CFAES

School of Environment and Natural Resources

USDA Forest Service – Elm Breeding Program

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Elm Breeding Program Overview

Map of Northern Research Station, Delaware, OH

USFS Misson: "…to sustain the health, diversity, and productivity of the nation's forests and grasslands to meet the needs of present and future generations."

- **USFS mission aligns with my interests!**
- **SENR professors sometimes email natural resource job opportunities… this was one of them!**

Interpretive Sign of USFS planting site at Glacier Ridge Metropark

In the 1930s, Dutch Elm Disease (DED) invaded the US and threatened forests and street elms. Since the 1970s, USFS researchers at Delaware's Northern Research station have been breeding surviving elm trees in the hopes of creating DED resistant Elms to go back on streets and into the environment.

A day in the life as a Student Trainee

Assisting Purdue University Researchers with leaf analysis

As a student trainee, my job consisted of assisting researchers with their daily tasks and long-term projects. This ranged from field work of maintaining trees, to lab work collecting data on planted trees for various experiments. Daily tasks were diverse! Sometimes the USFS partners with universities and allows them to use our facilities to conduct research, and I assisted them as well.

Tree maintenance at Rocky Fork Metropark Planting Site

Unexpected Obstacles

Characteristic Zigzag feeding pattern of Elm Zigzag Sawfly

In mid-July 2023, the invasive species Elm Zigzag Sawfly (*Aproceros leucopoda*) was discovered by a technician. This was the first known sighting in Ohio, and we pivoted quickly to study the scope of the problem and how to best move forward. I learned to always expect the unexpected!

Elm Zigzag Sawfly Pupa

Takeaways

The biggest asset I gained from my experience with the Forest Service is to be flexible and treat unexpected changes as opportunities. I also learned to work "in the moment" and enjoy my time working outside knowing I was also helping to restore our forests.

Survey Plot at Kenney Park, Columbus

Concerns for Prospective Employees

- Government moves slow, especially federal government!
- Be sure you set expectations of clear communication, not everyone communicates well or frequently
- Be prepared for the elements!

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