Empacts Project

Ecotype: Wetlands

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iNaturalist

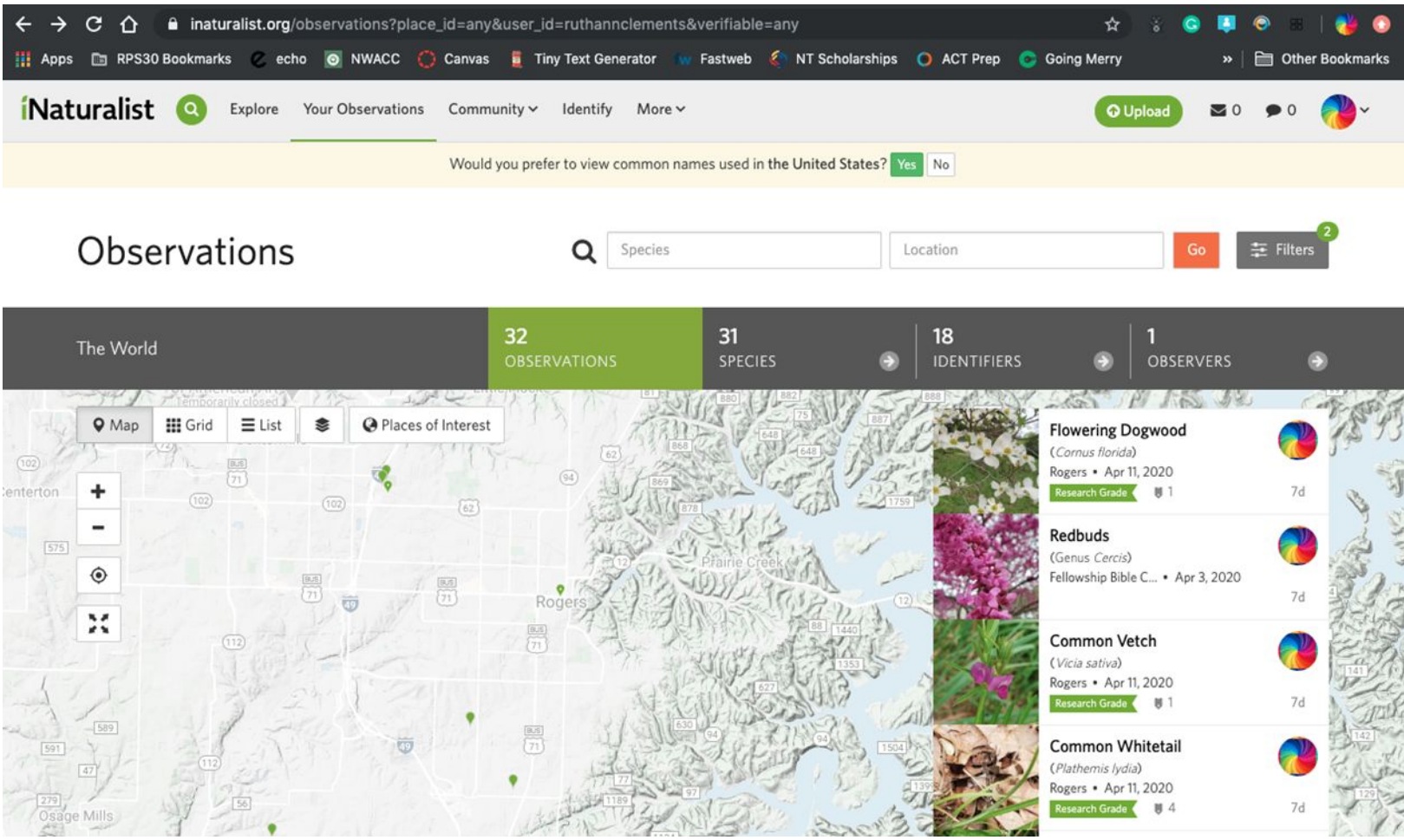
- iNaturalist can be used from the app and the website to identify many different plants and animals

Step 1: Open the website or app and select upload or take a picture of the orginism you wish to idenify.

