**WEBCAST: *What’s a Lichen? How a Smithsonian Scientist Studies a Unique Symbiosis***

The webcast program will be broadcast at 11am and 2pm ET on November 14, 2019. A recording of the live broadcast will be available later that evening.

Participate in the webcast here: <https://naturalhistory.si.edu/education/distance-learning/what-is-lichen-symbiosis>

**Prepare your students before the webcast:** Show your students this 3-minute video of Lichenologist Manuela explaining how she studies lichens and how she got interested in them: <https://www.youtube.com/watch?v=UBoUk7Q4ppo>.

**Start a conversation:** We suggest using these resources to start a conversation with your students about who does science and how they do it.

* **Before reviewing resources:**
  + Where would you look for lichen?
  + Do you think you have ever seen lichen?
  + How do you think scientists study lichen?
  + Why might scientists want to study lichen?
  + What kind of skills do you think scientists use to study lichen? Can students use those same skills?
* **After reviewing resources and the live webcast, “What’s a Lichen? How a Smithsonian Scientist Studies a Unique Symbiosis” video:**
  + Do you have new ideas about what a scientist does?
  + Do you have any new ideas about where you might find lichen?
  + Can you remember what organisms live together to form a lichen?
  + What are other examples of symbiotic relationships?
  + What kind of skills do you and scientists have in common?

**Submit your students’ questions:** Do your students have more questions about lichens or being a scientist? Send students’ questions to [ScienceHow@si.edu](mailto:ScienceHow@si.edu). Each week we’ll select one question for our scientists to answer, and we’ll send a response via direct email.

**Complementary teaching resources about lichen are available here:** [**Learning Lab Collection**](https://learninglab.si.edu/collections/exploring-the-amazing-world-of-lichens/E9fRnD5DoKRbF4ME#r)

Lichens are a symbiotic relationship between algae and fungus. They have been on earth for millions of years, living on rocks, trees, and soil in all different habitats on all seven continents. Even though lichens are all around us, scientists are still learning about what they are, where they live, and how many different species of lichens there are. Lichenization is a fungal lifestyle, and therefore the name of lichen is the name of the fungus component.

* Fungus is any group of spore-producing organisms feeding on organic matter, and include molds, yeast, mushrooms, and toadstools.
* Algae is a simple, non-flowering plant. Algae contain chlorophyll and produce sugar through photosynthesis, like other plants, but do not have true stems, roots, leaves, or vascular tissue like most other plants.

Lichens are very important for the environment. They are an important food source for many animals, provide nest materials for birds, and provide habitat and material for biomimicry for insects and other organisms.