# COLLEGE OF FOOD, AGRICULTURE, & ENVIRONMENTAL SCIENCES / SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES

# Cleveland Museum of Natural History | Conservation Intern

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#### INTRODUCTION

#### What is CMNH?

The Cleveland Museum of Natural History is a nonprofit public museum located in Cleveland, Ohio. I worked in the Natural Areas department, which owns/manages 11,000+ acres of nature preserves in Erie, Huron, Lorain, Medina, Cuyahoga, Summit, Lake, Geauga, Ashtabula, and Trumbull Counties.

The CMNH Mission is to inspire, through science and education, a passion for nature, the protection of natural diversity, the fostering of health, and leadership to a sustainable future.

The Natural Areas Program was established in 1956 with the acquiring of Fern Lake Bog. We like to think of our system of nature preserves as a "living extension" of the museum — great resources for studying Northeast Ohio's incredible biodiversity.



#### How did I find this position?

During the spring 2021 semester, I thought of looking for jobs with CMNH because it is close to my hometown, and I had been there several times for various school functions and family trips. I found this job by applying to the Conservation Intern position directly on the CMNH job board. I participated in a short interview with my supervisor in mid-April, and our full team of 7 was onboarded and working in the field by the beginning of June.



This is me wearing our typical uniform shirt and hat. When working near private property, we got to meet some kind landowners (and their pets). Meet Pixie!

# **ON THE JOB**

## A Day in the Life

One of my main duties as a Conservation Intern was to manage invasive plant species on our preserves, which involved plenty of hiking. We manage plant species in a few different ways, including by non-selective herbicide spraying, hand pulling, and clearing overgrowth to make room for rare and native plants.



This is an example of how we would start many of our days that we would be spraying invasive plants. We almost always used a 3% non-selective herbicide solution: for every gallon of water, we add 4 ounces of herbicide, 2 ounces of surfactant, and 2 ounces of non-toxic herbicide tracker dye.



Here is a before and after image (featuring my supervisor Ben) from the day we cleared the overgrowth from one of our deer exclosures at Koelliker Fen. Because we could not spray this with herbicide, everything was removed by hand pulling/sawing and placed in the forest nearby. Watch out for Poison Sumac!

#### **Mentor Marsh Restoration**

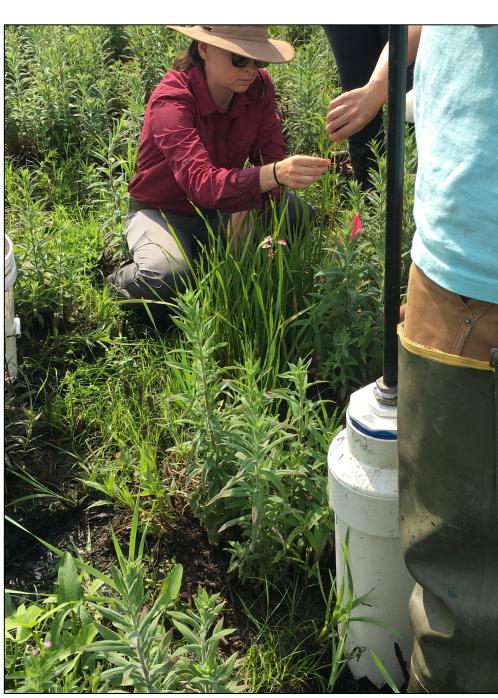
Mentor Marsh, a unique wetland habitat along the Lake Erie shoreline, became Ohio's first State Nature Preserve in 1971. Since 2004, the Cleveland Museum of Natural History has been involved in a large-scale restoration project to remove existing *Phragmites* plants, plant native seeds, and allow the existing native seedbank to return and to thrive.

For several weeks over the summer, our team was able to participate in this restoration project by removing cattail throughout much of the marsh and by sampling Flowering Rush cores in partnership with the U.S. Army Corps of Engineers.





The above drone pictures of the area surrounding Corduroy Road, provided by my supervisor (Ben Piazza), show the progress and ecological development at Mentor Marsh over the years. The top picture was taken in 2017, and the bottom picture was taken in 2021.



This picture was taken from the day we engaged in Flowering Rush core sampling with USACE. Mia Yeager, Mentor Marsh Habitat Restoration Manager, is seen here examining a Flowering Rush plant before taking a sample.

# REFLECTION

My ideal career involves constant discovery and the ability to see concrete progress from the work that I have done. It involves each day being at least a little bit different, and it involves being outdoors for a good portion of my time. This experience was a near perfect fit for my future career aspirations. We were at a different preserve almost every day, and there were constant opportunities to learn something new about plants.

Moving forward, I plan to seek another job or internship related to this position. Like what I did during the spring 2021 semester, I intend to keep an open mind and apply for experiences that spark my interest in the natural resources/land stewardship field. I would love to work for CMNH again next year, whether that be in the same position or in a different position/department.

To other students interested in a similar experience, the biggest advice I can offer you is to be curious and to find beauty in the fact that there is always more out there for you to discover. Attitude is everything; you need to enjoy what you're doing and be willing to take on new challenges to succeed. Finally, remember to take care of your physical and physical health. Listen to your body and take breaks when you need them; the frequency is different for everybody.

# **ACKNOWLEDGEMENTS**

I worked with a wonderful and supportive team this summer, and I sincerely appreciate everything they taught me. Thank you to the Natural Areas and Mentor Marsh teams!



This picture was taken during our aerial drone mapping survey of our progress at Mentor Marsh. Row 1: Stu Davis, Ryan Wilkinson, Edison Cigany, Ella Mascia, Maren Benos (me), Rebecca Cantrell, Michael Marefka, and Ben Piazza. Row 2: Mia Yeager, Charlotte Moore. Not pictured: Ken Schneider, Laine Bell, and David Kriska.