



University of Richmond 2020 RecycleMania Case Study

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

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2. Focus of Case study - University of Richmond diverts more than 1,500 pounds of soft plastic waste through a campus-wide plastic bag and film recycling program.

3. Detailed description of campaign component:

As outlined in our Sustainability Plan, University of Richmond aims to divert 75% of its waste from the landfill by 2025. Through a campaign called Rethink Waste, the University is increasing the amount of discarded goods that are recycled, donated, composted, or reused.

Nancy Propst, an Administrative Coordinator for the Department of Geography & the Environment and the Environmental Studies Program, took it upon herself to contribute to UR's Rethink Waste goals. After reading an article about a plastic bag collection program at another college, Nancy reached out to various campus partners and the decking company Trex to establish a soft plastics recycling program at University of Richmond. The project's aim was straightforward: Collect 500 lbs. of soft plastics within six months. In exchange, Trex would provide a bench made from recycled material, which would be placed in our campus's newly renovated green space, the Gambles Mill Eco-Corridor.

Nancy was the driving force behind the initiative, but it quickly grew to include staff from University Facilities, Dining Services, and the Office for Sustainability. The group placed bins around campus

and began collecting plastic grocery bags, bread bags, Ziplocs, bubble wrap, and more. Student organizations created content for a social media campaign to promote the project. Informational signage was affixed to each bin to guide participants on types of plastics that were accepted into the program.

At regular intervals, custodial staff recorded weights of the collected plastic and transported the items to storage location on campus. From there, staff and student volunteers delivered the goods to off-campus drop-off locations. The program was incredibly popular and reached its goal of 500 pounds 4 months ahead of schedule, followed by another 500 the next month. In all Nancy and her team collected 1590 pounds before COVID-19 interrupted life on campus.

4. Planning steps & timeline to implement:

- September 2019
 - Project idea was proposed to the University of Richmond's Office for Sustainability by a staff member, Nancy Propst, who works in the Department of Geography & the Environment and Environmental Studies Program.
 - Student engagement interns from the Office for Sustainability introduced project idea to student sustainability groups on campus.
- October 2019
 - Representatives in University Facilities, Dining Services and the Office for Sustainability met to review storage locations, plan to collect weights of plastic, and initial drop-off schedule.
 - Nancy reached out to a Trex project representative to register the University of Richmond as a participant.
- November 2019
 - Bins provided by Trex were distributed around campus for collection.
 - Custodial staff began to record weights.
 - The Office for Sustainability began a social media campaign to promote program.
- November 2019-present
 - The project currently remains in progress (pending return to campus).
 - Weights are recorded and bag drop-offs are completed weekly. Monthly weights are submitted to a TREX representative.
 - The 500-pound milestone was met in January 2020.
 - 1590 pounds total have been collected as of April 20, 2020.

5. Resources and stakeholders involved

Collection on campus was straightforward. Bins and signage were provided by Trex, additional signage was created by the Office for Sustainability and affixed by custodial staff, and bins were placed in high-traffic areas. Bin placement evolved as more people became aware of the program as we received several requests from staff and faculty to have bins placed near offices. Although

TREX provides informational signage for bins, our Sustainability Communications and Engagement Specialist created additional educational bin signage. There was a small cost for this additional signage that was covered by the Office for Sustainability.

A more challenging component of this project included delivery of bags to participating retail locations for drop-off. University vehicles were used to transport bags from different locations on campus to a storage site. Volunteers driving personal vehicles transported bags to drop-off locations at local grocery stores. There is an underlying cost of gas for transport.

The table below identifies stakeholders affiliated with the implementation of this project.

Campus Department or Project Partner	Roles and Responsibilities
Dept of Geography & the Environment	<ul style="list-style-type: none"> • Nancy Propst as project leader and coordinator
Office for Sustainability	<ul style="list-style-type: none"> • Interns for pickup/drop-off of bags • Staff for social media promotion, planning assistance, and additional educational signage
University Facilities	<ul style="list-style-type: none"> • Recycling & Custodial Support team for bag collection and weight recording • Storage
University Dining Services	<ul style="list-style-type: none"> • Provided retail locations around campus for bin placements; film recycling
University of Richmond Campus Community	<ul style="list-style-type: none"> • Students, faculty, and staff were active participants in the project by donating soft plastic waste at collection locations
Trex Point of contact: Stephanie Hicks	<ul style="list-style-type: none"> • Provided collection bins and informational posters • Produced benches as incentive to encourage participation

6. Describe the Results of this campaign component

a. General results



The overarching goal for this project was to divert plastic waste that could not be accepted into single-stream recycling containers from the landfill. Due to the comprehensive efforts of dedicated staff and students, we quickly surpassed our goal of 500 lbs. of diverted plastic waste within a period of six months. At the time University of Richmond’s campus closed due to COVID-19, we were on track to collect approximately 500 lbs. per month. This is due to the widespread participation of staff, faculty, and students, as well as the incorporation of soft plastic recycling into Dining and Custodial operations. Although we have already completed the requirements to

have a Trex bench made for our Eco-Corridor, the project will continue when we return to campus.

