



iNaturalist Lesson

Age Range & Audience: Though you must be over 13 to register an account, any student or teacher could use [iNaturalist](#) to make natural observations and identifications.

Materials: Smartphone or tablet.



CONNECTIONS TO:



Place-based Education Principles:

Community as classroom, local to global, inquiry-based



Cross Cutting Concepts in Next Generation Science Standards:

Patterns, Scale, proportion and quantity, Structure and Function



Social Emotional Learning:

Students can use iNaturalist to contribute to local and global biodiversity science; little actions can have big impacts.

For more information on Place-based Education Principles and Next Generation Science Standards, email fieldeducation@tetonscience.org

LESSON OVERVIEW:

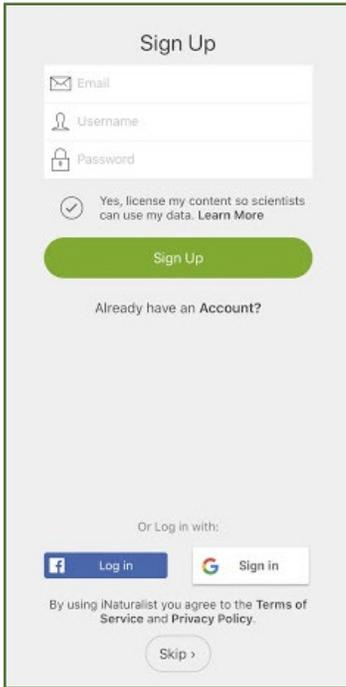
Contribute to a Citizen Science Project while observing and making record of any and all living organisms.

[iNaturalist](#) is a free on-line platform that allows students to record biodiversity observations, interact with experts, and contribute to a global Citizen Science project. All you need to use iNaturalist is a smartphone or tablet. Students at Teton Science Schools use iNaturalist to record natural observations in the Greater Yellowstone Ecosystem and complete scientific research projects based on the Science Circle. This lesson will guide participants through using iNaturalist to make observations of living flora and fauna.

LEARNING OUTCOMES	EVIDENCE
<ul style="list-style-type: none"> Register an account on iNaturalist Use iNaturalist to make observations of living flora and fauna 	<ul style="list-style-type: none"> Record and submit observations using iNaturalist

iNaturalist Lesson

LESSON PLAN



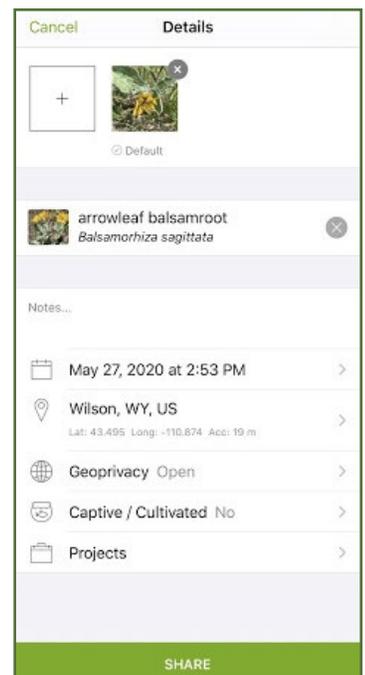
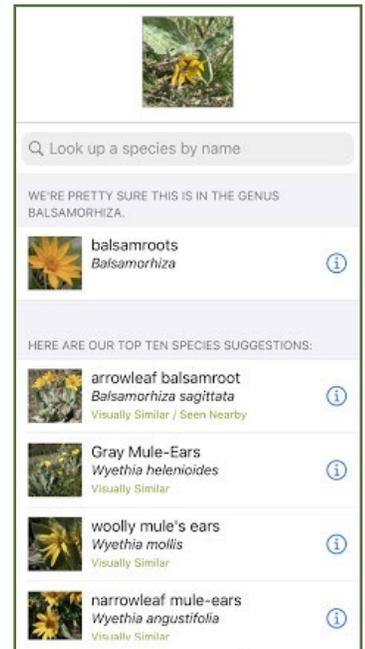
The image shows the iNaturalist sign-up interface. At the top, it says "Sign Up". Below this are three input fields: "Email", "Username", and "Password". A checkbox with a checkmark icon is labeled "Yes, license my content so scientists can use my data. [Learn More](#)". A large green button labeled "Sign Up" is positioned below the checkbox. Underneath the button, it asks "Already have an Account?". At the bottom, there is a section "Or Log in with:" with two buttons: "Log in" (with a Facebook icon) and "Sign in" (with a Google icon). Below these buttons, it states "By using iNaturalist you agree to the Terms of Service and Privacy Policy." and a "Skip >" button.

Setting up iNaturalist

- Download the iNaturalist on your smartphone or tablet.
- Open iNaturalist and create an account.
**You must be 13 years old to register an account. If you are younger than 13, ask a parent or teacher to help you out!*
- That's it! You are ready to start making observations!

Making Observations

- When you find something wild that you want to observe, record, and upload to iNaturalist, click the "Observe" button.
- Your camera will then open — take a picture of the organism you wish to record.
**You can also take a picture of the organism using your regular camera, and then upload the picture later by clicking the button in the far right corner of the screen.*
- You can then select the type of organism you observed by clicking the "What did you see?" button.
 - » iNaturalist can do an amazing job of guessing what it is you saw — you don't have to select their choice, but they often get it right.
**You don't have to make a choice or choose a species if you aren't sure.*
- Once you have made an identification, hit share!
- Your observation will now be shared within the entire iNaturalist community. Other naturalists can see your picture and observation. If someone agrees with your identification and your observation reaches 2 of the same identification (down to species), your observation becomes "research grade" and is shared in global biodiversity platforms such as the [Encyclopedia of Life!](#)
- Make sure you allow iNaturalist to track your location. All pictures must be location and time stamped to become research grade.



iNaturalist Lesson

GUIDELINES, TIPS, TRICKS AND MORE:

What can you observe?

- Anything alive or traces of anything alive in wild nature, including:
 - » Plants, animals, fungi, macro- and microorganisms!
 - » Uninvited house guests (pests or critters that you are not raising)
 - » Scat, tracks, hairs, or even calls (birds, frogs, etc)
 - » *If an organism is not wild (house plants, etc) it will be marked as "casual" and cannot become "research grade."
- You should NOT upload pictures of:
 - » House plants and pets
 - » Zoo animals
 - » Greenhouse plants or agricultural plants
 - » Human faces

Making good observations

- Look around, everywhere you can! Creatures are hiding all over the place. Check out this [DIY Guide](#) for tips on where to look and how to build simple devices to help you capture and collect organisms.
- If possible, take multiple pictures -- a picture of the whole organism, and a close-up picture(s) of different parts of the organism.
- If the organism is small, consider using a [macro lens](#) to take better close-up pictures.
- Make one observation for each species you find -- don't try to include pictures of multiple species in one observation.
- It can help to simply take pictures while you are in the field and then upload them to iNaturalist when you have returned home.

Further Resources

- There are so many more things you can do with iNaturalist, including searching out local and global observations, gathering data over many years in a certain place, and much more. Check out [these resources from iNaturalist](#) to learn more!



EXTENSIONS:

Field Journaling and Sit Spots. Explore our sit spot lesson for ideas on how to build a progressive field journaling practice focused in one specific place.

Many of these activities are the original genius of [BEETLES](#) and [John Muir Laws](#). The activities described in this lesson, and many more like them, can be found by visiting their websites. You will also find a rich database of additional resources on practicing and teaching field journaling to others.

Visit tetonscience.org/diy-field-education for more lessons and resources!