

Empacts Project

A decorative border consisting of a series of white diamond shapes arranged in a slightly wavy line across the width of the page.

Ecotype: Wetlands

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- 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 organism you wish to identify.

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

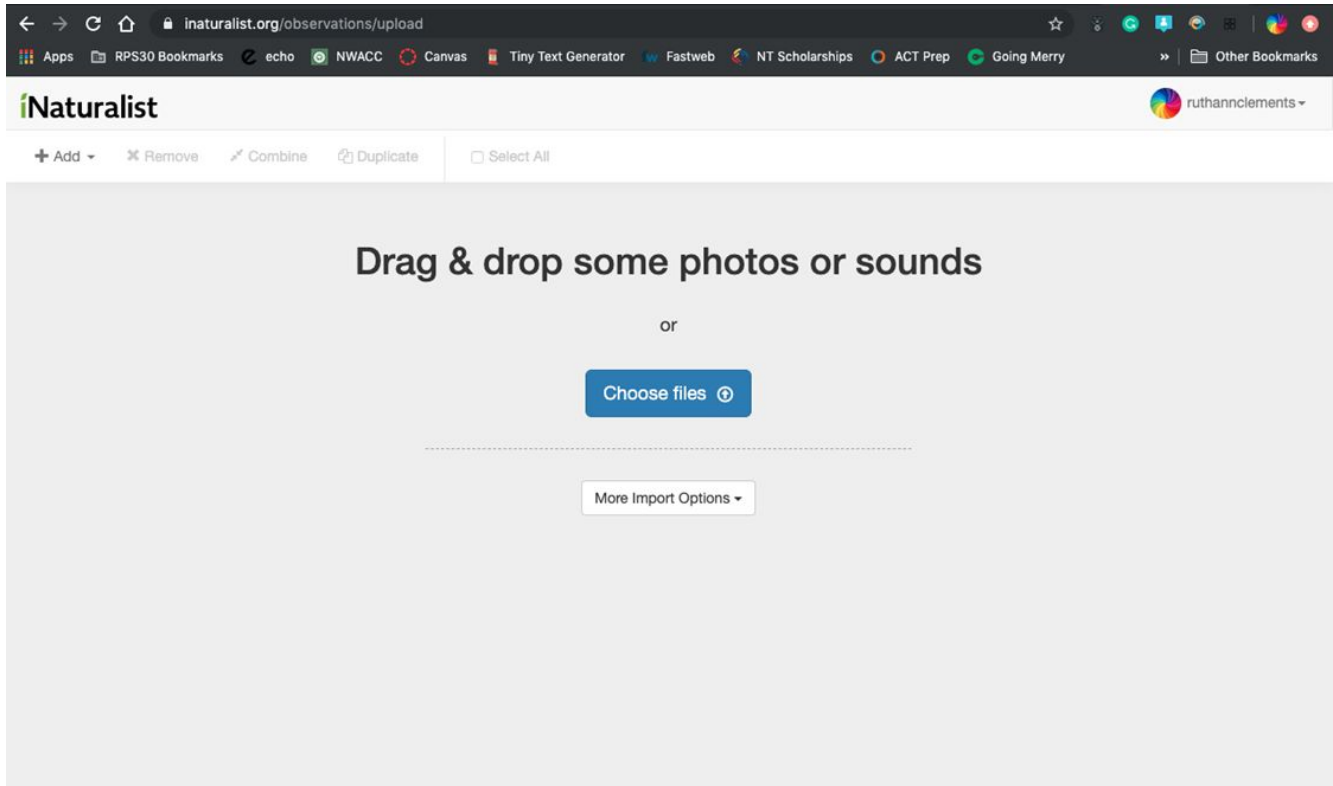
The screenshot shows the iNaturalist website interface. At the top, the browser address bar displays the URL: `inaturalist.org/observations?place_id=any&user_id=ruthanncléments&verifiable=any`. The navigation bar includes the iNaturalist logo, a search icon, and menu items: "Explore", "Your Observations", "Community", "Identify", and "More". On the right side of the navigation bar, there is a green "Upload" button, a mail icon with "0", a chat icon with "0", and a user profile icon. Below the navigation bar, a yellow banner asks: "Would you prefer to view common names used in the United States?" with "Yes" and "No" buttons.

The main content area is titled "Observations" and features a search bar with "Species" and "Location" input fields, a "Go" button, and a "Filters" button with a notification badge showing "2". Below the search bar, a summary bar displays statistics: "The World", "32 OBSERVATIONS", "31 SPECIES", "18 IDENTIFIERS", and "1 OBSERVERS".