Nancy’s persistence and tireless efforts to make this project successful was recognized in an article in the campus paper, the Collegian. She was also selected as the Office for Sustainability’s December 2019 Sustainability Champion, as well as a recipient of a Sustainability Leadership Award in April 2020 for her efforts in leading and coordinating this project. Links to the above are included in part nine.

b. Specific measurable impact figures

From the project kickoff in November through January 20, we collected 526.40 lbs. Between January 27 and February 21, we collected an additional 548.03 pounds (please see below for sample weight log for this time period). Between February 22 and April 20, we collected 515.9 pounds. By the end of April, we had collected 1590.33 lbs. of soft plastic. It is important to note that the University of Richmond moved to remote operations with reduced staff presence on campus in mid-March as a result of COVID-19. We were well on track to collect approximately 2000 lbs. of plastic within five months.

 **RECYCLING AND CUSTODIAL SUPPORT** 

PLASTICS BAGS

Date	Name	Weight (lbs)	Date	Name	Weight (lbs)	Date	Name	Weight (lbs)
1-27-20	ML	11.26	2-3-20	ML	4.51	2-12-20	ML	4.43
1-27-20	ML	8.37	2-3-20	ML	3.10	2-12-20	ML	10.73
1-27-20	ML	11.15	2-3-20	ML	8.55	2-12-20	ML	5.15
1-27-20	ML	4.27	2-3-20	ML	2.33	2-12-20	ML	11.79
1-27-20	ML	6.10	2-3-20	ML	4.10	2-12-20	ML	1.74
1-27-20	ML	24.55	2-3-20	ML	4.82	2-12-20	ML	6.76
1-27-20	ML	9.61	2-3-20	ML	3.28	2-12-20	ML	1.12
1-27-20	ML	3.04	2-3-20	ML	5.0	2-12-20	ML	5.53
1-28-20	ML	12.65	2-3-20	ML	1.34	2-12-20	ML	2.97
1-28-20	ML	3.94	2-3-20	ML	6.52	2-12-20	ML	2.27
1-28-20	ML	2.09	2-3-20	ML	4.76	2-12-20	ML	6.37
1-28-20	ML	2.27	2-4-20	JL	3.06	2-12-20	ML	5.09
1-28-20	ML	2.92	2-6-20	ML	4.47	2-12-20	ML	4.21
1-28-20	ML	10.84	2-6-20	ML	2.05	2-13-20	ML	3.43
1-28-20	ML	7.80	2-6-20	ML	2.13	2-13-20	ML	11.38
1-28-20	ML	3.13	2-6-20	ML	2.49	2-13-20	ML	10.95
1-29-20	ML	3.15	2-7-20	ML	12.38	2-13-20	ML	5.32
1-30-20	JS	3.88	2-7-20	ML	4.58	2-14-20	ML	16.37
1-30-20	JS	6.17	2-7-20	ML	5.62	2-14-20	ML	13.28
1-30-20	ML	2.92	2-7-20	ML	2.09	2-14-20	ML	9.74
1-30-20	ML	4.21	2-7-20	ML	6.70	2-14-20	ML	7.60
1-30-20	ML	5.88	2-7-20	ML	6.26	2-14-20	ML	5.87
1-31-20	ML	8.70	2-7-20	ML	9.89	2-14-20	ML	4.91
1-31-20	TOTAL	158.90	2-7-20	TOTAL	109.94	2-14-20	TOTAL	157.01

 **RECYCLING AND CUSTODIAL SUPPORT** 

PLASTICS BAGS

Date	Name	Weight (lbs)	Date	Name	Weight (lbs)	Date	Name	Weight (lbs)
2-19-20	ML	4.32						
2-19-20	ML	4.71						
2-19-20	ML	3.92						
2-19-20	ML	8.66						
2-19-20	ML	3.06						
2-19-20	ML	1.94						
2-19-20	ML	3.90						
2-20-20	ML	2.95						
2-20-20	ML	3.85						
2-20-20	ML	2.79						
2-20-20	ML	4.80						
2-20-20	ML	10.73						
2-20-20	ML	10.05						
2-21-20	ML	5.07						
2-21-20	ML	2.02						
2-21-20	ML	10.16						
2-21-20	ML	5.46						
2-21-20	ML	5.62						
2-21-20	ML	4.12						
2-21-20	ML	2.86						
2-21-20	ML	3.32						
2-21-20	ML	10.31						
2-21-20	ML	7.56						
2-21-20	TOTAL	122.18		TOTAL			TOTAL	

