

# Paper Towel Composting

Clemson University

Andrew Shealy



# The Need

- ▶ 13 billion pounds of paper towels are used in the United States each year.
- ▶ A waste audit done for Cooper Library in 2016 showed a large percentage of trash going to the landfill was paper towels from bathrooms.
  - ▶ Estimated 40 lbs of paper towels per day



# Why Compost?

- ▶ Rather than take up space in a landfill, paper towels can become useful compost.
- ▶ Woodchips are used to fulfil the carbon requirement for composting, but paper towels can serve the same purpose.
- ▶ The finished compost can be used at the student organic farm, on campus, or it can be sold to the community.

# Cherry Crossing Research Facility



# Cherry Crossing Research Facility

- ▶ Two main composting methods:
  - ▶ Manually aerated windrows
    - ▶ Better at breaking down paper towels
  - ▶ Aerated static piles



# Location: R. M. Cooper Library

- ▶ Pilot location chosen based on waste audit
- ▶ Five floors with a total of 20 bathrooms
  - ▶ 18 of which use paper towel dispensers
- ▶ Open 24 hours, so consistently busy



# Two Bin System

- ▶ Main goals for successful collection:
  - ▶ Consistency
  - ▶ Visibility
  - ▶ Education
- ▶ Working towards these goals helps to minimize contamination and increase diversion.

# Public Restrooms



# Staff Restrooms



# Outside of Each Restroom



# Education: Students

- ▶ Infographic used on every paper towel dispenser
- ▶ Clear labeling with a sign frame, sticker, and color coordination
- ▶ Social media promotion



# Life Cycle of a Paper Towel

*Clemson Composting*



In a landfill paper towels take **decades** to decompose

and produce **methane gas**.

We are throwing away **precious nutrients**.



If they are **composted**

they will degrade in about **60 days**.

Composting helps the soil **retain moisture**,

Or our story can end differently



compost **provides nutrients** for plants, and **reduces the need for fertilizers**.

Clemson University's compost, made at **Cherry Crossing**, is used around campus by **landscaping**,

and the **student organic farm**. It is also available for community purchase.

For more information:



- Clemson Recycles
- CURecycle
- ClemsonRecycles
- clemsonrecycles

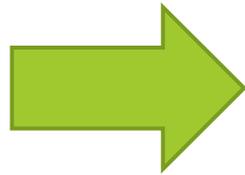


# Education: Staff

- ▶ Library staff were very involved and helpful with feedback
- ▶ Waited to collect larger bins until they were full
  - ▶ High cost of compostable bags
- ▶ Used a collective bag system for smaller bins

# Results

- ▶ Very clean compost with minimal contamination
- ▶ Positive feedback from student body
- ▶ Continuation of project



# Looking Back

- ▶ Some maintenance and upkeep required
- ▶ Best to start project over the summer in order to test it before the fall semester.
- ▶ Attempt at collecting paper towels from football stadium was not as successful



# Looking Forward

- ▶ Laminate infographics
- ▶ Plans to get bins set up in FIKE Recreation Center restrooms already underway
- ▶ Looking for next possible building to expand the project to

# Acknowledgments

- ▶ Cherry Crossing Composting Team
- ▶ R. M. Cooper Library Staff and Faculty
- ▶ Haley Hanks, Recycling Intern
- ▶ Clemson University Facilities

# Paper Towel Composting

Clemson University

Andrew Shealy

