

Resource Conservation Workshop

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Monday (cont.)

When we were done at Lake Wheeler, we returned to NC State's campus for lunch afterward, we continued to talk about soil erosion and waste management by participating in different labs. One lab was for animal waste and soil management, where we used sand and Kool-aid to visualize how manure infiltrates soil, with the sand as our soil and the Kool-aid as the manure. Another lab taught us about microbiomes and how microorganisms live and function. During the lab, we got to make our own self-sustaining microbiome 'pet,' using soil, leaves, salt, crushed egg shells, and water. The last lab was to test different samples of water from local lakes and streams for water quality, which included pH testing, turbidity testing, and testing for certain chemicals.

Animal waste lab



Microbiome lab



Water quality lab

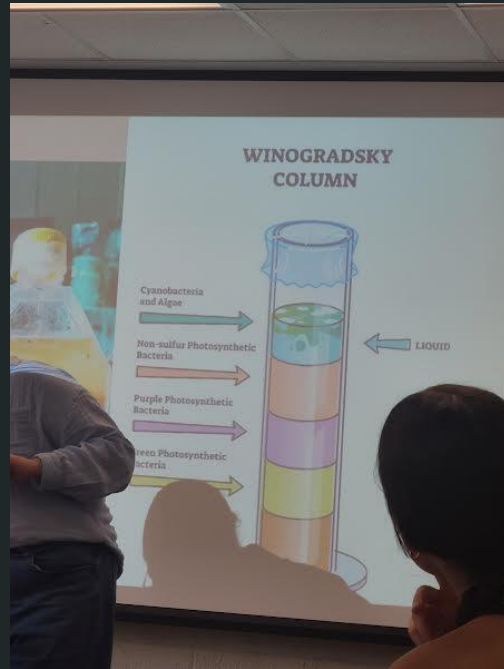


My Microbiome Pet! We were told to check on it 2-3 months later to see a change in color. Mine will most likely be showing signs of life soon

June 16, 2025



Colors and what they
mean



September 7, 2025



Tuesday

On Tuesday, we went to Falls Lake to learn about the Falls Dam and pollinators. We had to get into groups and create a pollinator friendly garden, then present ours to the other groups and discuss why we arranged plants and structures the way we did. Then we went to the Falls Dam and learned about the history of it and its function.

When we were walking around while talking about pollinators, I spotted a cicada nymph, and one of the counselors picked it up and talked to us about it and the life cycle of a cicada! We talked a lot about insects other than ones that we mostly associate with pollination as well.

Pollinator project



Falls Dam tour



Cicada time!



Tuesday (cont.)

Afterward, we went to the Sandling Beach Recreation Area and met with Fish and Wildlife Service and Park Rangers. With the Fish and Wildlife Service, we talked about managing wildlife and hunting, which Mr. Craig, one of the presenters, described it more so as managing how humans interact with wildlife. We learned about different animals that were native *and* nonnative to North Carolina, and were given visual representations with animal pelts and bones. Then we went to speak with the Park Rangers, who also talked about North Carolina's wildlife and their duties with the state parks. We went on a short hike with them where they showed us spots where bats and chimney swifts would inhabit, along with safety measures to take if they choose to live in/on a structure attached to your home.

I talked with one of the Park Rangers, Mr. Sancartier, about birds and their roles in the environment. A main focus of our discussion was about vultures and how crucial they are for cleaning our Earth.

Fish & Wildlife
Service



Hike



Wednesday

On Wednesday, we went to NC State's Beef Unit, which is where their cattle are located. First, we were at the cropland area, where we talked about best management practices, or BMPs, and how to plan out their placements. Then we traveled to the pasture, where we talked about BMP's more in-depth and then dug through cow manure for dung beetles. My group found the most variety of species in our rotation for it. Afterward, we returned to campus for lunch, then we were given practice scenarios. We had to organize a pasture with BMPs. The main goal of this project was to see if we could arrange it appropriately and in a way that limited runoff into drinking water sources while also giving the cattle sustainable areas to live and graze.

At the pasture



BMP Practice Scenarios



Thursday

On Thursday, we went to the Clemmons Forest. First, we learned about forest fires, what causes them, and how to prevent/control them. Then we talked about the environment and what a healthy conglomeration of plants and fungi is for a forest environment. We were also shown a demonstration of what the forestry service uses during a forest fire. Afterward, we talked about tree identification and forest measurement. We had to learn about the different leaf shapes, branch types, and growth patterns of native tree species to identify different types of trees. For forest measurements, we learned how to measure the diameter of a tree and the specific units of measure used for it.

Forest fire control



Forestry service



Thursday (cont.)

We returned to campus and went to the Plant Sciences Building. We were separated into several different groups, and each group rotated through different labs. My group started with making tote bags, but we used cyanotypes to create special designs on them. Then we made 'boba ball' pH indicators in a lab. Once we made the pH indicators, we traveled to Lake Raleigh to test the pH of the water in the lake. We used the boba balls, which were a pinkish-purple color when we made them. A change in their color determined the pH of the lake. Mine turned clear, meaning the pH was closest to being neutral (7). We also used a test strip and a pH meter and compared our findings to get an accurate reading. Then we went back to the Plant Sciences Building to learn about soil aggregates.

Boba ball pH experiment



Cyanotype tote bag



Conclusion

Overall, it was an honor to attend the Resource Conservation Workshop. I learned so much about managing water and soil and it's changed my perspective of the world around me. It reinforced my interest in wildlife and the conservation of our Earth and its resources. The counselors and members involved in making this workshop happen were very informative and catered towards people with all types of interests, even giving us opportunities that we could pursue to help us in the future. The other camp attendees all had similar mindsets, and it was refreshing to be around people who cared about taking care of our environment. Thank you for making it possible for me to attend. It was an incredible experience.