7. What would you do differently in the future?

The success of this project certainly did not come without a few challenges. We were unprepared for the successful growth of the project in such a short time period. Because our campus does not have the capacity to bale bags, individual staff and volunteers deliver bags of plastic to approved drop-off locations each week. This became overwhelming as the quantity of bags grew. Our storage location for backlogged bags has changed several times to support the quantity of plastic. In order to be better equipped with handling the large volume of plastic, we would look more closely at distribution of plastic from campus to the stores participating as drop-off locations. We may also consider the purchase of a baler so that we are able to qualify as a pickup location for Trex.

Something that we did not consider in the planning and early stages of this project was including a detailed educational component regarding plastic waste generation and the concept of reduce and reuse. Nancy mentions that, "It is great to give people an outlet for getting rid of the soft plastic in their lives and it changed behaviors of people to save the plastic to be recycled, but it doesn't have a way to change people's behavior around actually using less plastic in their lives."

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

Colleges who wish to pursue a similar effort should closely consider storage, and if not able to bale plastic, distribution to approved drop-off locations. We also suggest working with campus partners, such as a recycling support team and student organizations, to make sure that there is sufficient buy-in in order to have successful participation rates.

9. Photos and Graphics



Recycling & Custodial Support staff in University Facilities.
This team directly handles the transport of bags to storage
area on campus and tracking weight data.

Photo credit: Caroline Fernandez, The Collegian



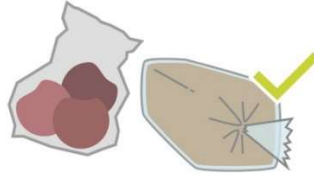
Collection bin in University
commons area.

Photo credit: @beagreen spider
on Instagram.

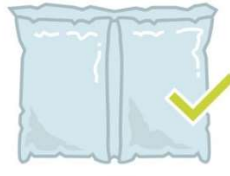
Soft Plastic Recycling



Plastic Shipping Envelopes



Bread & Produce Bags



Air Pillows



Resealable Bags



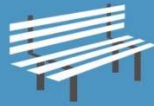
Grocery & Shopping Bags



Product Overwrap



Bubble Wrap



Every 500 pounds of plastic that we recycle will earn a free bench from Trex.



Rethink Waste
Know Where It Goes

richmond.edu/rethinkwaste

Informational signage created by Office for Sustainability Communications and Engagement Specialist, Cassandra Troy.

Photo credit: Cassandra Troy, Office for Sustainability

RECYCLE BEYOND THE BAG

Recycle your household bags & wrap into Trex's Earth-friendly composite decking and railing!



FROM THE GROCERY STORE

- ✓ Produce & bread bags
- ✓ Grocery bags
- ✓ Cereal box liners
- ✓ Ice bags



FROM YOUR PANTRY

- ✓ Ziploc® & other reclosable bags
- ✓ Case overwrap



FROM YOUR FRONT DOOR

- ✓ Newspaper sleeves
- ✓ Dry cleaning bags
- ✓ Plastic shopping bags
- ✓ Bubble wrap bags



Trex®

trex.com/recycling 1-800-Buy-Trex

Informational signage provided by Trex that were affixed on bin or wall.

Photo credit: @beagreenspider on Instagram.



Initial backlogged storage location in our University Facilities warehouse. As indicated by the pictures, the quantity of bags quickly grew, resulting in the need for a larger storage space.

Photo credit: University of Richmond Custodial Staff

Published articles and recognition

- “Drowning in plastic: Soft plastic recycling program exceeds expectations” by Caroline Fernandez in The Collegian. March 4, 2020.
 - https://www.thecollegianur.com/article/2020/03/drowning-in-plastic-soft-plastic-recycling-program-exceeds-expectations?ct=content_open&cv=cbox_latest
- Nancy Propst, December 2019 Sustainability Champion, University of Richmond Office for Sustainability Newsletter. Interview from project coordinator.
 - <https://us6.campaign-archive.com/?u=639ffe7857398fbfc427a6d26&id=3cb312b319>
- Nancy Propst, 2020 Sustainability Leadership Award Recipient, Office for Sustainability.
 - <https://sustainability.richmond.edu/involved/events/banquet.html>