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Environmental Science Newsletter

Allegheny College

This edition of the Newsletter is dedicated to the life of David R. Shipe of the class of 2018

Aquaponics Center Renamed

On October 3rd, the aquaponics system inside of Carr Hall was renamed in David R. Shipe's honor. During his tenure at Allegheny, Shipe was the manager of the aquaponics system for three years. He was interested in sustainable agriculture and forest management. Shipe was doubled majored in biology and environmental science and he graduated in the Spring of 2018. After a cancer diagnosis, Shipe's family set up a scholarship for future Allegheny students who are interested in the same ideas that he was with a strong tie to sustainable food production. Bobby Bower '20 was the first student to receive the scholarship. Bower is also a biology and environmental science double major, and he works in the aquaponics center. Bower had this to say about being the recipient of the scholarship, "It is truly an honor to be the recipient of the David Shipe scholarship. Working with David on the aquaponics system last year was amazing and he taught me so much and became a friend. I am very thankful to him and his family."

David sadly lost his battle this November. Renaming the aquaponics center will serve as a reminder of the positive impact that Shipe had not only to the environmental science department but also to the Allegheny community as a whole.

If you would like to contribute to the Allegheny College David R. Shipe, Class of 2018 Scholarship in Environmental Science, please follow this link, http://allegheny.edu/davidshipe

Pictured above are David Shipe and Bobby Bower

Editor: Brittany Lutheran '19

Heagy's Orchard: Accessible Local Agriculture

Heagy's Orchard rests at the bottom of a small hill, between plowed fields of golden wheat and dark groves of fruit trees. The absence of ambient noise, the smell of exhaust and roving students creates the illusion you have traveled farther than you have. However, this orchard is only fifteen minutes from campus and well worth the time. I had the fortune to visit and have a short tour of this small paradise last week, through Professor Kerstin Ams' ES 240: Small Scale Agriculture.

We were greeted upon arrival by Sam Heagy, who purchased the land now used for the orchard back in 1992. Ten years later, after deciding to switch from dairy farming to fruit production, he planted his first peach saplings. Despite frequent setbacks, including losing all his original peach trees and a serious accident, Sam Heagy and his orchard still stand with confidence. And although you wouldn't guess it from the way Sam speaks about his experience, he describes himself and his son, as very much still learning.

It's easy to understand why Sam says this after he explains their workload and process. There's a lot more that goes into fruit production than someone looking in would realize and I underestimated the amount of care each tree needs. Blossoms need to be knocked off either by hand or machine to produce sizable growth and prevent alternate year crops, trees have to be trained to produce desirable limbs and even small-scale growers like the Heagy's still need an industrial-sized storage freezer. Seeing all the machinery and work that goes into something that seems so simple really gives an appreciation for something I think a lot of us take for granted. Sam manages the orchard's pear trees, which sport classic Bartlett pears in addition to Asian and European pears. Sam's son, Preston, oversees the rest of Heagy's Orchard, which includes 800 peach trees and even more apples.

I encourage anyone who has the time to stop by Heagy's Orchard and experience as much as you can. In modern America, most of us do not possess a strong connection to where the food we eat comes from, much less those who pour their lives into providing it. Taking a minute to absorb the orchard with your senses and speak to whomever you are able builds a connection not only with the location and people, but with the fruit itself. Restoring this greater human connection to agriculture, a trade that is responsible for civilization itself, is an invaluable way to gain greater appreciation for our food. Listening to Sam speak about the work that goes into creating the pear that you hold in your hands is an eye-opening experience to a part of our world that we cannot live without. If you're looking for a place to enjoy farm fresh produce, support local agriculture and connect with some genuinely interesting people, Heagy's Orchard is a great opportunity for all of the above!

Water Bottle Use on Campus: An ES 210 Research Project

Have you ever noticed how many plastic things you touch in a day? Even as environmental scholars we often miss the small materials that are so pervasively embedded in the very the tools we use to navigate, study, and improve the world. This is same question that Professor Beth Choate once posed to her colleague Professor Pallant. She is certain that she forever changed the way he sees his surroundings and has since put forth efforts to consider the everyday use of plastic in the Allegheny Campus environment.

It was approximately four years ago that Professor Choate and her ES 210 research methods class launched a survey study specifically seeking to understand plastic water bottle use at Allegheny. Now the legacy continues. With the allied assistance of Professor Matt Bethurem and their current ES 210 class Professor Choate is digging deeper into the subject of bottle water use. The class began the year by examining both the earlier survey as well as the contents of the dormitory trash rooms. Adorning blue latex and bearing clip boards they took to the bricks, venturing out into the far corners of campus to investigate how many plastic bottles gathered in the creases of the disposal bins. In the end, they found **127** plastic water bottles and **111** plastic non-water bottles (soda, coffee etc.). Of the 127 plastic, recyclable water bottles observed, approximately half were found in trash cans. After learning about the significant presence of plastic bottles on campus, the ES 210 students are well on their way to understand not only the physical impacts of plastic bottles on the environment, but also the social human components of bottled water. Although plastic has contributed greatly to human discovery and innovation, the ES 210 class has come to the understanding that single use plastic items are causing damage to human health and the global environment right at this very moment.

In order to gain greater knowledge of the issue and how best to encourage long lasting changes, they have designed a survey, pilot tested it, and begun collecting qualitative data directly from Allegheny students about bottle water use on campus. You may have seen them tabling on all levels of the campus center, at the library, or Brooks dining hall. If you are 18 years or older and a student at Allegheny and have not yet taken the survey please visit the link below to be a valuable participant in this unique study.

https://docs.google.com/forms/d/e/1FAIpQLSe7Umo17Zf5ktwxBxtNqj7xVnMHilK_XQBNhIPRUhofs4E9iA/viewform?usp=sf_link

Internship and Research Opportunities

Mercer County Conservation District Internship, contact <jmccullough@mcc.co.mercer.pa.us>
Allegheny College's Farm to School Internship, register for EDUC 510
Local Food and Farming Internships, contact <kams>
University of Michigan DDCSP UM Research and Internship program, application due Jan. 11

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