# ESS Newsletter February, 2023

# **Operation Wildlife Certification**

This semester, Professor Rich Bowden's students in Junior Seminar are working to obtain a Wildlife Habitat Certification for College. The certification, Allegheny recognized by the National Wildlife Federation, indicates that the area supports wildlife and utilizes sustainability practices. Some of the necessary features include sources of food, water, cover, and places for animals to raise young. The sustainability practices may consist of soil and water conservation, control of invasive exotic species, and using organic techniques. The class identified that Allegheny has implemented many of these practices on campus, such as composting and mulching, installing a rain garden and a pollinator garden, using native plants, and eliminating fertilizers and pesticides. The students will spend the semester creating a pitch that Allegheny's potential for this certification, as well as brainstorming ways to make our campus more wildlife friendly.

The students noted this popular spot under the bridge near Schultz Hall as a valuable place for wildlife.





Mark Kirk. Summer of 2022 with a brown trout caught by electrofishing.

# Alumni Spotlight - Mark Kirk

Mark Kirk, a 2011 Allegheny Graduate, is the Research Scientist for the Watershed Conservation Research Center (WCRC) at Allegheny College. While at Allegheny, Mark Kirk was involved in Creek Connections which gave him valuable field work experience. He also worked closely with Scott Wissinger, a Professor of former Biology Environmental Science, for his senior comp, a summer job in Colorado, and various research projects done at Busson. The undergraduate work Mark was able to take advantage of laid the foundation for the rest of his studies. After Allegheny, he completed his Masters in Fisheries at the University of Idaho in 2015, and his Ph.D. in Ecology at the University of Wyoming in 2020. Mark Kirk has returned to Allegheny and is excited to continue to explore the French Creek area while being about to provide students with the valuable opportunities to apply what they learn in the classrooms.

## Visit to Sablyak

On February 1st, Professor Eric Pallant's Soil to Plate class went on a field trip to Sablyak Farms in Springsboro to learn about the ins and outs of conventional agriculture! The farm's owner gave the class a tour of various machinery they use to plant, harvest, and prepare crops for being sold. They were also lectured on the various operations that place at the farm, including explanation of how money travels in and out of the farm, the process of planting and selling crops, and concerns related to the farm that involved everything from predicting market trends to figuring out the best way to combat weeds and pests. Overall, the trip helped students to discuss the viability of modern farming practices and consider the long-term impacts they can have on the environment.



A corn drying system that helps to prepare corn for being shipped after it is harvested!



#### **Disc Golf and Outdoor Education**

When you hear the phrase "interactive self guided outdoor educational experience," the first thing that comes to mind is probably not disc golf. That is, unless you're Allegheny senior ESS major Liam McCann. Liam's comprehensive project involves creating a disc golf course in the woods behind Robertson that serves as an environmental lesson. Liam has used GPS data and GIS to determine locations of the "T"s and baskets. He is now working on a story map; each hole will have a written exhibit with a title and a write up about some aspect of the environment. The rationale is simple: to give people a personal connection to the outdoors while also teaching them. Liam believes that giving people an emotional tie to critical the outdoors is to driving environmental change, and disc golf is a great way to accomplish just that.

# Field Ecology Project

During the previous semester, a group of students began a project in their Stream Ecology class led by Professor Mick Demi. The project's aim is to study the impacts of consumption and algal presence on the rate of decomposition for leaves. This semester, the Field Ecology class will be continuing the study with Professor Demi by collecting and analyzing results. So far, they have observed that macroinvertebrate consumption has a larger impact than microbe consumption and there does not appear to be a difference in decomposition rate with the presence or absence of algae. However, they still have one more round of results to collect so the observations may change. Leaf decomposition is an important process in ecology as many obtain their nutrients decomposing material and it can also disclose information about the surrounding environment which is why studies like these are so important!



Students preparing project materials.

## **My Love for Nature**

Nature is so marvelous, full of emotion,
Delightful for everyone, I am no exception.
The beautiful golden sunset, I wish to kiss,
The grassy meadows give me extreme bliss.
From the tiniest crystal dew drop,
To the colossal snow-clad mountains,

Makes me feel as if, I am in seventh heaven.

The rays of early dawn,
Filtering through the leaves,
Turning them into golden foliage,
With much ease.
The magnificent view,
Of the mirror-like lake,
Reflecting the scenes
Which only nature can make.

On the huge rocks, the waterfalls cascading,
Looking as if they are invading.
The forests carpeted,
With lush green grass,
I wish, the destruction of nature,
Man would bypass.
The brilliant colors of autumn, red and yellow,
The evergreen forests of birch and willow.

The green pastures and fields full of beauty,
The wild flowers of vivid variety,
Fill my heart with vibrant joy,
I desire to remain there and enjoy,
To my hearts full contentment,
Under the warm sunshine, incandescent
Complete silence except for the wind blowing,
And the sound of branches swaying.

Nature's beauty is a great treasure,
Just as the boundless sky beyond measure.
I feel upset due to the noise and disturbance,
All these flaunt man's ignorance.
The glimpses of aspen and juniper wood,
Add intense pleasure to my mood
Upon mankind, nature has endowed,
All the beautiful gifts in loads.

Poem by Rizwana Sultana







Chimney swifts preparing to enter the Oddfellows chimney.

## **Bird Club & Chimney Swifts Projects**

Josh Heiser ('23) started Bird Club his freshman year after connecting with other members of the campus community who shared his enthusiasm for birding. Bird Club weekly meetings focused hosts identification and other skills, as well as trivia and game nights. The club also leads birding trips (fun for birders of all levels, even if you're new!) around campus and in the region. As an Audubon Campus Chapter, Bird completes conservation projects, such as setting up fencing to protect nesting sites of shore birds at Presque Isle.

An upcoming conservation project of the club is providing alternative housing for chimney swifts that roost seasonally in the Oddfellows chimney. You may have seen the spectacle of the swifts circling the chimney on fall evenings before they perch inside for the night. For more info about the chimney swifts, see the Campus article "The Oddfellows chimney swift dilemma."

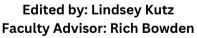
If you're interested in Bird Club, email birdclub@allegheny.edu or check out their Instagram @ac\_birdclub!



An example of a constructed chimney swift tower, part of Audubon's Chimney Swift Tower Initiative.



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Interested in writing for the ESS Newsletter? Feel free to reach out to kutz01@allegheny.edu