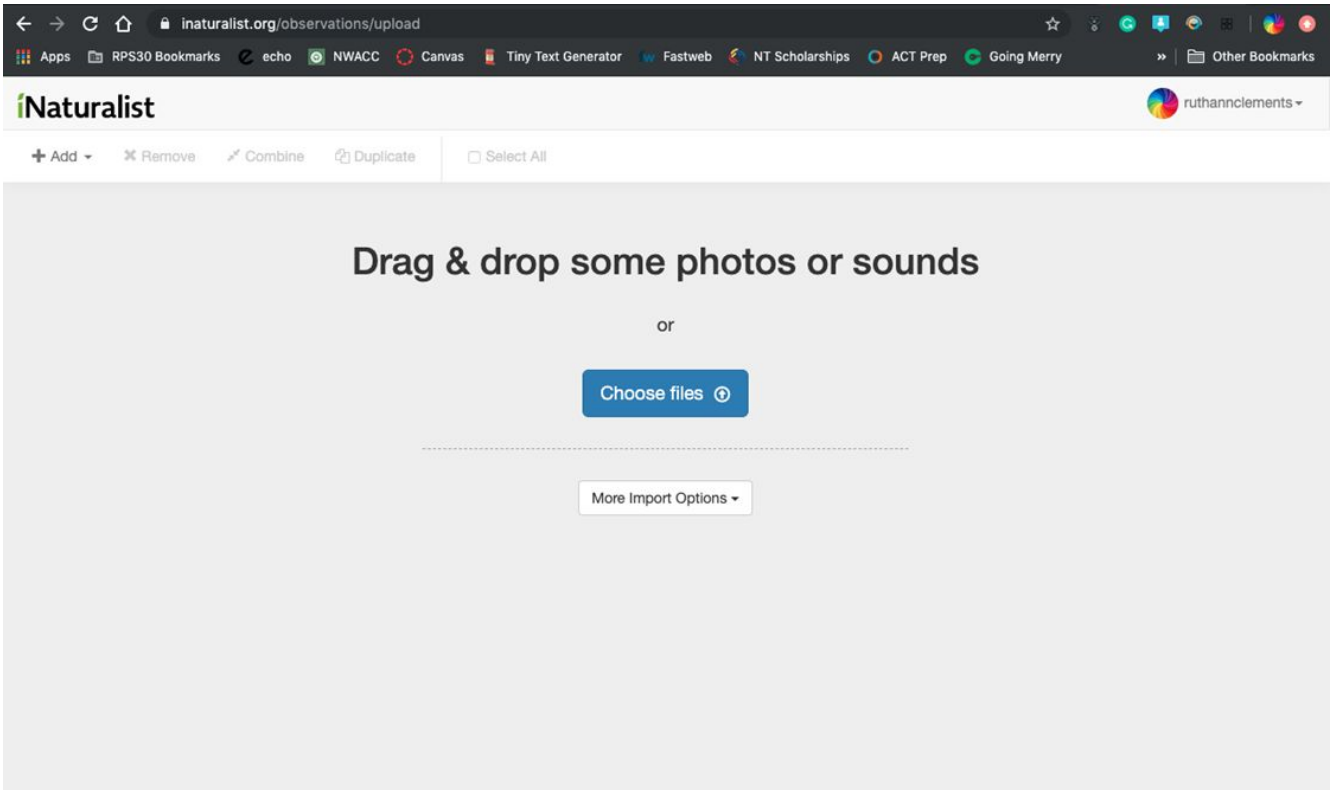
Step 2: Add various information such as location and any other observations you made.

