



# The Fairchild Challenge at Phipps



2017-2018



# Michele Buford

Keynote Speaker



# Challenge 1: “Eco Edibles”



# Challenge #1: “Eco Edibles”

## Special Merit:

### Elizabeth Forward High School

Owen Meilander

Noah Madden

Jenna Mervosh

Sydney Knicely

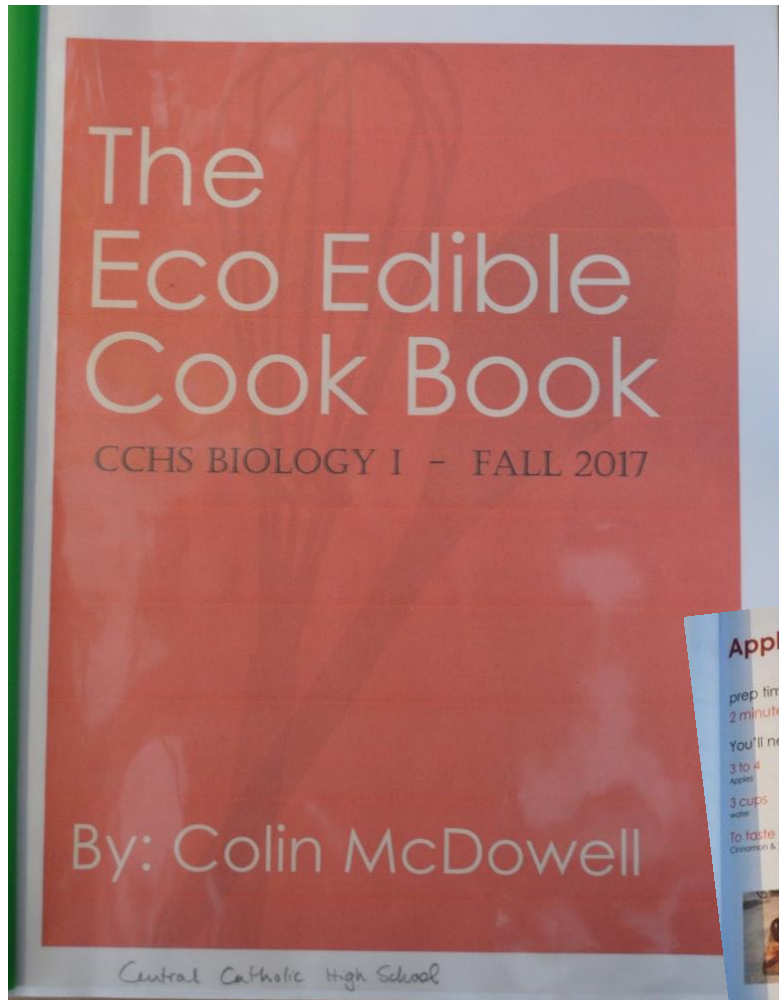
Madison Kapisak

William Carter

Elsie Carter



# Challenge #1: “Eco Edibles”



**Third Place:**

**Central Catholic High School**

Colin McDowell

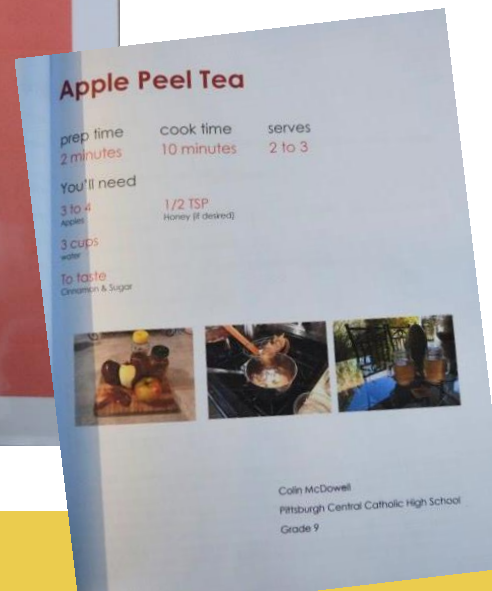
John Lynch

Liam Tinker

Nick Nuzzo

Brendan Loughlin

James Genco

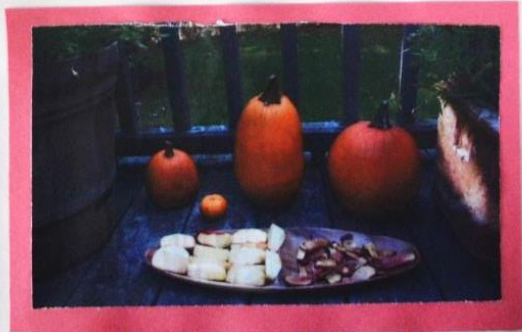
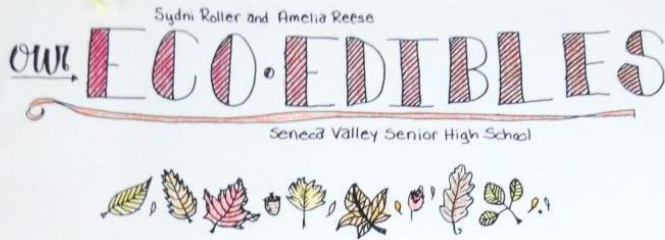


# Challenge #1: “Eco Edibles”

Second Place:

