Curious About Frogs: by HAILEY MCCLALLEN written October 11th, 2024

On September 23rd, 2024, we visited the Viles Arboretum in Augusta, Maine. We discovered that an arboretum is a botanical garden usually consisting of trees and woody plants. The weather was hot and humid and the sky was open; without clouds. It was 55° degrees out.



When we first got there, we studied the white oaks in the tree area. All the trees had metal identification tags that sort of looked like military dog tags. The owner of the arboretum most likely had those tags so visitors could know the exact species of the trees we saw.

At about one o'clock in the afternoon, we visited a little pond

which we saw from the bridge we were at. I noticed a huge population of frogs which I later easily classified as northern green frogs. This information was found on maine.gov. They looked to be resting on the pond's surface, with only their heads and upper bodies showing. I also noticed they weren't startled easily, which might have meant they were used to people.



The pond seemed like it was full of green algae and I wonder if the frogs eat the algae. I later found out that the tadpoles of the green frog species eat the algae but the grown frogs eat crayfish, small snakes, insects, snails, other frogs, and tadpoles. This information came from nature.org

The trees surrounding the pond had visible roots and were swooped low. Most of them had circular leaves with a pointed tip. The next thing I saw was logs which had fallen in the water which may have been there for years or just this season.

The smell of rotting and damp earth was a pleasant smell; it reminded me of stepping outside during a heavy rain. There was also a sweet smell, perhaps the smell of old fallen fruit that might have been laying on the riverbed.

Green frogs are not a keystone species, which means if they were removed from an ecosystem, the results wouldn't be too drastic. But, if the population is a large number, it could still do a ton of damage to Maine's native species. Scientists could do an experiment testing the impact green frogs have on their ecosystems. An idea is monitoring two or three small bodies of water, such as ponds with frogs being added or taken away manually. I would like to know if there can be a non-invasive way to keep track of the frog population in this pond, because it might help scientists population control other species. I found later that biologists insert PIT tags into species such as frogs, to help them find how long they live. This helps them later figure out the overall population of frogs.

Maine Gov -

https://www.maine.gov/ifw/fish-wildlife/wildlife/species-information/reptiles-amphibians/greenfrog.html

Nature.org -

https://www.nature.org/en-us/about-us/where-we-work/united-states/washington/stories-i n-washington/exploring-nature-spring-frogs/

INaturalist.org

https://www.inaturalist.org/taxa/65982-Lithobates-clamitans