

# How it Works: Aerated Static Pile System at NC State Compost Facility & Research Cooperative



## WHAT IS COMPOST?

A process of recycling organic materials into a rich soil amendment. Compost can be used to grow new plants, flowers, and trees!

**1** Students, faculty, staff, & guests dine on campus, utilize paper towels, & manage greenhouse & agriculture waste.



**2** This organic waste & compostable materials are placed into a green compost bin.



**3** Everything collected is taken to a compost dumpster by staff.



**4** The dumpster is picked up by NC State's Waste Reduction and Recycling team and transported to the **NC State Compost Facility & Research Cooperative**.



**5** This material is then mixed with wood chips & animal bedding (also from campus) at specific rates to ensure the proper carbon to nitrogen ratio, moisture content, bulk density, & porosity.

BACK TO #1

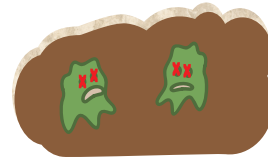
**8**

Once the organic waste is completely broken down, the resulting compost is full of nutrients and will be used on campus to close the loop with organic waste management.



**7**

The piles remain in the bay until they reach at least 131 degrees F for 3 days and have maintained an average temperature of 113 degrees F for 14 days in order to kill pathogens & weed seeds.



**6**

The homogenized mixture is placed into a bay with perforated PVC pipes recessed into the floor. The pipes are hooked up to blowers and keep the piles aerated, eliminating the need for turning.