Seneca Valley Senior High School

Sydni Roller  
Amelia Reese



Bread Pudding

Sydni Roller

#### Ingredients:

1. Several ends of any type of bread
2. Handful of raisins
3. 4 eggs
4. 1.5 cups of milk
5. 1/2 cup white sugar
6. 1/2 cup brown sugar
7. Tablespoon ground cinnamon
8. Tablespoon vanilla extract
9. Tablespoon melted butter

Wheat

Triticum aestivum

Region of Origin: Fertile Crescent, 9600 BCE

Plant Part Used: Grain (only endosperm for white flour used in bread)

#### Directions:

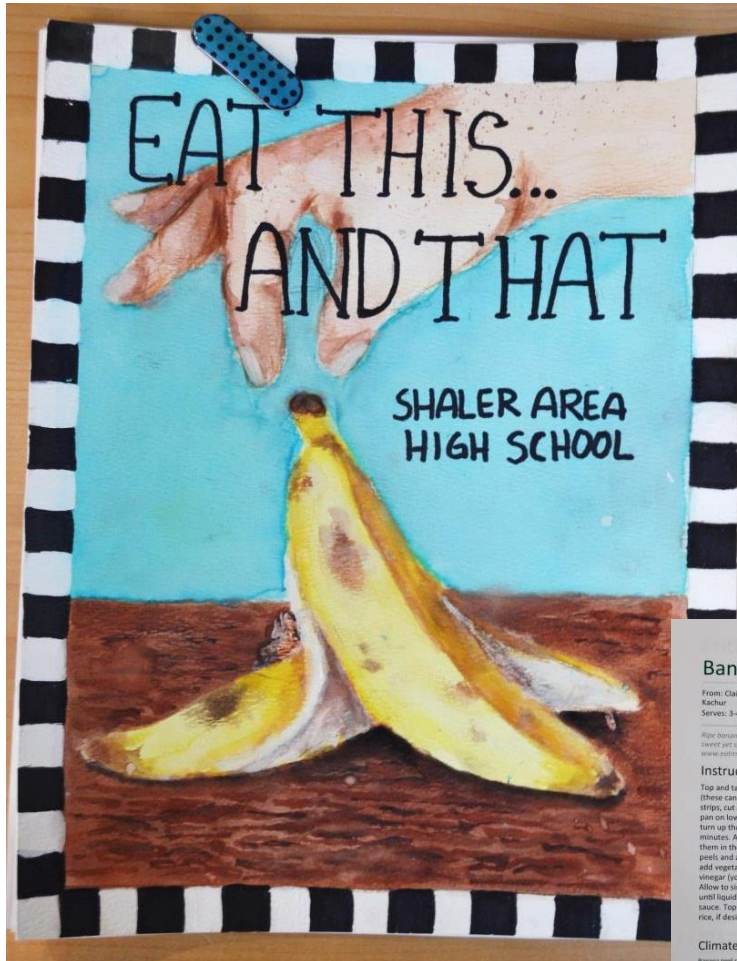
Rip bread into smaller pieces. Cover with melted butter. Combine all other ingredients in mixing bowl. Pour onto bread and let saturate. Bake in oven at 350° for 45 minutes.

This recipe reduces food waste in my household because it utilizes the typically undesired ends of loaves of bread. Normally, these 2-4 pieces of bread per package would just get thrown away after my family finished the loaf. By making this recipe, we were able to throw away less food. When wheat is produced, it uses resources like fertilizer, soil, water, and machinery for harvest. This food is reducing my contribution to climate change because when food is thrown away, it often ends up in a landfill. When food sits around in landfills, it produces methane, which is a greenhouse gas that absorbs the sun's heat and warms the atmosphere. By utilizing every part of the bread loaf, I reduce the amount of food thrown away to a landfill, therefore reducing the amount of methane produced that contributes to climate change.

Adapted from <http://zatterides.com/recipe/2127/bread-pudding-4/>



# Challenge #1: “Eco Edibles”



## Banana Peel Curry

From: Claire Raines & Sophie Kachur  
Prep Time: 20 min  
Cook Time: 35 min  
Serves: 3-4

Ripe banana skins pair nicely with the flavors of curry, in this novel yet spicy dish courtesy of <http://www.entirelythoughts.com/banana-skin-curry/>

### Instructions

Top and tail the bananas, removing the “woody” parts (these can be composted). Slice banana peels into thin strips, cut approximately 2” in length. Heat a large frying pan on low heat. Fry onion in oil until softened and then turn up the heat to medium. Add banana peels. Fry for 5 minutes. Add the apple and the curry powder, tossing them in the pan so that the powder coats the banana peels and apples. Fry for an additional 5 minutes. Next, add vegetable stock, a squeeze of lemon juice and the vinegar (you can compost the lemon wedge when done). Allow to simmer for 20 minutes, stirring occasionally until liquid is reduced. Add smashed banana to thicken sauce. Top with some cilantro and pass it with boiled rice, if desired.

### Climate Connection

Banana peel curry is not only a healthy meal, but one that conserves waste and energy. Using the majority of the banana peel eliminated food waste. Normally banana peels are thrown away, but we discovered a recipe to use them. The peels were delicious! If the peels were thrown away, the gas used to get the bananas would have been waste, along with the gas for garbage truck would waste in transporting the peels to a landfill. Using one of the actual bananas that was made the banana peel also reduced food waste. Eating the remaining banana and giving some to our dog eliminated the waste of a perfectly delicious banana. In addition, energy was conserved by using ingredients for the curry that were found around the house. We used olive oil, ripe bananas, an already cut lemon wedge, spices, an apple, and all of the ingredients in the recipe, which were all located at our house. This conserved gas for our cars to purchase more products, along with plastic and paper that may have had to be used to carry the items (in bags). Finally, because gas was conserved, pollution was eliminated. The banana peel curry that was made reduced resources and waste with its eco-friendly ingredients.