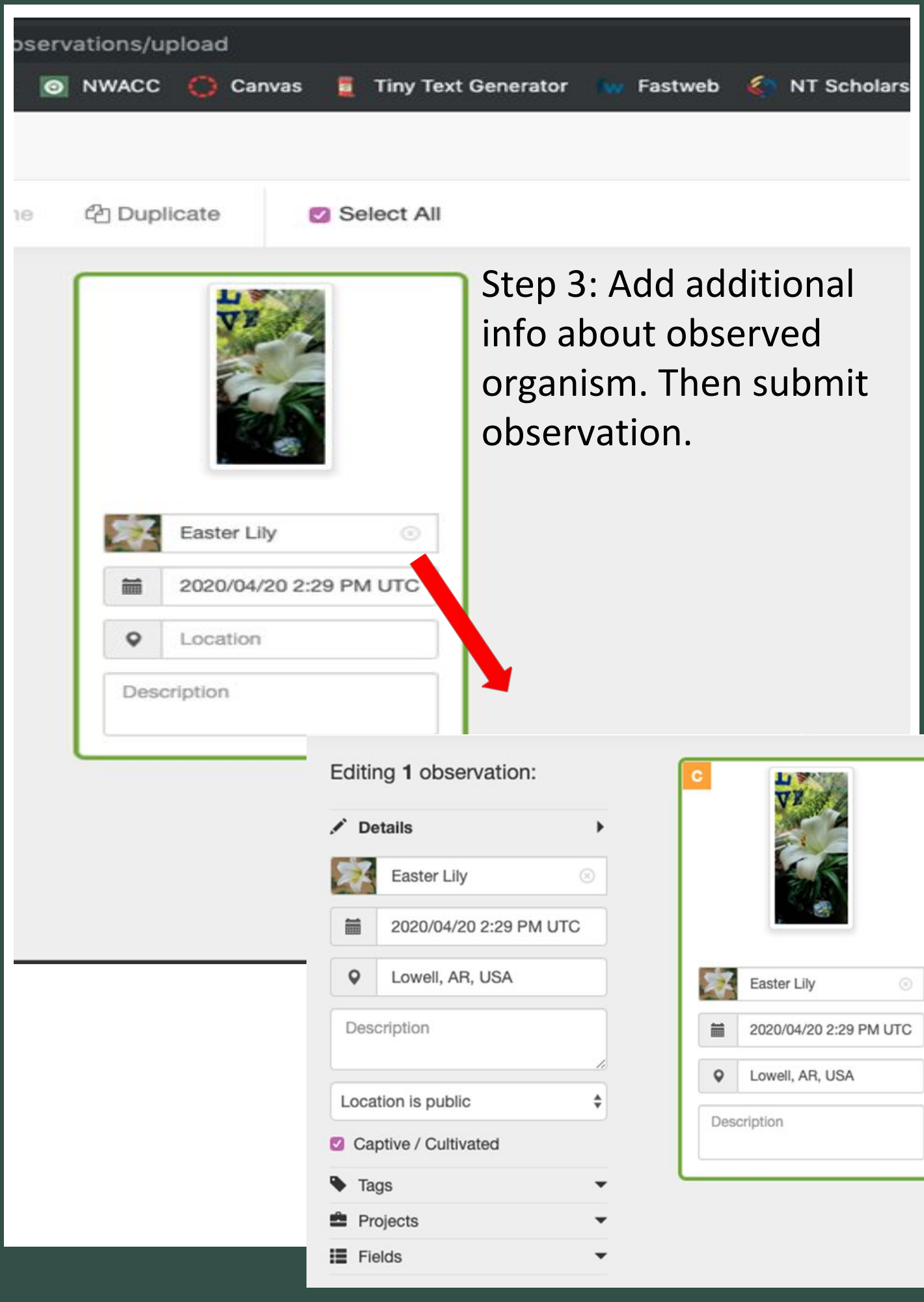
Step 3: Complete observation entry.

