

Virtual Lichen Herbarium

Field Biology

An herbarium is a collection of dried specimens, used by scientists and researchers as a kind of biological library to refer to when studying different groups of plants. When properly maintained, herbarium specimens have been known to last for hundreds of years. These specimens can be also useful when ecologists want to re-construct the kinds of species that once grew in an area. By referring to the herbarium of dried specimens found in an area many years ago, they can learn how the species composition of plants or lichens has changed over time and potentially address any issues that have caused this change. For this assignment, rather than preserving dried specimens, you will create a virtual herbarium using pictures you take and Google Slides. **This is an individual assignment.**

Your goal:

1. Individually, make a virtual herbarium of the 7 different species of lichens we will be studying.

Scientific Name	Common Name
<i>Ramalina farinacea</i>	Mealy Ramalina
<i>Ramalina menziesii</i>	Fishnet Lichen
<i>Evernia prunastri</i>	Wrinkled Evernia
<i>Parmelia sulcata</i>	Net-marked Parmelia
<i>Usnea subfloridana</i>	Bushy Cord Lichen
<i>Hypogymnia physodes</i>	Inflated Hypogymnia
<i>Lobaria pulmonaria</i>	Lungwort

2. You need to include two photographs (of actual lichens) that you take yourself.
3. Each slide should include correct identification, usage and collection information, one human use of the lichen, and the lichen's sensitivity to air pollution. (See below for more details.) This information should be collected and documented individually – this is not a group project, so the information on your herbarium slides should be uniquely phrased. DO NOT COPY AND PASTE INFORMATION (that is plagiarism).

The information on each slide should consist of the following:

- Name of lichen: Scientific and common name
- Date: The month and year that the specimen was collected
- Location: Your location should start with "Crescent Valley area, Benton County, Oregon" and should also include a short description of where your specimen was collected (for example, "just east of the tennis courts", or "oak trees in the back parking lot")
- One human use of the lichen – among other things, you might document one of the following:
 - Any medicinal uses of the lichen
 - What kinds of dyes or perfumes it might be used for
 - How it is used in personal products, such as powders, toothpastes
 - Any known nutritional value or toxicity
- Its sensitivity to air pollution and use as an air pollution bioindicator

(For the last two pieces of information, refer to the references on the Lichen Identification Guide posted to the website or use the microlichen book in the classroom)