There are many resources that also go in to producing bananas, cilantro,



### Ingredients

2 banana peels, washed thoroughly  
1 banana (smashed) - save the other banana to be eaten later  
1 onion, diced  
1 T curry powder  
1 T olive oil  
1 cupful of apple cider vinegar  
500 ml of vegetable stock  
Cilantro  
Lemon

### Plant Particulars:

Banana—Musa Acuminata—Originated in south-east Asia and the South Pacific. Used everything except the “woody” ends of the banana.

Onion—Allium cepa—Native to central Asia. Used the onion after peeling.

Apple—Malus domestica Borkh—Originated in North America. Used the flesh. Purchased at a local farm.

Cilantro—Coriandrum Sativum—Origin is China, but picked from our garden. Used the leaves.

Climate Connection—continued  
and apples. If the wastes of the fruit and herbs are composted, they will return back to soil, one major thing that the plants need in order to grow. They also need water and sunlight. There are laborers to pick and harvest the plants and ship them to be sold. Most plants need to be fertilized, gas is needed for transportation, and packaging is necessary, especially for the delicate cilantro. A huge amount of resources go into the production and distribution of the plants like apples, banana and cilantro.

## First Place:

## Shaler Area High School

Nick Wigda  
Sarah Umandap  
Jason Grieco  
Claire Raines  
Sophie Kachur  
Michaela Brining  
Elisa Gabriel  
Maddie Bartosh  
Fiona Loudon

Kelsey Marshall  
Eddie Sheets  
Alicea Zelina  
Emalee Eakin  
Jamie Eichmiller  
Erika Spondike  
Camry Sidick  
Emily Ehrenberger  
PJ Squire





## Challenge 2: “Petals & Pollinators”



# Challenge #2: “Petals & Pollinators”

## Global Challenge

**Special Merit:**

**Shaler Area High School**

P.J. Squire



# Challenge #2: “Petals & Pollinators”

## Global Challenge

**Special Merit:**

**West Mifflin Area High  
School**

Zoe Cutillo



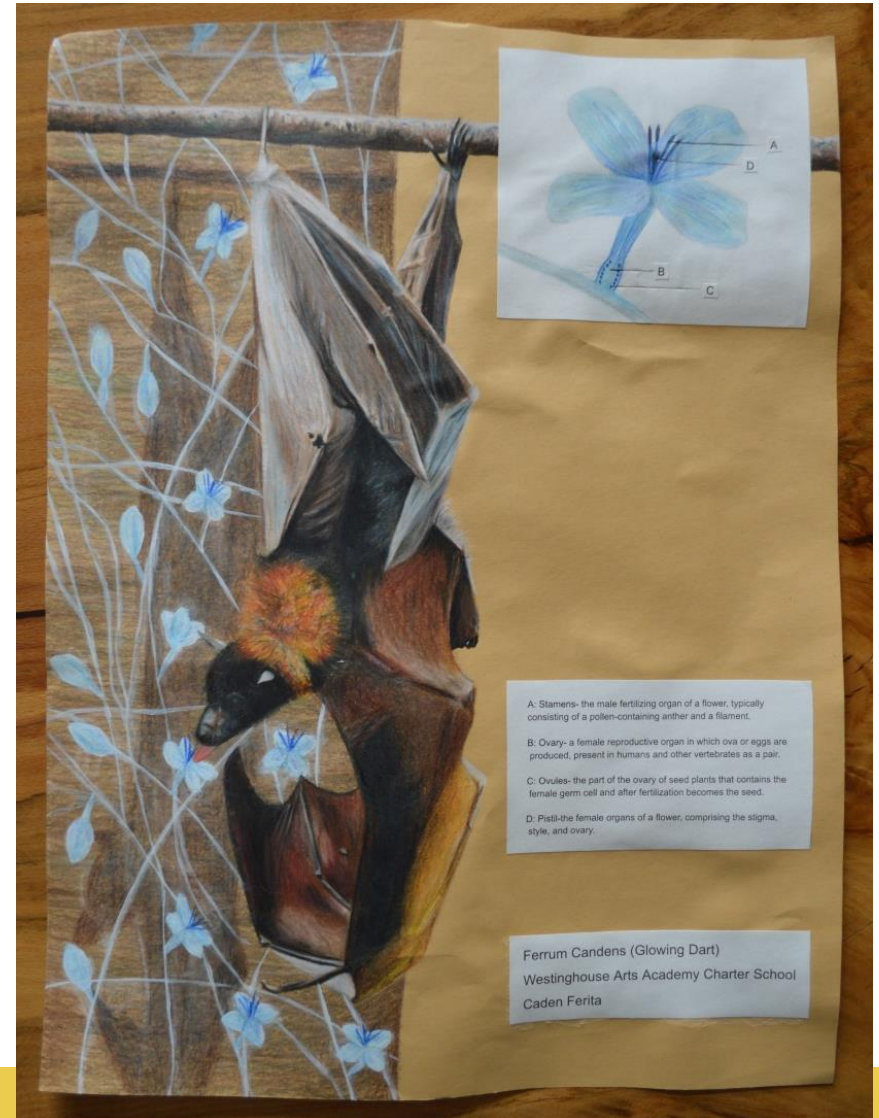
# Challenge #2: “Petals & Pollinators”