Step 1: Select the upload button

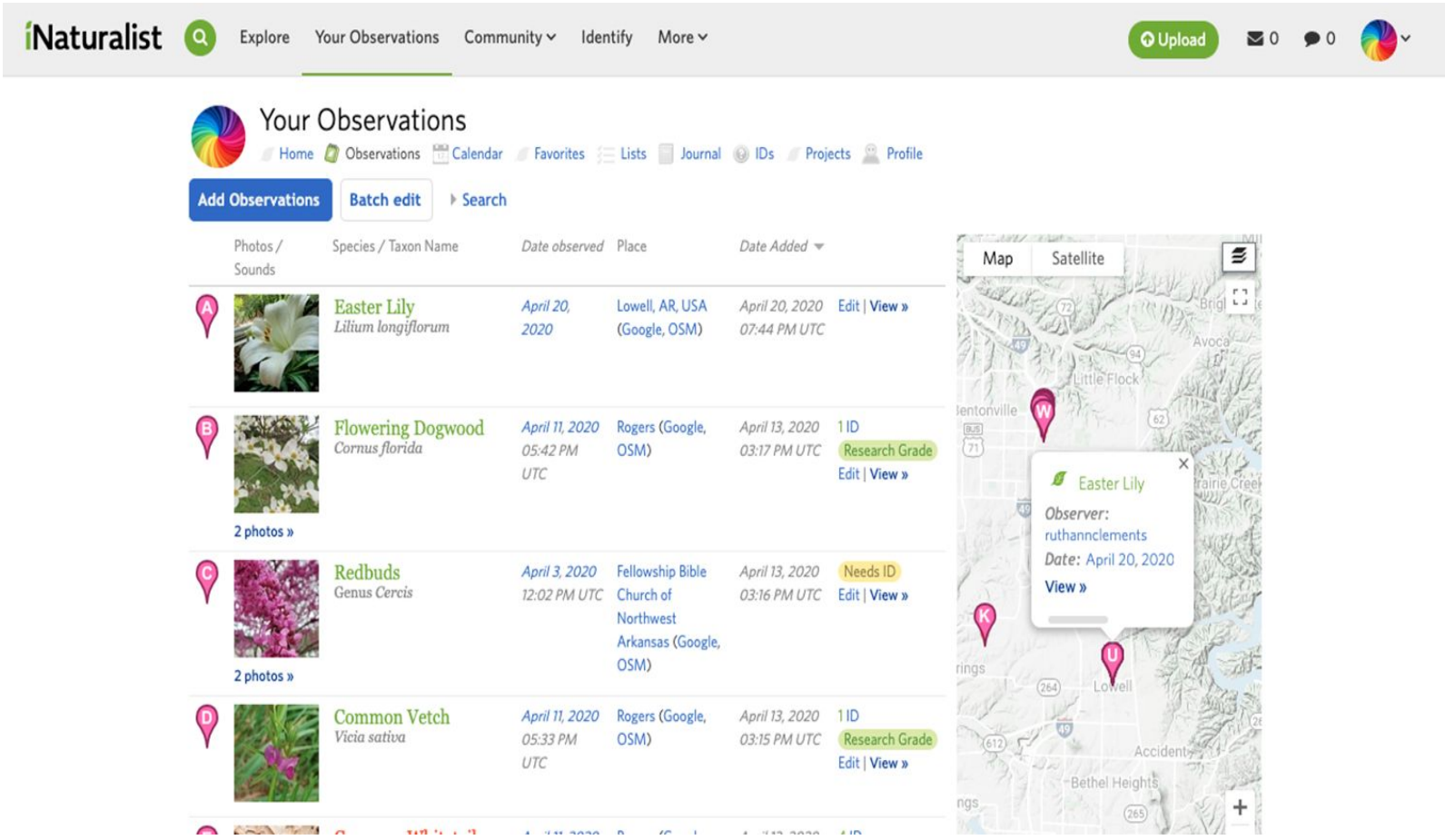


Step 2: Choose photo focusing on flower




bservations/upload
NWACC
Canvas
Tiny Text Generator
Fastweb
NT Scholars
Duplicate
Select All
Easter Lily
2020/04/20 2:29 PM UTC
Location
Description
Step 3: Add additional info about observed organism. Then submit observation.
Editing 1 observation:
Details
Easter Lily
2020/04/20 2:29 PM UTC
Lowell, AR, USA
Description
Location is public
Captive / Cultivated
Tags
Projects
Fields
C
Easter Lily
2020/04/20 2:29 PM UTC
Lowell, AR, USA
Description

The organism is now one of your observations



•Students and staff alike are contributing to NWACC's very own Biodiversity project. On campus we have prime examples of a wetland, successional forest, and post oak flatwoods.

