact!)
- Viola, Hannah – graduate student, Krone EBB, educated other researchers in Krone EBB about the pilot
- Stathos, Mark - graduate student, Krone EBB, Bioengineering and Bioscience Unified Graduate Students (BBUGS) representative, educated other researchers in Krone EBB about the audit
- Del Cid Oseguera, Ada - graduate student, Whitaker Building, Bioengineering and Bioscience Unified Graduate Students (BBUGS) representative (Ada graduated in 2019; however, she is still listed in this nomination package to recognize her impact!)
- Rothschild-Mancinelli, Brooke – graduate student, Petit Biotechnology Building, educated other researchers in the Petit Biotechnology Building about the pilot

In-Kind contributions-

- Transportation, galylords, pallets, bags and eventual gaylord liners: Office of Solid Waste Management & Recycling (GT Facilities)
- Staffing: Building Services and Office of Solid Waste Management & Recycling
- Education: Office of Campus Sustainability, Environmental Health and Safety

6. Describe the Results of this campaign component

- a. General results (*ex: attracted attention of campus president, campus paper did a news story on the event, etc.*)

Won the Process Improvement Excellence 2020 Georgia Tech Staff Award – recognized by the President & Executive Leadership Team

- b. Specific measurable impact figures: To date has diverted 1,053.26 pounds of Styrofoam from the landfill

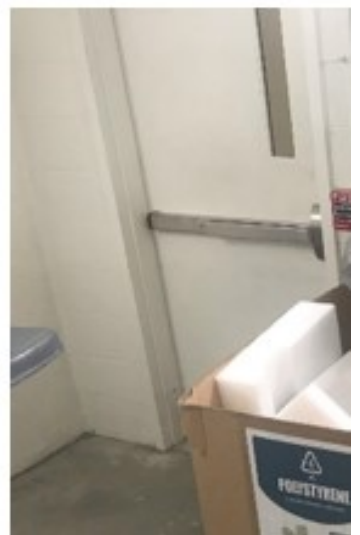
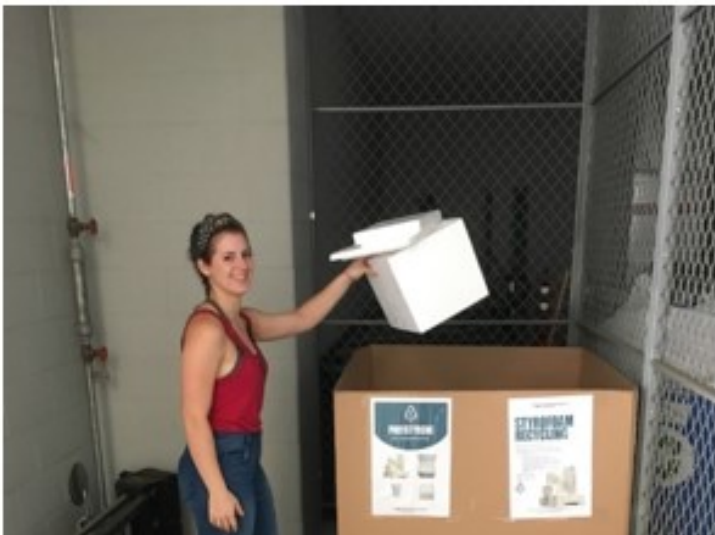
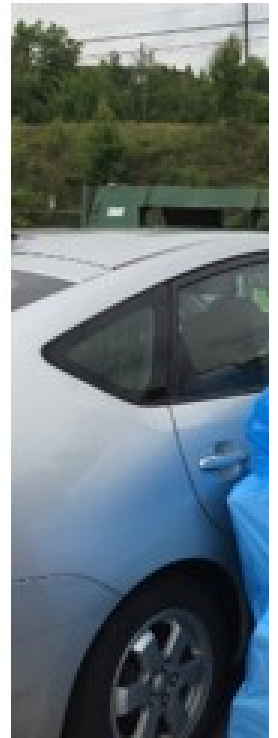
7. What would you do differently in the future?

Do a more comprehensive audit of Styrofoam before collection. We were surprised by how much we were collecting and took a few weeks to take it all to the vendor before we could adjust our route to accommodate a once a week collection.

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

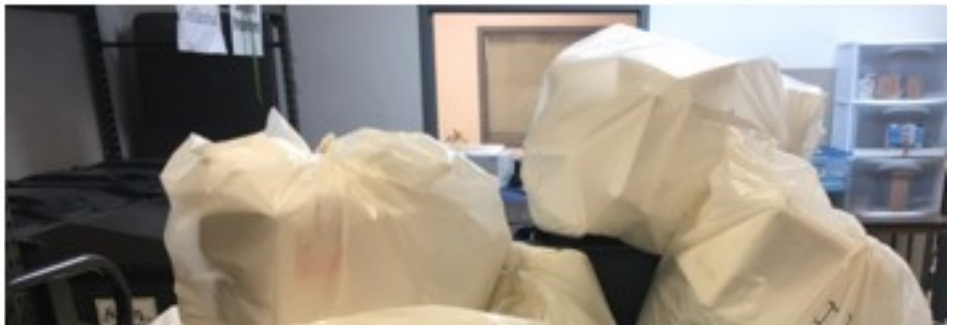
Prepare for bulky material. We were using so many regular sized bags before we switched the Gaylord liners. They saved us a lot of time gathering the material at the collection sites. Example: <https://www.grainger.com/product/GRAINGER-APPROVED-73-L-x-55-W-x-45-D-Clear-Pallet-2LCY4>

9. Photos and Graphics





One lab in Krone EBB setup a collection box in their lab, the Styrofoam down to the collection box on the Krone





Left: GT Styrofoam at CHaRM Right: OSWM&R staff at CHaRM weighing material



Left: Styrofoam collected during 2019 student move in Middle: Students drop off Styrofoam at EBB Right: OSWM&R storeroom collection of material



Left: OSWM&R staff load stake-bed truck Right: initial pilot team meeting June 2019