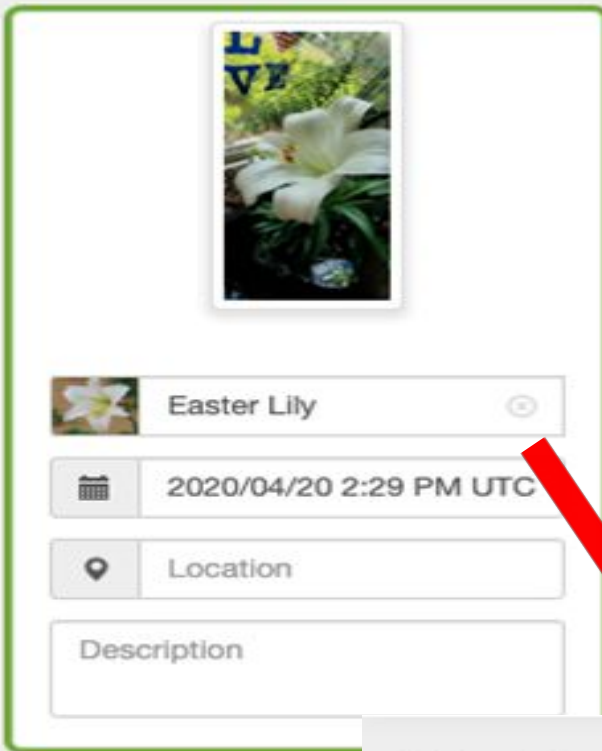
The central part of the page shows a map of the Rogers area with several green location pins. To the right of the map, a list of observations is displayed:

- Flowering Dogwood** (*Cornus florida*)
Rogers • Apr 11, 2020
Research Grade 1 7d
- Redbuds** (Genus *Cercis*)
Fellowship Bible C... • Apr 3, 2020
7d
- Common Vetch** (*Vicia sativa*)
Rogers • Apr 11, 2020
Research Grade 1 7d
- Common Whitetail** (*Plathemis lydia*)
Rogers • Apr 11, 2020
Research Grade 4 7d

Step 2: Choose photo focusing on flower



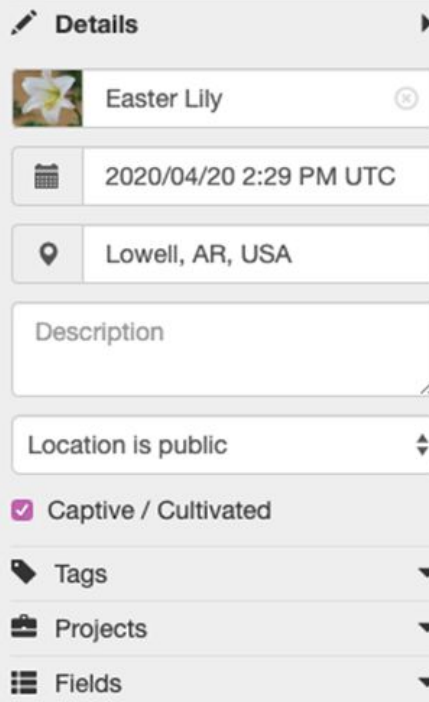
1e Duplicate Select All



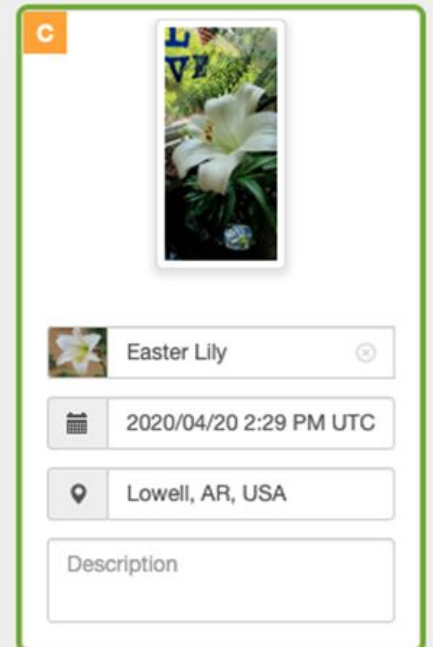
A form for adding observation details. It includes a photo of a white lily flower, a dropdown menu with 'Easter Lily' selected, a date and time field showing '2020/04/20 2:29 PM UTC', a location field with a placeholder 'Location', and a description field.

Step 3: Add additional info about observed organism. Then submit observation.