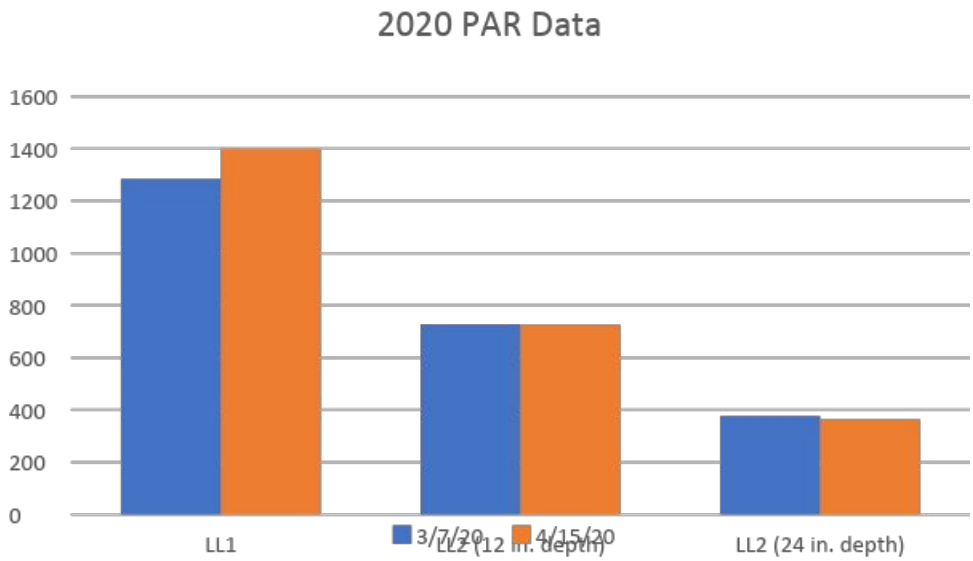
I-Naturalist Biodiversity of NWACC campus project

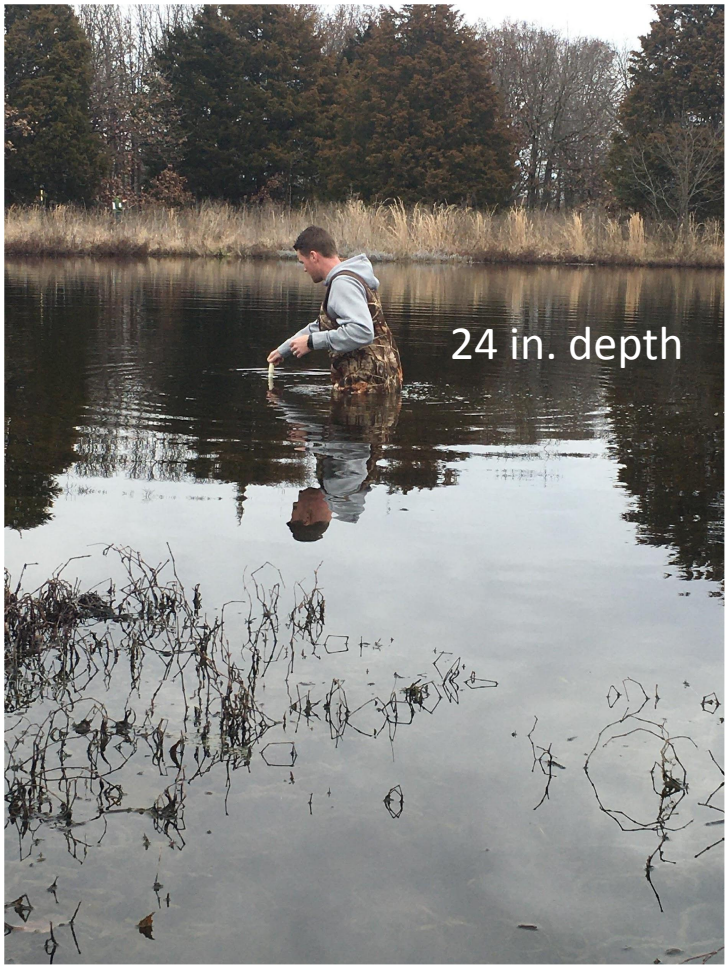
PAR (photosynthetic active radiation) Data

