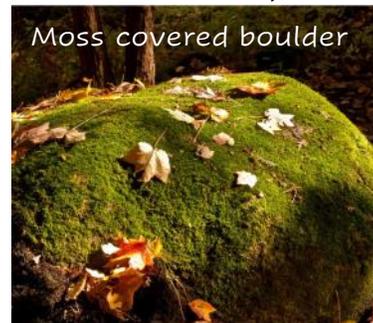


## Lichen Hikin'

All Ages

We often call the fuzzy or flaky looking stuff found on trees, rocks, stumps, logs, etc., 'moss'. A closer look reveals two very different organisms, mosses and lichens (rhymes with hikin'). It is helpful to understand how they differ.

Moss is a nonflowering plant with tiny leaves, stems and thread-like rhizoids that act as roots. The green leaves of moss have chlorophyll which turn sunlight into food for the plant—this is called photosynthesis. Mosses are the ancestors of today's trees, flowers, and ferns. They do not have flowers to make seeds and can reproduce on their own with spores. Because mosses dry out easily, they must live in shady, wet, or moist habitats.



Lichen is made up of two living things, fungus and alga, which work together to survive. The fungi attach to the surface, and they collect water. Algae make food using photosynthesis. This cooperation helps lichens survive harsh weather that would kill most plants, including a fungus or an alga growing alone. Working together to survive is called symbiosis. Lichens are found in deserts, on mountain tops, and in the frozen Arctic. Get out and look for lichens in your neighborhood.



Hikin' for lichen can be done year-round, even in the winter. It is easy to find lichen almost anywhere, on rocks, trees, deadwood, and even on the ground. Most lichen is very short, about 6 millimeters, so get up close. Many lichens, called Crustose, are flat scab-like blotches that attach to the surface like peeling paint. Some leaf-like lichens, called Foliose, attach to a surface in one spot and grow little flaps like lettuce. Others stand up and look like a miniature forest or hang from trees in long strands like a shaggy, old beard. Both types of lichen are called Fruticose. Lichens come in all sorts of colours. You can find brown, grey, black, green, and even bright orange, or yellow. There are spots and dots of red, blue, pink, and purple, too!

Be sure to leave alone any lichen on living trees. Lichens do not hurt trees. They are very busy cleaning the air, decomposing dead wood, and turning rocks into soil. Some types of lichen are eaten by reindeer and even by humans. But very few insects will eat it. A few small birds, including hummingbirds, camouflage their nest with lichen, sticking it place with spiderweb.

We use lichens in all sorts of ways including in medicines, dyes, lipstick, perfume, and even as air pollution detectors. Lichens are very sensitive to air quality. Pollution is the greatest threat to survival of lichens.

This is a pretty cool experiment! Try separating the algae from the fungi. With some shrubby looking lichens, you can actually pull the green algal sheath or covering off of the white fungus.



# Common Lichens

Start lovin' lichens with this little list of lichens to look for.

See more lichens at [Ways of Enlichenment](#).



Pixie-Cup Lichen



Salted Shell Lichen



Powdery Sunburst



Gold-eye Lichen



Peppered Rock Tripe



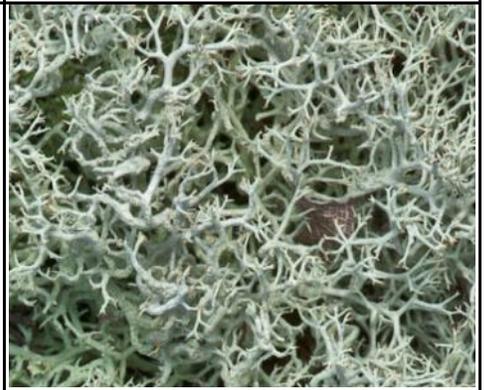
Oakmoss Lichen



Lungwort Lichen



Common Clam Lichen



Reindeer Lichen

**Observations to make while lichen hikin'.** Notice patterns in the different types of lichen. Do different types grow in different places? Do you see more than one kind of lichen in the same place? Does lichen grow in rocks, on top of or on the bottom side of rocks? On live trees, dead trees, just on the trunk or way up on the branches? Are there places where you do not see any lichens? Do you notice evidence of animals or insects eating lichen? Pretend you are a Lichenologist and name the lichens you discover. Use descriptive words that will help someone else to identify your lichens.