FRIENDS of Sax-ZimBog

BOGDIVERSITY THURSDAY

—from Head Naturalist Clinton

Beard Lichens and Relatives

POST #17—February 3, 2022

Biodiversity in the Sax-Zim Bog is most abundant and obvious in the summer months, but that doesn't mean that there aren't plenty of things to see during the heart of winter. Today's post features a group of fairly obvious lichens that you can find at any time of the year.

Lichens are an amazingly diverse group. They grow on soil, rocks, tree bark, tree limbs, sidewalks, fence posts, gravestones, lake shores, and peat hummocks to name a few. There are three easy to observe growth forms: crustose (lichens that grow tight to substrates), foliose (leafy lichens that do not grow tight to their substrates), and fruticose lichens (lichens that grow up and away from a single point off of their substrates).

Fruticose lichens that grow on trees can be great indicators of forest health, air quality, and are used by a number of bird species for nesting material! In fact, Northern Parulas primarily use lichens in the genus Usnea (the beard lichens) for nest building!

Below are a few representative tree-based fruticose lichens that you might see along a trail, boardwalk, or roadside in the Sax-Zim Bog!

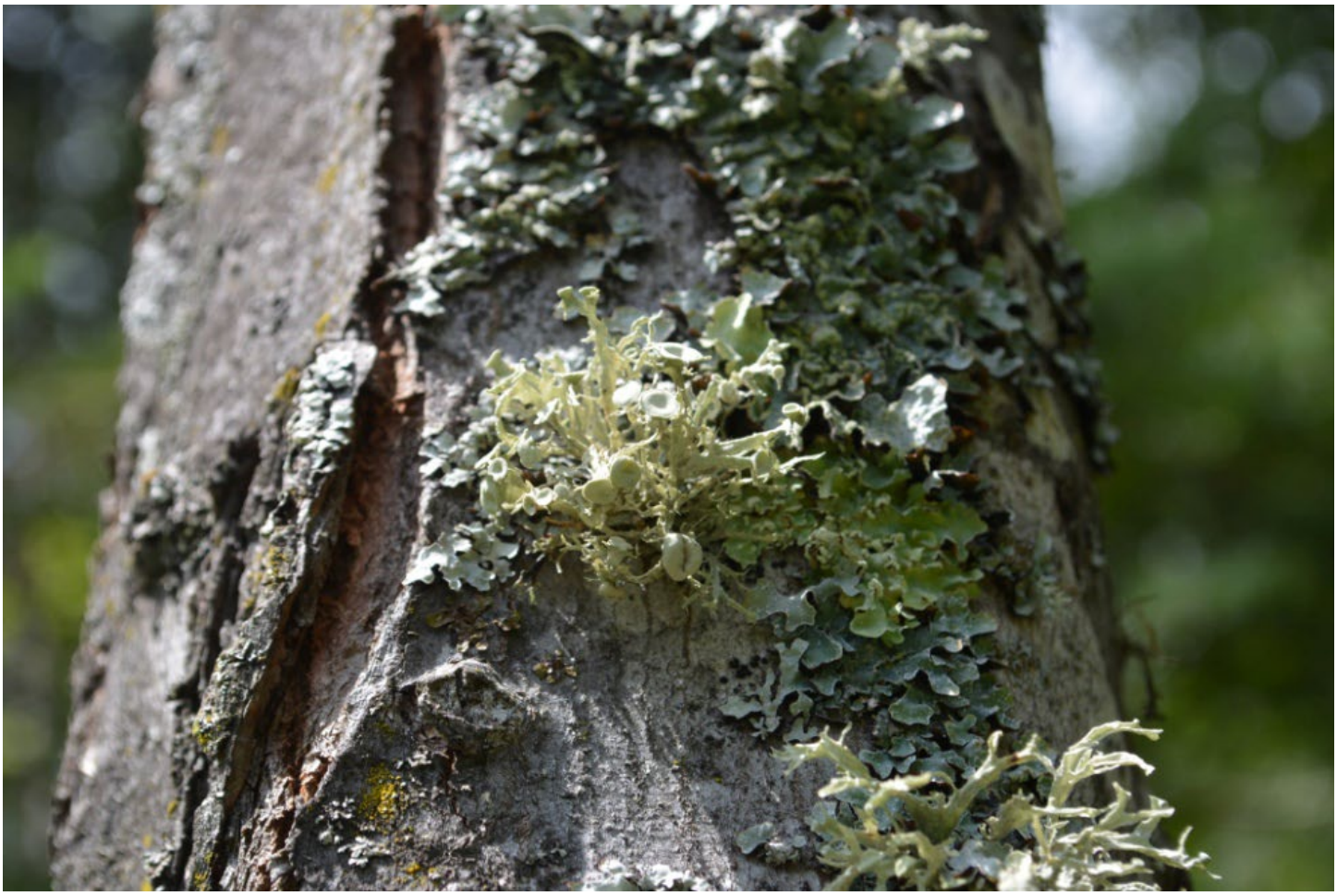
In this group of lichens, Boreal Oakmoss is likely the most commonly observed lichen in the Sax-Zim Bog! It grows on most coniferous and deciduous trees and shrubs and can be quite abundant where it grows. Boreal Oakmoss is quite tolerant of air pollutants and can be found close to urban areas, where other species of beard-like lichens might not be found. Lichens in the genus Usnea and Bryoria, the beard and horsehair/moosehair lichens, are particularly sensitive to poor air quality and great indicators of high-quality habitats.

