





# Student Compost Cooperative — "Plate-to-Plate" Sustainability

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#### Abstract

Composting is a natural process by which organic wastes decompose into a nutrient-rich soil amendment. Compost enriches the soil with organic material and improves water retention. By reducing the disposal of organic waste into landfills, composting decreases greenhouse gas emissions and reduces demand for commercial fertilizers. The Student Compost Cooperative (SCC) is a cross-disciplinary education and outreach program established by the Soil and Water Sciences Department, UF-IFAS, that fosters sustainability and nutrient upcycling through composting, gardening and rainwater harvesting. The SCC provides free garden plots at the BioEnergy and Sustainable Technology (BEST) Laboratory, allowing students to utilize the compost on-site and establish a circular "plate-to-plate" sustainability practice whereby food waste is repurposed to grow fresh nutritious food. While the SCC was originally established to promote composting of food scraps, it has grown to foster a diverse community working to eliminate waste, promote organic gardening, and to learn about sustainable living and a circular economy. The SCC hosts tours and events, promotes collaboration among other organizations, and strives to popularize sustainability through social media. All students and staff are invited to participate in the SCC to make the UF campus a more sustainable community by supporting plate-to-plate sustainability.

#### Introduction

The **SCC** is a student-led and student-run outreach program that encourages others in the Gainesville community to bring their food waste and to learn about composting through hands-on experiences. All students, staff, and members of the Gainesville community are invited to bring their food waste to the SCC and to use the finished compost for their own garden plots.

## Objective

The SCC strives to create a sustainable Gainesville community by providing composting bins, plots for organic gardening, and educational outreach.

## Why We Encourage Composting

- To keep greenhouse gas-producing food waste out of landfills
- Compost enriches soil with nutrients and organic matter
- This helps the soil to retain its moisture and prevents nutrient leaching
- It provides a sustainable alternative to commercial fertilizers
- Composting teaches students how to live a more sustainable lifestyle

# Compost Needs

- Food waste material: Organic matter, including food scraps, used coffee grounds, egg shells, cooked pasta, and much more!
- Carbon material: Shredded paper and cardboard, dead leaves
- This soaks up moisture from the food waste and provides "bulking" material, which provides air space for the microbes
- Temperature: High temperatures help the microbial organisms within the food waste to thrive
- Moisture: The pile should resemble a "wrung-out sponge''—not too wet, not too dry
- **Aeration:** The decomposition process occurs faster when the pile is regularly mixed, distributing material and oxygen to microbes



#### Features of the SCC

- ✓ Composting bins
- ✓ We have 3 food waste bins and 3 composting bins for curing
- ✓ The processed compost is provided to students for **free**
- ✓ Garden plots
- ✓ Garden plots are **free** to students and tools are available in the toolshed
- ✓ Rainwater harvesters
- ✓ No rain goes to waste at the SCC! We collect rain in our 4 rainwater harvesters to use for watering the plots
- ✓ A greenhouse with tools and supplies for potting plants
- ✓ An herb table
- ✓ Monarch Caterpillar and Butterfly enclosures to promote pollinators in the garden
- ✓ Vermiculture composting bins
  - ✓ These teach students about a different method of natural decomposition using worms





Contact the SCC coordinator to get your own plot!



The rainwater harvesters allow us to water the gardens sustainably.



**New at the SCC! Our Monarch Enclosures** help to promote pollinators in the garden.











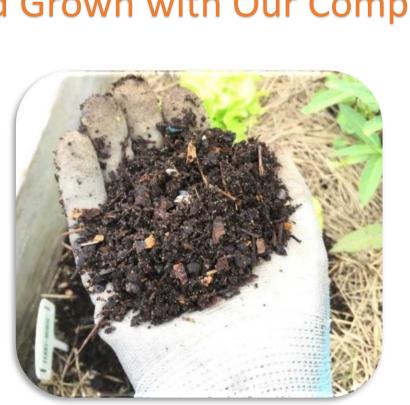


# The Compost Process

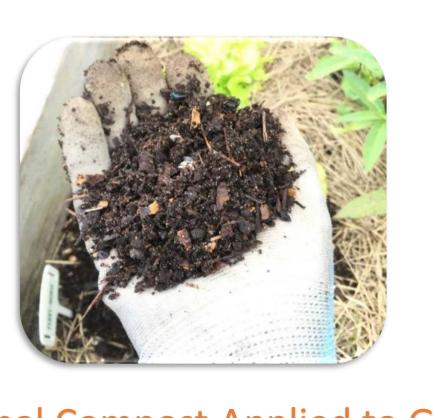
Add Food Waste



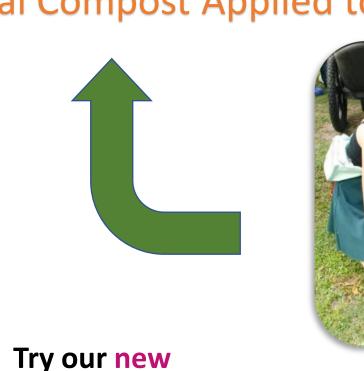








6. Final Compost Applied to Garden Beds



compost mixer!

5. Sift the Compost

or Compost Mixer

. Add Equal Parts Carbon

with Food Waste

4. The End Product: Compost

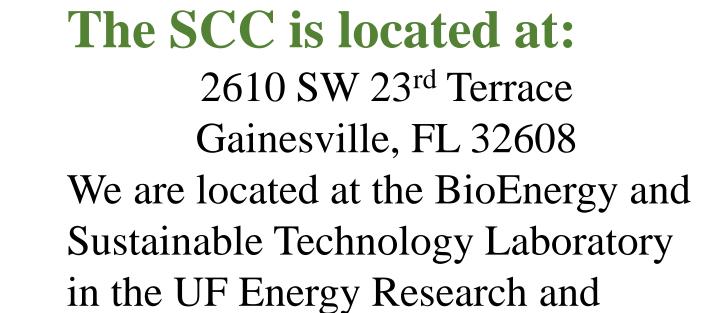












Education Park.

