



# Greening the Grab n' Go: Reducing the plastic waste of dining services at St. Mary's College of Maryland



Sophia Caradine-Taber  
ENST 450: Sustainability Practicum

## Proposal for reducing plastic bag usage at the Grab n' Go

### Step 1: Improve SMCM's existing reusable to-go box program

Students have been throwing away reusable to-go boxes to such an extent that Bon Appetit ordered more 480 boxes this semester alone, spending almost \$2,000.

Students are not charged money for failing to return to-go boxes for washing and reuse. SMCM's to-go box program could be improved by having students be charged money to their student account for not returning boxes by the end of the semester. Fees such as this are successfully used at Wooster College, Marquette University, and other schools to prevent this loss of boxes and money.

### Step 2: Replace plastic bags

Students could check out reusable to-go boxes at the Grab n' Go or bring in their own plastic or reusable bags to use.

### Step 3: Reducing plastic bag usage

Bon Appetit could stop the purchase of plastic bags for the Grab n' Go.

### Potential Impact

This initiative would:

- save **2,000 plastic bags** per week.
- save **30,000 plastic bags** per semester.
- prevent **2,165 pounds of CO2** from being released into the atmosphere per semester, not including the CO2 emissions from transportation of the bags to SMCM. This is similar to the amount of CO2 that **596 trees** would absorb during a semester-long (15-week) period.

### Works Cited

- "Plastic Bag Statistics."  
<http://www.inspirationgreen.com/plastic-bag-stats.html>
- "The Plastic Bag."  
<http://web.pdx.edu/~arice/carboncapstone/plastic%20bags%20project.pdf>
- "Reusable to-go boxes coming soon."  
<http://thewoostervoice.spaces.wooster.edu/2014/02/19/reusable-to-go-boxes-coming-soon/>
- "MUSG, Sodexo debut sustainable to-go boxes."  
<http://marquettewire.org/2014/08/25/tribune/tribune-news/musg-sodexo-debut-sustainable-to-go-boxes/>
- "World Centric: Compostable Plastic"  
<http://worldcentric.org/about-compostables/eco-profiles/plastics>

### Acknowledgements

Dr. Barry Muchnick  
Shelby Kalm, Sustainability Fellow  
Carmen Allen, Bon Appetit