Editing 1 observation:



Editing observation details. The form includes a photo of a white lily flower, a dropdown menu with 'Easter Lily' selected, a date and time field showing '2020/04/20 2:29 PM UTC', a location field with 'Lowell, AR, USA', a description field, a 'Location is public' dropdown, a checked 'Captive / Cultivated' checkbox, and sections for 'Tags', 'Projects', and 'Fields'.



Final observation form. It includes a photo of a white lily flower, a dropdown menu with 'Easter Lily' selected, a date and time field showing '2020/04/20 2:29 PM UTC', a location field with 'Lowell, AR, USA', and a description field.





The organism is now one of your observations

iNaturalist Explore Your Observations Community Identify More Upload 0 0

Your Observations

[Home](#) [Observations](#) [Calendar](#) [Favorites](#) [Lists](#) [Journal](#) [IDs](#) [Projects](#) [Profile](#)

[Add Observations](#) [Batch edit](#) Search

Photos / Sounds	Species / Taxon Name	Date observed	Place	Date Added	
	Easter Lily <i>Lilium longiflorum</i>	April 20, 2020	Lowell, AR, USA (Google, OSM)	April 20, 2020 07:44 PM UTC	Edit View »
	Flowering Dogwood <i>Cornus florida</i>	April 11, 2020 05:42 PM UTC	Rogers (Google, OSM)	April 13, 2020 03:17 PM UTC	1 ID Research Grade Edit View »
	Redbuds Genus <i>Cercis</i>	April 3, 2020 12:02 PM UTC	Fellowship Bible Church of Northwest Arkansas (Google, OSM)	April 13, 2020 03:16 PM UTC	Needs ID Edit View »
	Common Vetch <i>Vicia sativa</i>	April 11, 2020 05:33 PM UTC	Rogers (Google, OSM)	April 13, 2020 03:15 PM UTC	1 ID Research Grade Edit View »

[2 photos](#) »

[2 photos](#) »

[2 photos](#) »

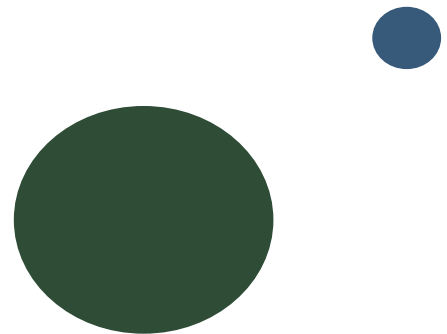
[2 photos](#) »

Map **Satellite**

Easter Lily
Observer: ruthanncléments
Date: April 20, 2020
[View](#) »



•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

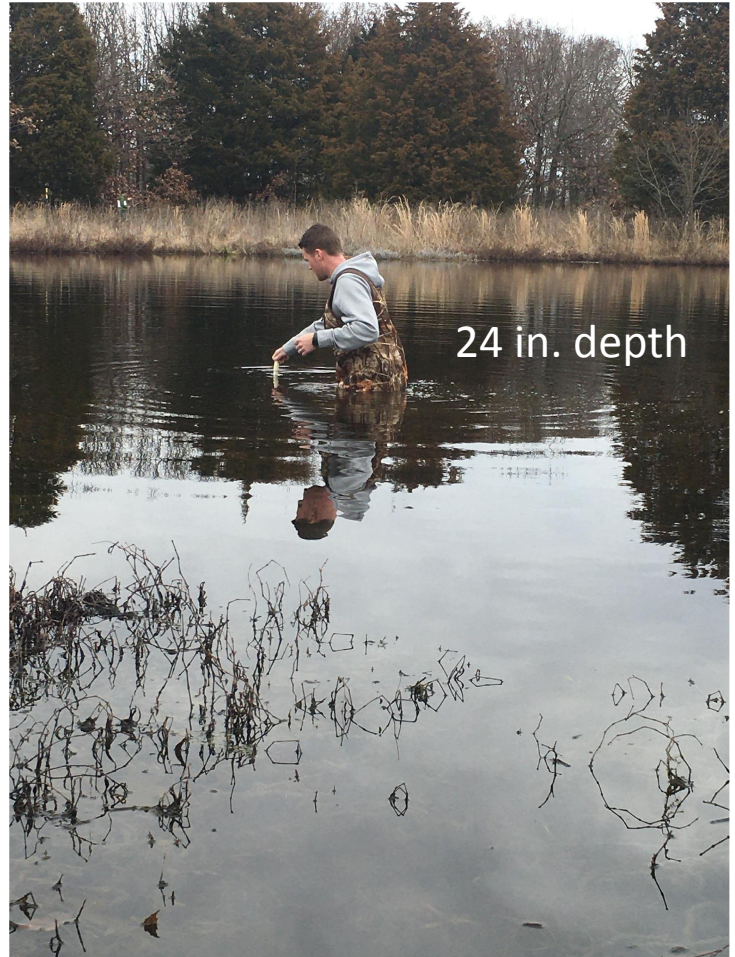
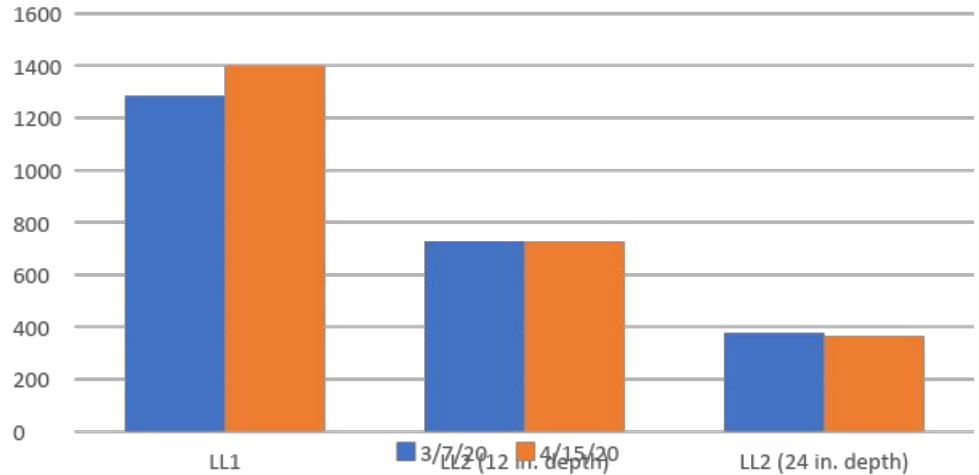
PAR (photosynthetic active radiation) Data

