

Introduction to Lichens

Field Ecology

The purpose of this activity is for you to familiarize yourself with what lichens look like, take a closer look at some lichens under a microscope, and begin collecting lichen specimens for a physical lichen herbarium. Lichens are pale to dark green plantlike organisms that grow on branches, wood, rocks, and many other objects. (They aren't plants, though – and you'll soon find out what they actually are!)

Today, you will collect some lichen specimens with a partner, make some individual drawings, and begin the process of identifying lichens for your own individual lichen collection. Your tasks are as follows:

1. Working with a partner, collect a **SMALL** branch from near the quad that is covered with fuzzy-looking, moss-like light green stuff. These are lichens! (Moss is more bright green.) You can collect two branches if you want, but they should be small (**no larger than 12-14"** – around one foot). Your goal is to get the most lichens, not the largest stick. You need at least 6-7 different lichen species so if you don't have enough on the stick you collected, go back for another round.
2. Bring your stick(s) back to the classroom. Pull off at least **6-7 individual, unique lichen specimens** and make two **DETAILED** drawings of each one:
 - a. Make one overall drawing by looking carefully at each lichen. Make thorough observations of the colors, textures, and shapes. Your drawing should be as detailed as possible and should include notes describing what you see.
 - b. Put each specimen under a dissecting scope. For this drawing, find an interesting structure that is part of the overall lichen and carefully draw it. Again, be as detailed as possible with regards to color, texture, and shape. Add notes where helpful to describe what you see.
3. Once you've made your drawings, put your name on your work and turn it into the bin.
4. Next, you will need to identify and store as many of your specimens as you can. This is a preliminary identification so don't worry if you can't identify or misidentify some specimens. Eventually, you will all have the same, correctly identified lichen specimens. You can work with your partner to figure out the names of your lichens, but you should each label and package your own specimens.
 - a. Make six small envelopes out of the ½ sheets of scratch paper provided. You should have one envelope for each type of lichen you collected. Your envelopes should be small and neatly made so they're easy to work with. **Write your name on each one.**
 - b. Using the identification guide on the website, identify as many of your lichens as you can and write the names on the envelopes.
 - c. Place each lichen in its envelope – don't staple or tape the envelopes shut as you'll need to have easy access to each of the lichens
 - d. When you're done, put your envelopes in the bin for safe keeping. Then help get the room cleaned up!