

NCF-Envirothon iNaturalist Project

Welcome to the NCF-Envirothon iNaturalist Project! Whether you are gathering with your team or you are exploring solo, NCF-Envirothon's iNaturalist project offers a way for you to brush up on your identification skills, collaborate with your teammates and others, and learn more about ecology. iNaturalist is one of the largest citizen science projects in the world. We encourage you to use the platform as an extension of the hands-on, experiential learning that Envirothon offers.

Accept the Natural Challenge!

Use iNaturalist to put your Envirothon study materials into action! Can you spot the succession of species as you move from a field into a forest? How do the species you observe change in different ecosystems? Which species are common, and which are harder to find? Which species interest you the most, and why?

iNaturalist is a launching point for your investigations into the natural world. Get to know your local ecosystems! Observe how the same location changes with the seasons. Discover when the birds nest, and when the flowers start to bloom. Learn where tree seedlings thrive, and where the squirrels stash their acorns. <u>Get outside and start exploring!</u>



How **Does** It Work?

To participate in the NCF-Envirothon iNaturalist Project, you will need to:

1. Create an iNaturalist account

2. Join the NCF-Envirothon Project

3. Start making Observations!

Visit <u>the iNaturalist Getting Started</u> <u>page</u> for helpful instructions! Any qualifying observations you make after joining the project will automatically

be added. There are several <u>video tutorials</u> to help guide you in making observations and navigating the web-based and mobile applications. Advisors are encouraged to be familiar with the <u>iNaturalist Teachers Guide</u>, particularly as it relates to students and online privacy policies.

Web-Based and Mobile Applications



iNaturalist has both <u>web-based</u> and mobile applications, including <u>iPhone</u> and <u>Android</u> Apps.

The iNaturalist website has many resources to <u>get you</u> <u>started</u> and to <u>help if you encounter any issues</u>. The website is also the easiest way to view the results of the NCF-Envirothon Project, and to see what other Envirothoners have been observing. You can filter observations by taxon, location, and much more.

The iNaturalist mobile app is the most convenient way to make and upload observations. The app can automatically use the location information captured by your smartphone's camera to add to the observation. If you don't have a smartphone, don't worry! You can still upload observations through the iNaturalist website.

Making Observations

You can make observations as part of an NCF-Envirothon activity, or on your own. Look for wild, uncultivated organisms. Pets, home/backyard garden plants, and human influenced landscaping fall under the category of "Captured/Cultivated" and should <u>not</u> be included in this project.

The more data that you can include for a species that you observe, the more accurate the identification will be. One picture may not capture all of the key features required to identify a species. Photos from different angles can help with more accurate identification, as can including more information about where the species was found or if there were any animal signs nearby. You can even upload audio clips for birdsong, frog calls, and more! When identifying a tree, you should include pictures of the leaves, bark, buds, leaf scars, and branching patterns (or as many of these as you are able). For an animal, try to get photos from as many angles as you can without disturbing the creature. Animal signs can also serve as observations. The distinct tracks of an otter or the unique toothmarks of a beaver on a tree trunk enable identification of species without the actual animal being present.

Responsible Wildlife Viewing

Respect all wildlife by quietly observing from a distance. As you make your observations, be sure to follow ethical practices – such as those outlined by <u>Leave</u> <u>No Trace, Nature First, and the</u> <u>US National Park Service</u> – to keep everyone (humans, wildlife, habitats, and plants) safe!

If you see someone behaving in a way that disturbs nature and wildlife, speak up! Tell an adult, such as your advisor or the park staff.

Identifying Organisms

Try identifying any species you observe on your own at first. Field guides and dichotomous keys will help to guide you to important identification characteristics. If you are stumped, you can reach out to the iNaturalist community for help!

One of the benefits of using iNaturalist is that it enables



community collaboration. iNaturalist is one of the largest citizen science projects in the world, and by using iNaturalist, you are helping to contribute to environmental research. You can get help from your teammates, your advisor, other Envirothon students, and resource professionals that are a part of our NCF-Envirothon project community. iNaturalist also has a robust identification algorithm to help point in you the right direction for unfamiliar organisms. Identify the species as narrowly as you can when you post your observation. For example, if you saw a spider, but you weren't sure of the species, you can still mark your photo as "Arachnid."

Pictures taken with smartphones and many digital cameras will have GPS coordinates embedded in them. As you upload your observation, the location of the organism will automatically be added. If you are making observations in your backyard instead of in a public park, you have the option to obscure your location to maintain your privacy. When making an observation, simply go to Geoprivacy and select "Obscure." This will give a general 22 by 22 kilometer area for your observation, instead of a specific point. Learn more about geoprivacy and obscuring coordinates here.



Collaborate with Others

Share your username with your teammates and advisor, and you can help each other with your identifications, even if you aren't physically in the same place. Other iNaturalist users can also chime in to help you with your identifications.

Are you a dendrology devotee, an entomology enthusiast, a lichen lover, or a master of macroinvertebrates? Use your area of specialty to help out other Envirothon students! Comment on other observations in your area with your identifications and suggestions!

Most of all, have fun exploring the world around you!