## Project Overview

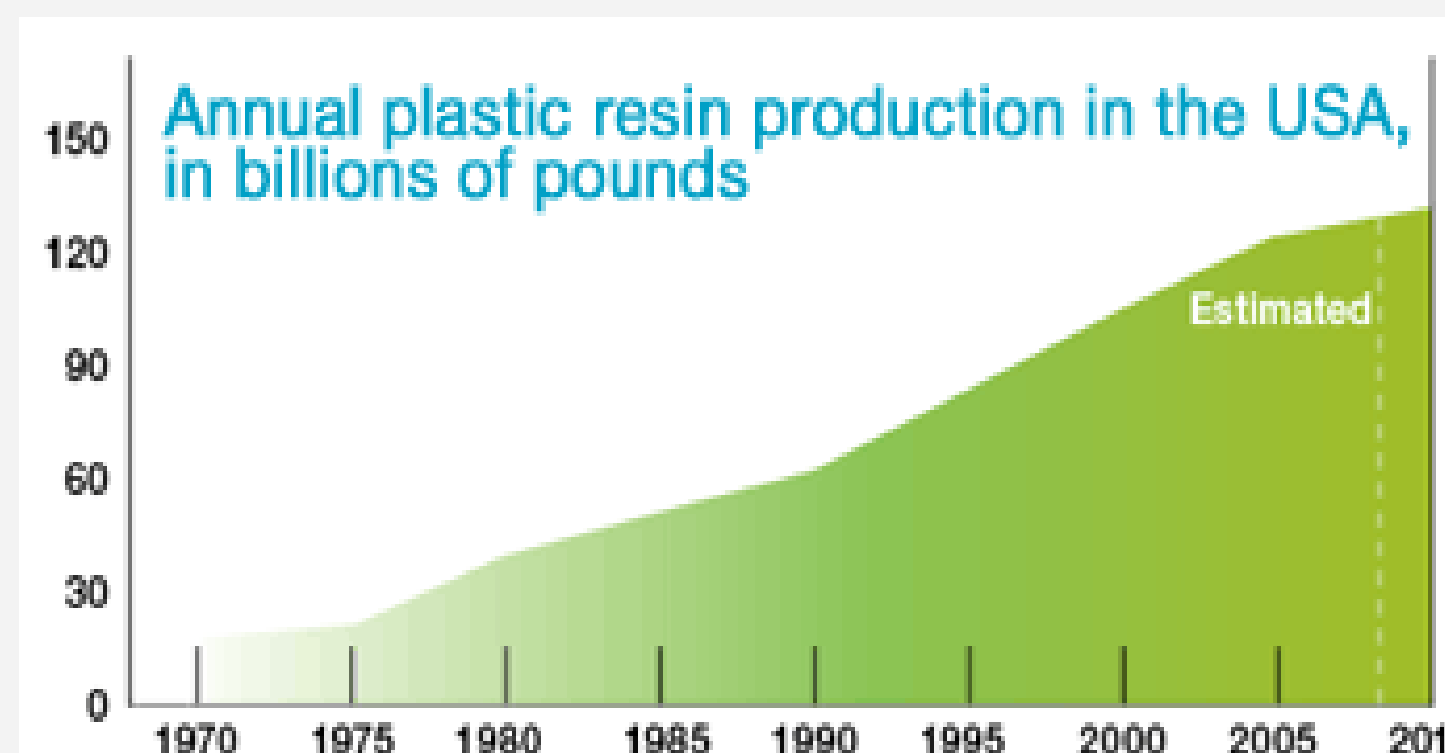
This project aims to reduce plastic waste at the Grab n' Go by replacing plastic bags with reusable to-go boxes or student-provided bags and by replacing plastic utensils with compostable ones.

### Objectives

1. Reduce plastic waste and litter at SMCM
2. Improve existing reusable to-go box program at SMCM
3. Compost food service products that are already in use on campus
4. Increase student awareness of environmental impacts of plastics and composting

### Problems with plastic

- Plastic bags can take up to 1,000 years to break down, and they release toxins into the surrounding environment during this breakdown period.
- Plastics break down even more slowly in landfills because landfills have low levels of microbes, oxygen, and moisture, all of which are important for decomposition.



It is estimated that the US produced **120 billion pounds of plastic** in 2007. In this year, about **31 million tons**, or **12.1%**, of the US's total municipal waste was plastic.



Less than **5%** of plastics are recycled in the US.



Left: Certified compostable ice cream cups are already used in the Great Room.



Right: Aspenware utensils.

## Proposal for compostable utensils at the Grab n' Go

### Step 1: Switch from plastic to wood

SMCM could switch from plastic utensils to wooden compostable utensils from the Canadian company Aspenware. Aspenware utensils are made from smaller "useless" trees that are otherwise cut down and burned by the logging industry. These utensils are not wrapped in plastic like the plastic utensils currently used at the Grab n' Go, further reducing plastic waste. These utensils are used by dining services at institutions such as Humboldt State University and University of California Davis,

### Step 2: Collect utensils after use

Several composting bins could be set up around campus. Collected utensils could be composted at the Campus Community Farm or taken to a local farm, such as Chesapeake Bounty in St. Leonard, which has a larger and hotter compost setup.



Large compost pile at Chesapeake Bounty Farm.

### Step 3: Composting

After composting, the utensils would break down and return nutrients to the ground within 90 days, forming new soil for the campus farm or another local farm to use.

### Potential Impact

This initiative would:

- stop the use of **3,750 plastic utensils** per week from the Great Room and the Grab n' Go combined.
- stop the use of **56,250 plastic utensils** per semester.

### Looking Forward: Improving SMCM's composting program

Despite the higher price (compostable products are usually double the price of their plastic counterparts), compostable food service products are already used on campus, however these products are currently thrown away. If a trial of compostable utensils were to be successful, then maybe these other products could eventually also be composted.