While the beard-like lichens have rounded branches and lobes, lichens in the genus Ramalina have flattened lobes. Fan Ramalina (photo below) has wide, flat lobes that are distinctly fan shaped. This lichen has one of the strangest ranges of any species and is found in three very different ecoregions: the desert Southwest, throughout Minnesota, and a small section of extreme north central British Columbia!

So far, we have documented 86 species of lichen in the Sax-Zim Bog! There aren't very many lichens left for us to find in the area, which makes finding new species all the more fun.

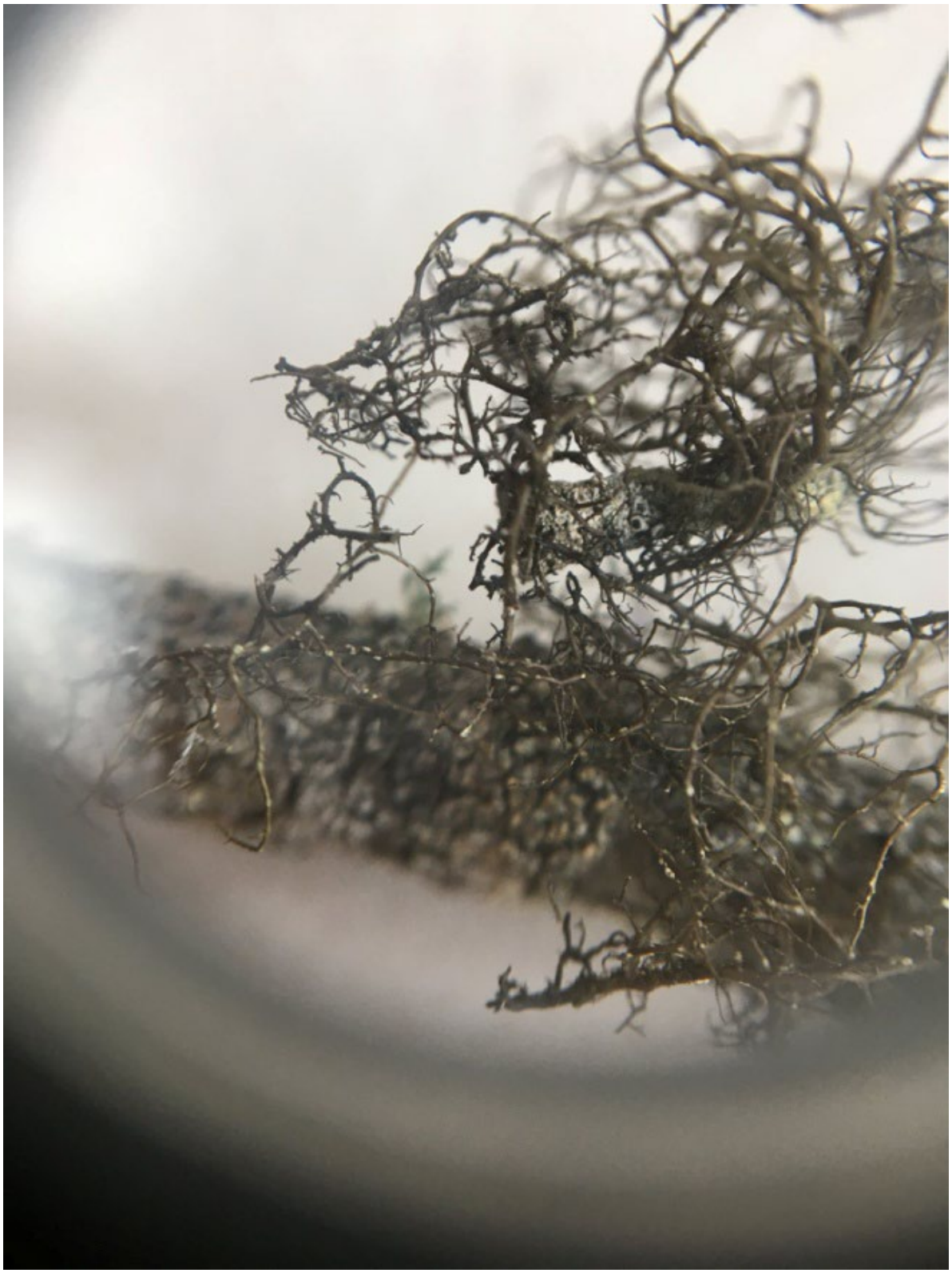
More information and species ID on the photos below!
(photos by Head Naturalist Clinton)

Beard lichens, like this one in the genus Usnea, are quite delicate. They have very narrow branches and can be difficult to ID without investigating them with a hand lens.



Sinewed Bushy Lichen is one of two species in the genus Ramalina found in the Sax-Zim Bog. This genus is very sensitive to air pollution. Sinewed Bushy Lichen has distinct, hammerhead shaped apothecia which makes it fairly easy to ID.

There are a couple of tree-based fruticose lichens in this photo! The green one is Boreal Oakmoss, where that brown mess below it is actually a Moosehair lichen species! Moosehair lichens are very difficult to find as they are brown in color and look very much like snagged hair on a branch.



A closer look at a moosehair lichen. This is Pale-footed Moosehair Lichen! To ID this species, you must look at them with at least a hand lens, if not a microscope. This photo was taken through a hand lens during observation.

Boreal Oakmoss is very, very common and quite abundant in the Sax-Zim Bog. This branch was nearly entirely covered by Boreal Oakmoss. If you hike Gray Jay Way, you should be able to see a cluster of dead trees absolutely covered from top to bottom with this species of lichen!

Fan Ramalina has only been documented from Wood Thrush Woods in the Sax-Zim Bog. In fact, not only just at one property, but only found on one tree so far (but it is likely to be more common if we seek it out!).