Decomposing with Gainesville Compost: BEST Lab Community Outreach Project

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Gainesville Compost

 A local company that composts food waste from local restaurants

 Looking for ways to handle an increase in food waste and decrease odor of food waste on site.

• Potential Solution:

Tumbler Composter

Composter

- Gainesville Compost currently operating static pile composters.
 - Requires a lot of space and effort to maintain
 - Unsightly, cannot contain odor of food waste





Composter Design Objectives

- Simple, attractive design
- Provides adequate aeration and moisture
- Ability to load and turn with just one person
- Repurpose used or discarded materials as much as possible
- Easy to replicate, and scale up or down for different batch sizes

Composter Construction

Composter Materials

- (2) 2"×4"×32.5" treated lumber
- (2) 2"×4"×30" treated lumber
- (4) 2"×4"×56" treated lumber
- (1) 48"×1/2" steel pipe
- (1) 55 gal plastic drum w/ screw on lid
- (1) 1'×1' of 1mm×1mm grade aluminum mesh
- (3) Metal handles with screws and nuts
- (20) 2¹/₂" galvanized screws

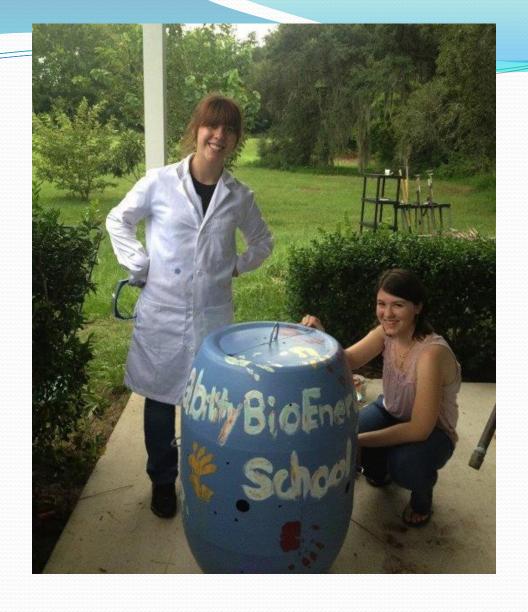


(Composter "x" frame, simple and durable)

The BESS Tumbler Composter



(Composter frame, with compost barrel)



A Protective Coat of Recycled Paint!

The Finished Tumbler Composter



Composter Results

- Tumbling composter construction
- Easy to turn, aesthetic design
- Inexpensive and easy to build
- Quick composting time- 2 to 3 weeks

Discussion

- Gainesville Compost now has the option to use and test this new design
- The new composter will serve as the prototype for potential future models
- Large-scale implementation may serve to process higher anticipated demand
- Multiple units can be operated simultaneously

Working with Gainesville Compost









Keep Bio-Degrading, Gainesville Compost!