- 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

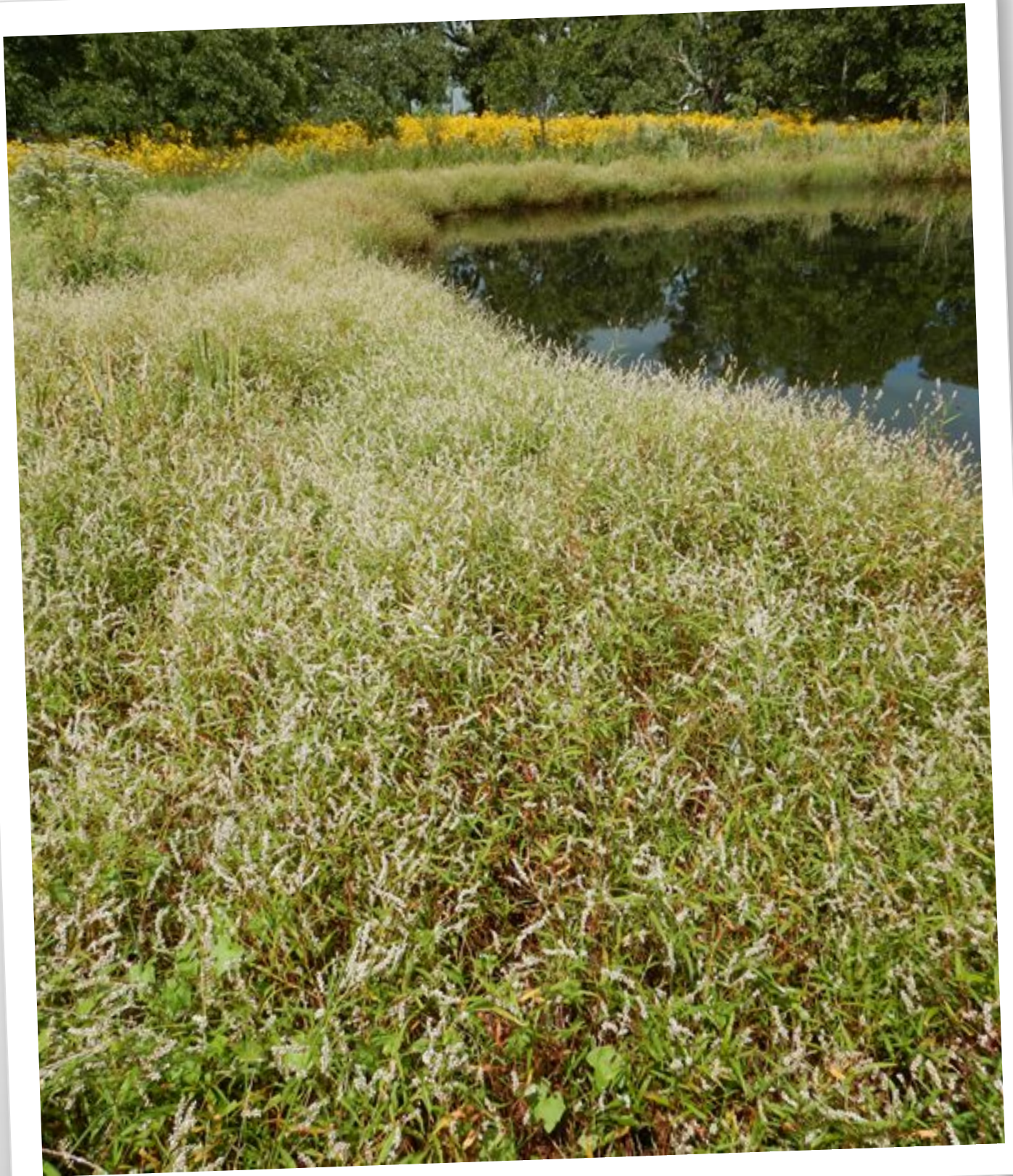
Measured PPFD (photosynthetic photon flux density) average over 60 seconds