## Global Challenge

**Special Merit:**

**Westinghouse Arts Academy  
Charter**

Caden Ferita





# Challenge #2: “Petals & Pollinators”

## Global Challenge



**Third Place:**

**Shaler Area High School**

Emily Ehrenberger



# Challenge #2: "Petals & Pollinators"

## Global Challenge

**Second Place:**

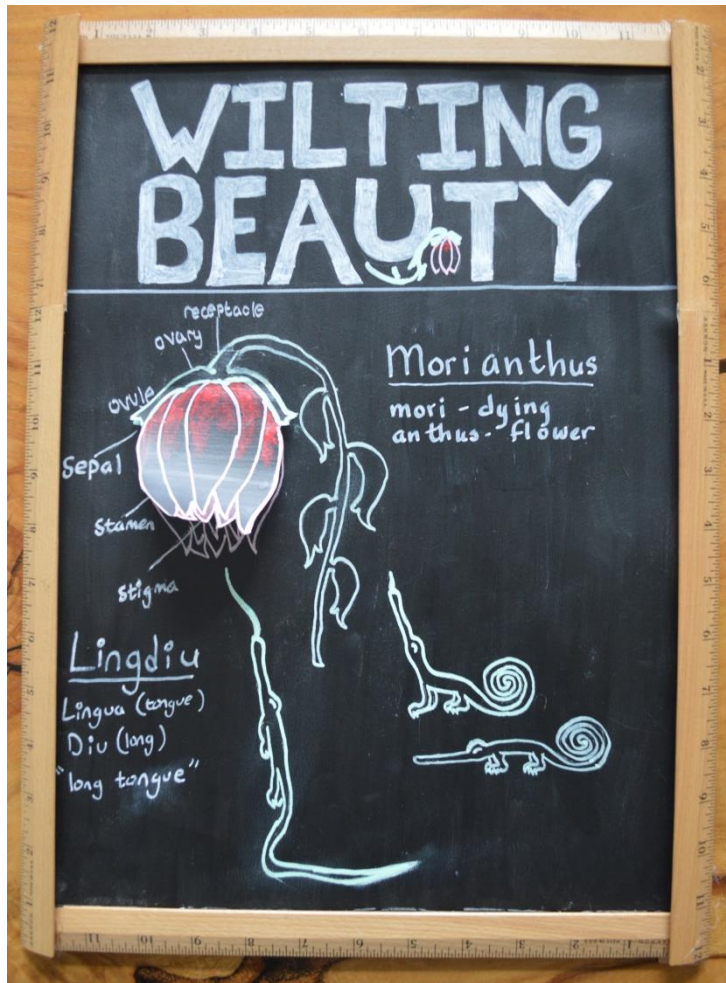
**Penn-Trafford High School**

Emma ChiChilla  
Madison Kober  
Brianna Stephans



# Challenge #2: “Petals & Pollinators”

## Global Challenge



**First Place:**

**Elizabeth Forward High School**

Elsie Carter  
William Carter  
Madison Kapisak  
Sydney Knicely  
Jenna Mervosh



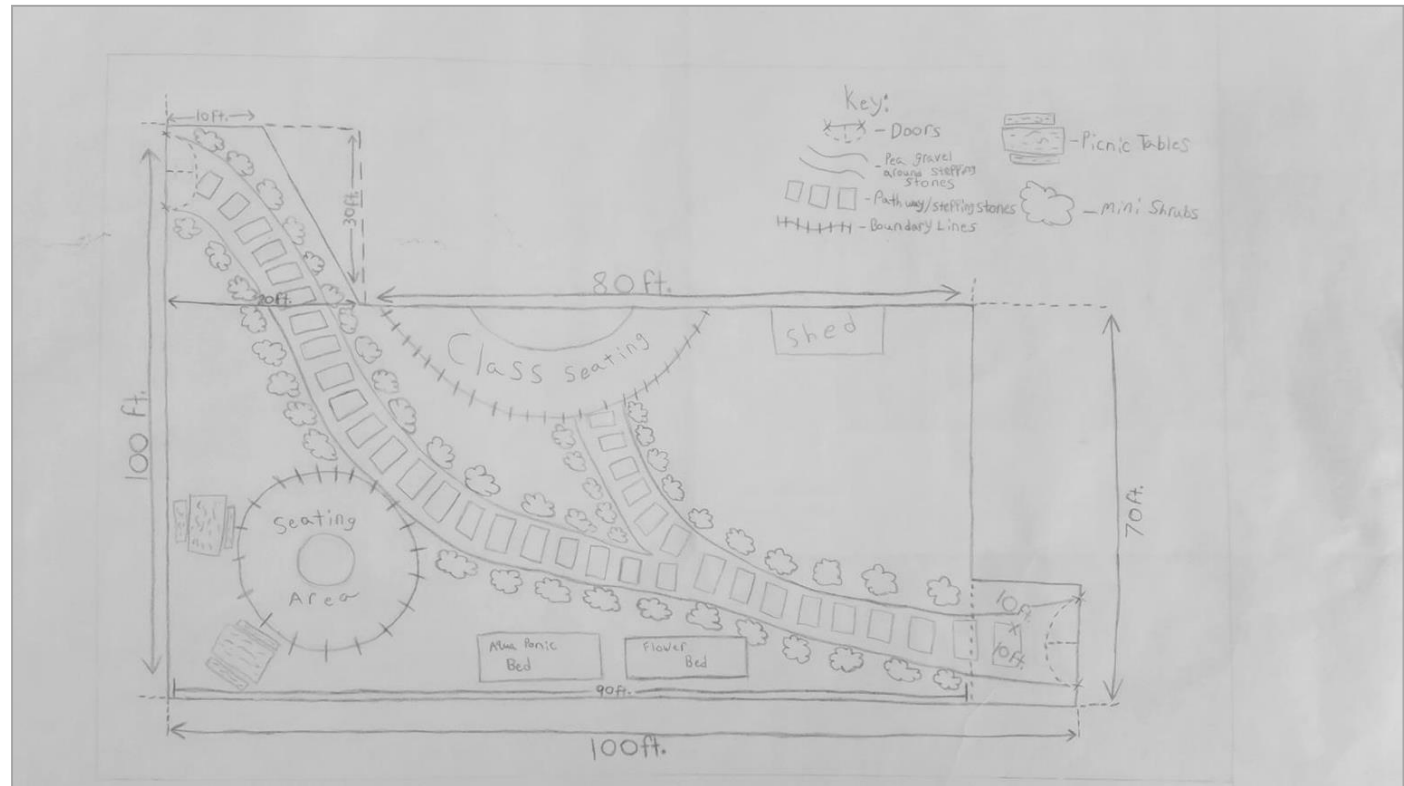
## Challenge 3: “Eco Lots”