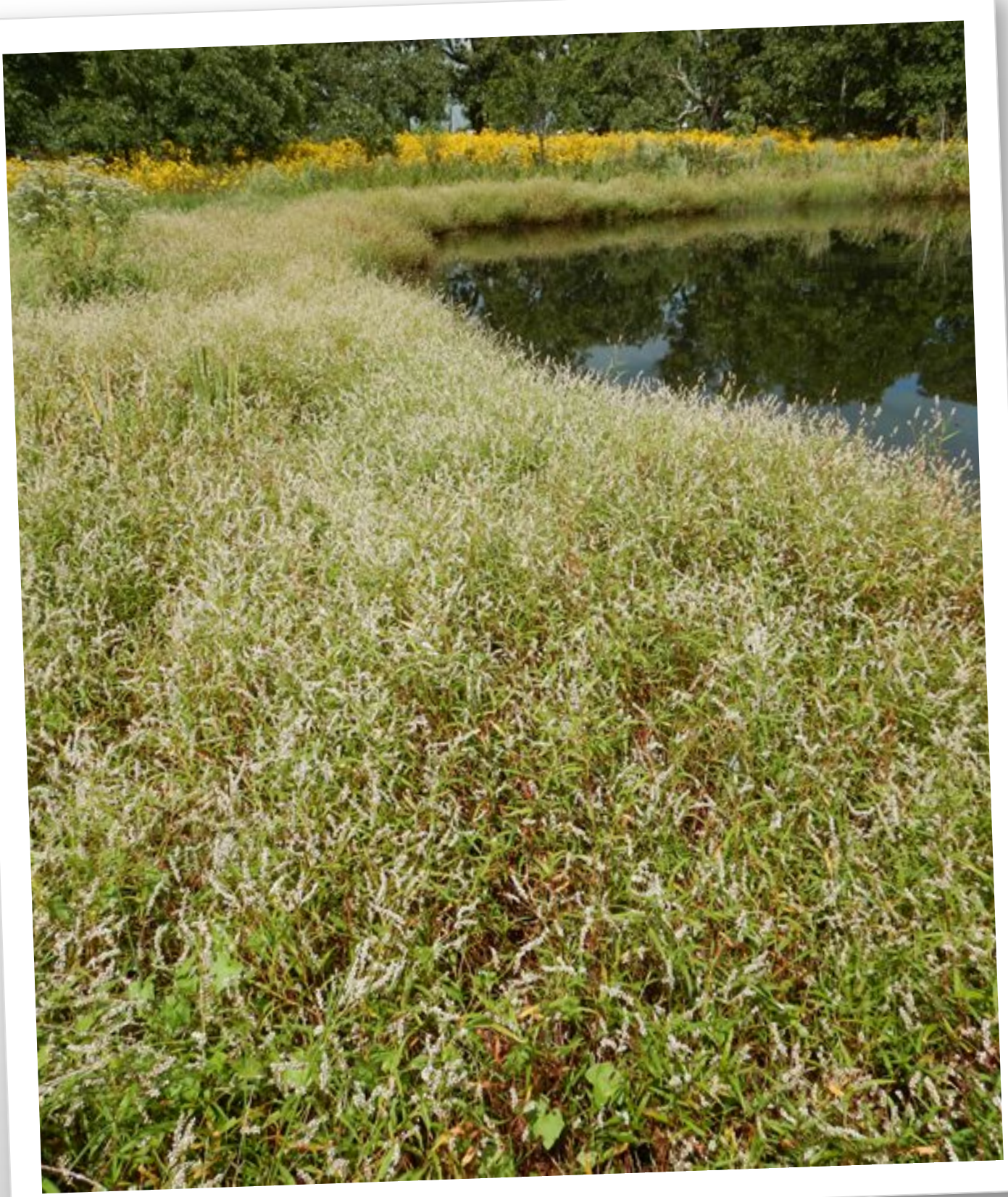
- LL1 – 9.11% increase
- LL2 (12 in. depth) – 2.75% decrease
- LL2 (24 in. depth) – 3.18% decrease
- This data shows the amount of light available for photosynthesis