Unit of measure:
micromoles/meter
squared/ second

2020 PAR Data







Consumers



-Ants

American bullfrogs -



- Grasshoppers

Cottonmouth snakes or
Water moccasin -

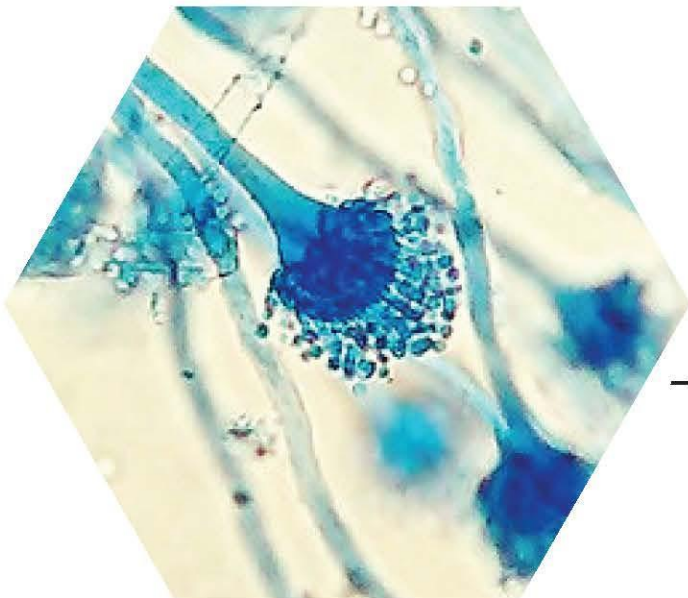


Decomposers



- 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 different environmental services:

- 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.

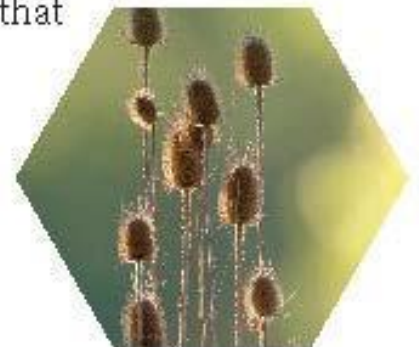
Producers

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 bryophytes 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 trapping 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

Chen, Cheng Ann & Shabdin, & mohd Long, Shabdin. (2015). A New Marine Nematode Species, *Metalinhomoeus ramsarensis* (Linhomoeidae Filipjev, 1922) from Kuching Wetland National Park, Sarawak, Malaysia. *Borneo Journal of Resource Science and Technology*. 5.

Jiang, Min-zhi, et al. "Mucilaginibacter Xinganensis Sp. Nov., a Phenanthrene-Degrading Bacterium Isolated from Wetland Soil." *Antonie van Leeuwenhoek*, vol. 112, no. 4, Apr. 2019, pp. 641–649. EBSCOhost.

Korniłowicz-Kowalska, Teresa, and Ignacy Kitowski. "Aspergillus Fumigatus and Other Thermophilic Fungi in Nests of Wetland Birds." *Mycopathologia*, vol. 175, no. 1/2, Feb. 2013, pp. 43–56. EBSCOhost, doi:10.1007/s11046-012-9582-3.