# Challenge #3: “Eco Lots”

Special Merit:

Elizabeth Forward High  
School

Madison Kapisak  
Jenna Mervosh





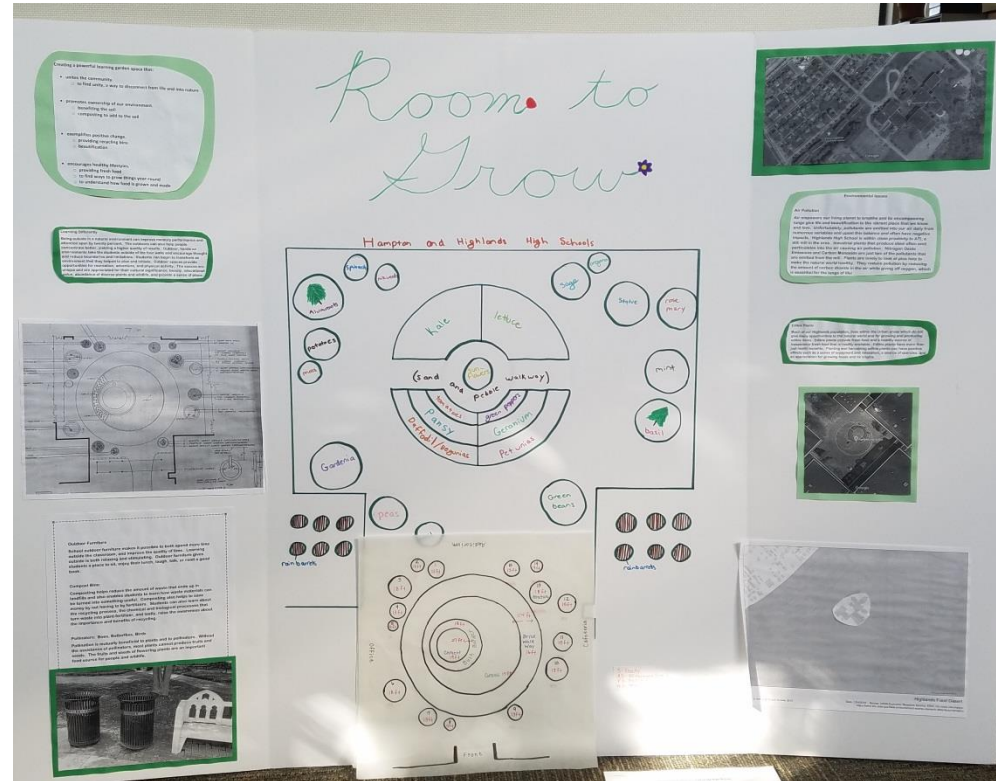
# Challenge #3: “Eco Lots”

## Special Merit:

## Hampton High School & Highlands High School

Jessica McGinley  
Chris Rosenthal  
Shelby  
Hildebrandt  
Kelley Simon

Mitch Balog  
Caitlin Vandergraft  
Yousaf Chowdhry  
Delaney Jones  
Nathan Bizic  
Eli Fondrk  
Gabby Walker  
Rachel Blackburn  
Anthony Bergamasco  
Madison Ritchie

