

Student Compost Cooperative – Reducing UF’s Ecological Footprint

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Abstract

Composting is a natural decomposition process in which organic wastes decompose into a nutritious soil amendment. Nutrients in organic wastes such as food scraps (primarily fruits and vegetables), as well as shredded paper and cardboard for carbon addition, can be recovered and recycled for use in agriculture, horticulture and urban gardening. When food scraps are disposed in landfills, they produce sizable amounts of harmful methane gas because they undergo anaerobic decomposition. Composting solves this issue by allowing plenty of oxygen into the system through consistent turning, which reduces methane emissions. Not only does compost enrich the soils with organic matter and improve water retention, it also significantly reduces landfill disposal of organic waste and demand for commercial fertilizers, thereby reducing society’s reliance on fossil fuels and paving the path toward a sustainable future. 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 and sustainable gardening. The SCC strives to popularize sustainability and composting through educational demonstrations and social media. The SCC also provides free garden plots for students at the *BioEnergy and Sustainable Technology (BEST) Laboratory*, and encourages them to compost their food waste and use the finished product for their own organic gardens. All students and staff are invited to participate in the SCC to make the UF campus a more sustainable community.

Introduction

The **Student Compost Cooperative (SCC)** is a student-run program that encourages composting through outreach and provides hands-on learning experiences with compost at the BioEnergy and Sustainable Technology Laboratory.

Students and faculty can compost their own food waste and in exchange receive the finished compost for their own gardens.



Hands-on experience at the SCC



Bananas grown with SCC compost

Composting Benefits

- Enriches soils with nutrients and organic matter
- Retains soil moisture and helps prevent nutrient leaching
- Decreases landfill waste and methane emissions
- Provides a sustainable alternative to commercial fertilizers



You're never too young to start composting!

Objective

The **Student Compost Cooperative** aims to create a sustainable UF Community through composting food waste, organic gardening, and educational outreach.



Compost Process

Key factors to an efficient compost:

- **Temperature:** Warm temperatures allow microbial organisms to thrive
- **Substrate:** Organic matter including food scraps, paper, cardboard, coffee grounds
- **Moisture:** Slightly moist
- **Carbon:** Adding leaves and other carbon-rich materials provides bulk density and air spaces
- **Mixing:** Decomposition occurs faster by distributing substrates and oxygen to microbes



Closed Loop System



SCC Gardens

- Educate students and faculty on the tangible effects of composting.
- Provide life lessons of care, hard work, and patience.
- Provide a relaxing and nature-centered environment.
- Emphasize sustainable practices.
- Connects us back to our roots.



What's in our gardens?

- Bell Pepper
- Strawberry
- Pineapple
- Lavender
- Broccoli
- Kale

And More!

Special Feature!

SCC Rain Harvester!

- Our rain harvester provides fresh water for the plants in the gardens.
- Teaches students and faculty about self-sustainability.



Get Involved!

Visit our website:

<http://biogas.ifas.ufl.edu/SCC>

f Facebook:

UF Student Compost Cooperative



Location

Come to the facility!

2610 SW 23rd Terrace
Gainesville, FL 32608.

The SCC is an outdoor facility located at the BioEnergy and Sustainable Technology Laboratory in the UF Energy Research and Education Park.