Measured PPFD (photosynthetic photon flux density) average over 60 seconds

Unit of measure: micromoles/meter squared/ second







Consumers

-Ants

American bullfrogs -

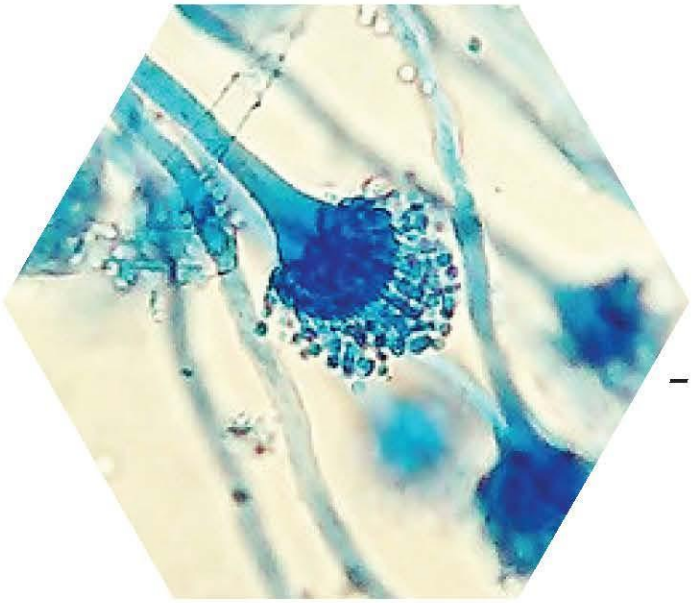
- Grasshoppers

Cottonmouth snakes or
Water moccasin -

Decomposers

- Earthworms

Morels (Fungi) -



- Aspergillus Fumigatus

Wetlands

Defining characteristics of wetlands:

- The surface water of wetlands come from streams, lakes, rivers, ponds, and oceans.

- The ground water will come in from cracks in sand, gravel, and rock beneath the earth's surface. The amount of water in any wetland should be enough to support wetland plants.

- Wetlands will have a different type of soil called hydric soil that lacks oxygen because the spaces inbetween each grain of soil are filled with water.

ENVIRONMENTAL SERVICES

Wetlands provide many diferent environmental serivces:

- It offers a regulating service with its natural ability to help control flooding and purify the air we breathe.

- It acts as a filter for larger bodies of water such as lakes and ponds, preventing something called eutrophication that causes lack of oxygen and dense plant growth but death of animal life.

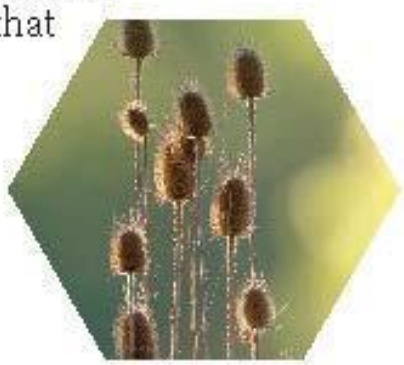
- During droughts it acts as a reserve water supply to larger bodies of water through groundwater discharge.

- They also serve as a habitat for a variety of animals including fish, deer, birds, and insects.

Producers

Producers are organisms that make their own food; they are also known as autotrophs. You can find these producers at NWACC's wetlands:

- Goblet mosses are bryophtes meaning they are non vascular and reproduce by spore release. They lack true roots, xylem and phloem. They are photosynthetic and produce oxygen that we breathe.



- Teasels can be found along the bioswale aiding in the traping of the run-off water from the parkinglot. The seeds are a food source for some of the local birds.

-Fireweed provides a natural medicine that helps with pain on top of filtering our air.

- "Coontail" hornworts or ceratophyllum demersum is a free-floating aquatic plant that provides food for freshwater fish

- Swamp milkweed or Asclepias incarnata is a nectar producing plant that attracts and feeds humming birds and butterflies.

Sources Cited

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