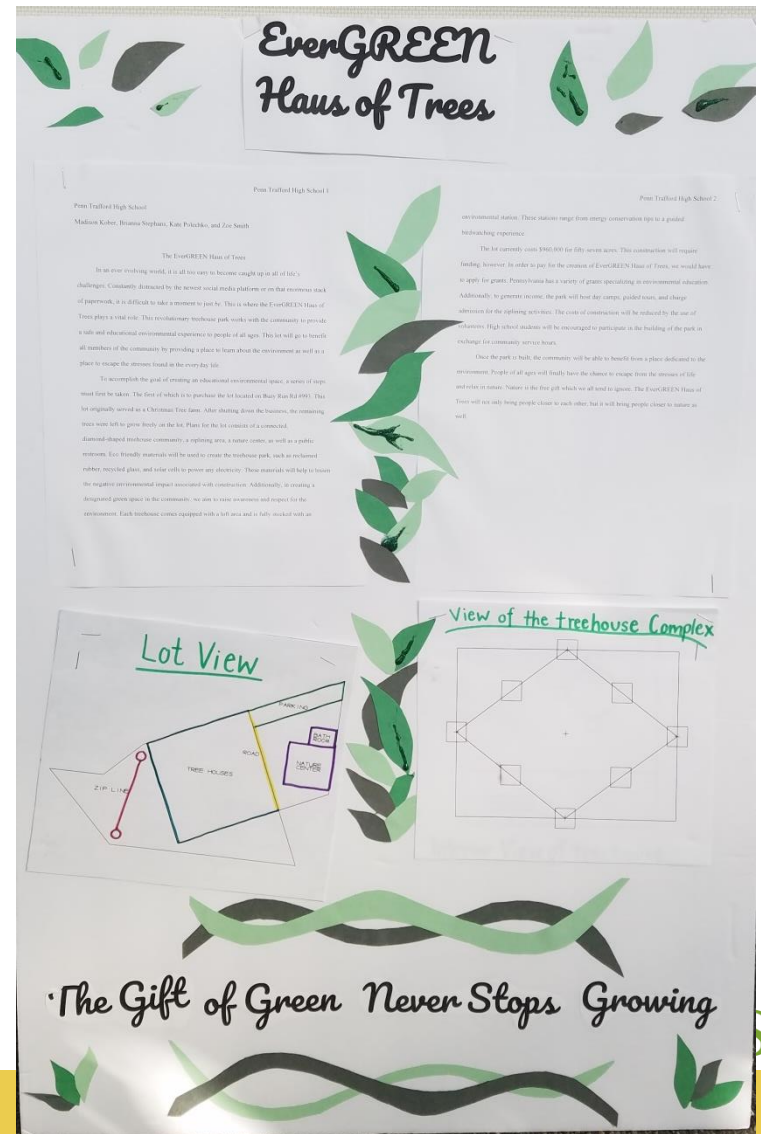


# Challenge #3: “Eco Lots”

## Special Merit:

## Penn-Trafford High School

Madison Kober  
Kate Polechko  
Zoe Smith  
Brianna Stephans



# Challenge #3: “Eco Lots”



Third Place:

Keystone Oaks High School

Sarah Chormanski  
Caitlin Workmaster  
Luke Garda  
Ashleigh Lugaila  
Mirabella Stump

# Challenge #3: “Eco Lots”

Second Place:

Westinghouse Arts Academy  
Charter

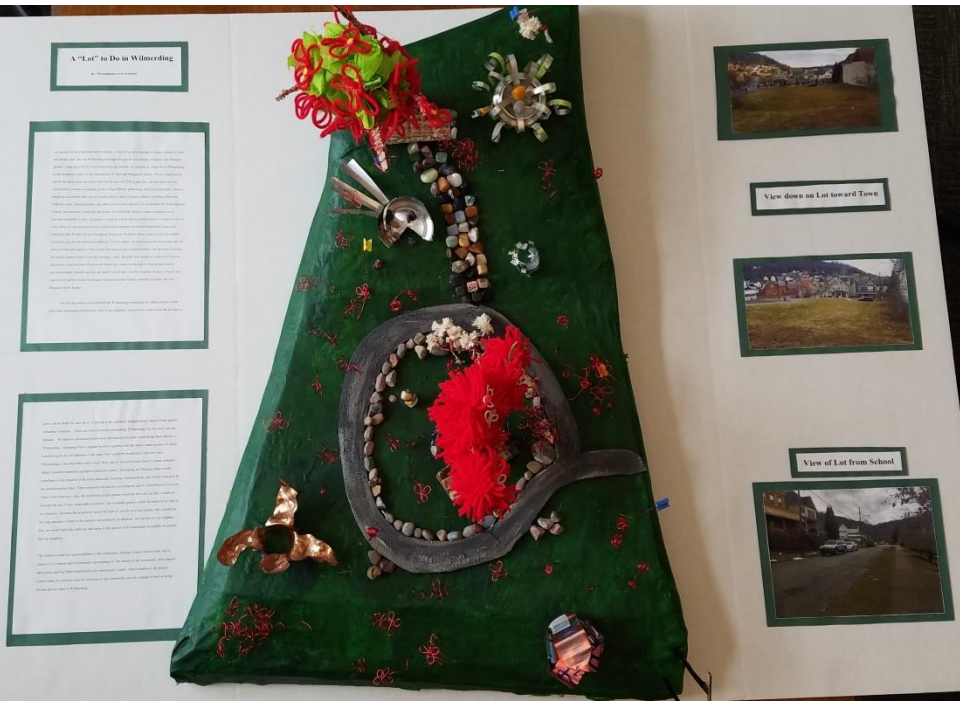
Colton Edwards

Trent Edwards

Eli Klepacz

Caden Ferita

Aiden Meininger





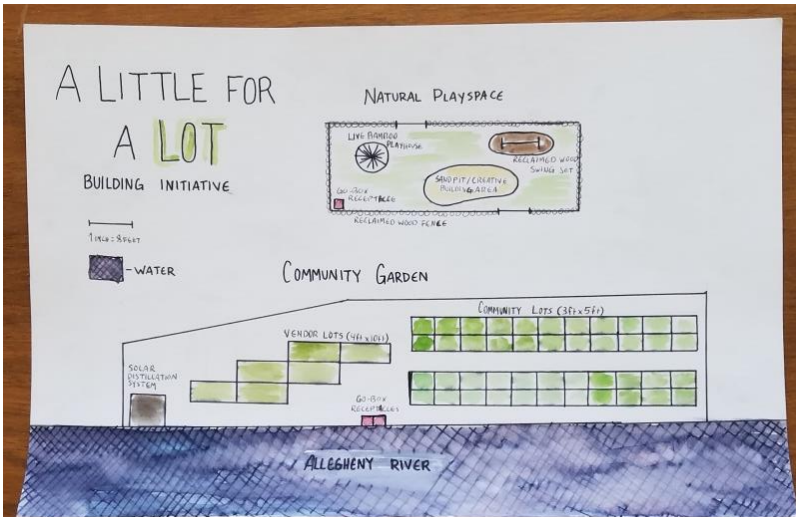
# Challenge #3: “Eco Lots”

First Place:

Shaler Area High School

Emily Ehrenberger

P.J. Squire





## Challenge 4: “Environmental Prose”

# Challenge #4: “Environmental Prose”

## Special Merit:

**Greater Latrobe High School**

Lily Ridilla

## Second Place:

**North Allegheny Senior High School**

Rin Swann

## Third Place:

**Central Catholic High School**

James Genco

## First Place:

**Seneca Valley Intermediate High School**

Claire Williams



# Optional Video Challenge “Environmental Citizen”

2017-2018

Patti Burns Prize for Excellence in  
Communication and Media



Central Catholic High School,  
Christian Farls and Matthew Luckiewicz



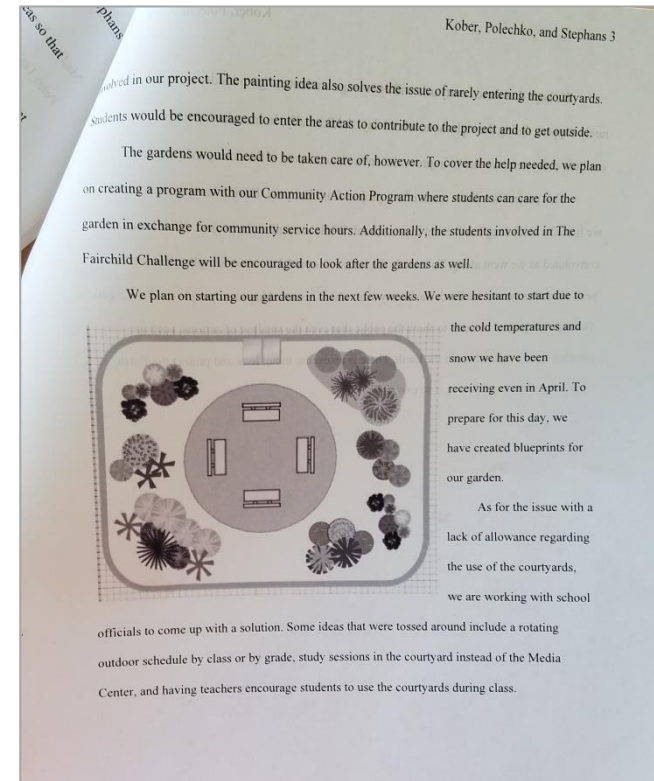
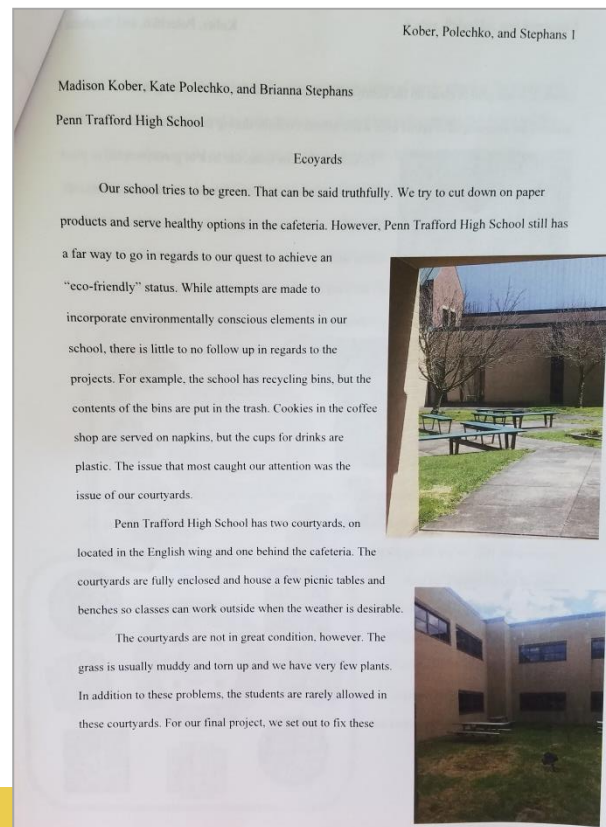
# Challenge 5: Environmental Action: Home, School or Community

# Challenge #5: Environmental Action

## Special Merit:

## Penn-Trafford High School

Madison Kober  
Kate Polechko  
Brianna Stephans



# Challenge #5: Environmental Action

Third Place:

## Westinghouse Arts Academy Charter School

Sumaya Ansar  
Taylor Attaway  
Noah Beir  
Colton Edwards  
Trent Edwards  
Caden Ferita  
Zoe Gibson  
K'Shya Green  
Anaeja Halliburton  
Colleen Hall  
Amani Hill

Gianna Hutton  
Jillian Jones  
Eli Klepacz  
Brianna Mack  
Lauren McCarty  
Lucy Melocchi  
Aiden Meininger  
Breanna Moorhead  
Allison Riley  
Tate Shannon  
Peter Stamerra

### Campus Cleanup & Courtyard Construction

The Westinghouse Arts Academy students have been planning and preparing for an environmentally friendly courtyard garden. The project will take place in the central courtyard area of the school grounds which the students have been maintaining for three months. The courtyard is located near the main entrance of the school and is a great place for the students to learn about environmental issues. The students will be planting a variety of plants and flowers in the courtyard and will be responsible for the garden's maintenance during periods of time. Many of the students have been working on the garden since the beginning of the school year. The students have been working on the garden since the beginning of the school year. The students have been working on the garden since the beginning of the school year.

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Earth Day  
Tuesday April 22nd  
Westinghouse Arts Academy  
Starts at 1pm

I'm with HER



# Challenge #5: Environmental Action



## Second Place:

### North Allegheny Senior High School

Tess Christensen

Ellen Poplavska

Inu Miriyala

Tori Cikins

Emme Cikins

Emily Wilson

Ella Li

Bhamini Sundararaman

Reed Stasko

Michael Harnish

Anya Soller

Jetta Kroll

Shirley Dong

Evan Cheng

Catherine Cao

Mary Evankovich

Takuma Goto

Madelyn Fischer

Courtney Roman

Kevin Lu

Allena Carmody

Carrie Vinski

Nicole Atkinson

Yulia Yatsenko

Kaitlyn Gallon

Yosen Wang

Kate Delaney

Maureen Walsh

Evan Swatchick

Jyotsna Bathina

Pavan Otthi

Josh Gerthoffer

# Challenge #5: Environmental Action

First Place:

North Allegheny  
Intermediate High School

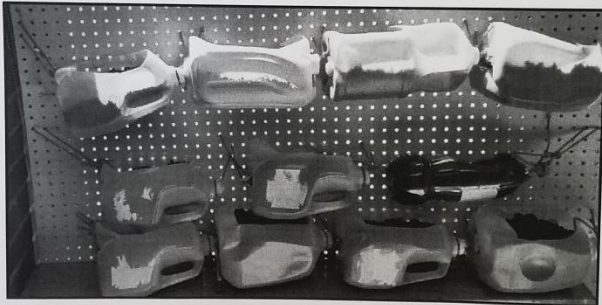
Shria Shyam

## ENVIRONMENTAL ACTION AT NORTH ALLEGHENY INTERMEDIATE 2017-18

*Shria Shyam*

### EXECUTIVE SUMMARY

North Allegheny Intermediate High School (NAI) faces significant issues regarding its air conditioning system- each room withholds extreme and opposing temperatures in and of itself. For teachers and students alike, such a flaw in the educational environment interferes with the capability to learn. To combat this issue, while simultaneously implementing an innovative environmental solution in an all-school effort that engages students, staff, and the community, 9th and 10th grade students constructed a living wall in an entirely student-led effort at improving the educational and natural environments simultaneously.



### BACKGROUND

Due to the nature of the project, this initiative has the most immediate implications for the educational environment. NAI underwent multi-faceted renovations in the past summer, but,

*Shria Shyam, North Allegheny Intermediate High School*



# Exhibitor Awards

## Elizabeth Forward High School

- Students: Elsie Carter, William Carter, Madison Kapisak, Sydney Knicely and Jenna Mervosh

## Keystone Oaks High School

- Mirabella Stump, Sarah Chormanski, Caitlin Workmaster and Benjamin Kvederis

## North Allegheny Senior High School

- Tess Majewski

## Penn-Trafford High School

- Kate Polechko, Zoe Smith, Alex Wargo, Emma ChiChilla, Madison Kober, and Brianna Stephans

## Saint Joseph High School

- Shelby Gogal and Allison Wygonik

## Shaler Area High School

- Emily Ehrenberger and P.J. Squire

## South Park High School

- Elyssa Pemu and Alexia Schmader

## West Mifflin Area High School

- Zoe Cutillo, Nia Gambrell and Heavynn Weir

## Westinghouse Arts Academy Charter

- Caden Ferita



# Food Waste Warrior

Central Catholic High School,  
James Genco





# Rookie Schools 2017-2018

Greater Latrobe High School

Westinghouse Arts Academy Charter School



# Participation Awards

Gateway High School  
Greater Latrobe High School  
Hampton High School  
Highlands High School  
Keystone Oaks High School  
North Allegheny Intermediate High School  
Saint Joseph High School  
Seneca Valley Intermediate High School  
Seneca Valley Senior High School  
South Park High School  
South Side Area High School



# The Fairchild Challenge Awards

Central Catholic High School

Elizabeth Forward High School

North Allegheny Senior High School

Penn-Trafford High School

Shaler Area High School

West Mifflin Area High School

Westinghouse Arts Academy Charter School



# **Overall 2017-2018 Phipps Fairchild Challenge Winners**

Third Place

Central Catholic High School  
Elizabeth Forward High School  
Penn-Trafford High School





# **Overall 2017-2018 Phipps Fairchild Challenge Winners**

Second Place

West Mifflin Area High School



# **Overall 2017-2018 Phipps Fairchild Challenge Winners**

First Place

Shaler Area High School



# Thank You!

Students, Teachers, Panelists, Volunteers,  
Parents, Phipps staff & Michele Buford