

BOGDIVERSITY THURSDAY



—*from Head Naturalist Clinton*

Quaking Aspen

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The Sax-Zim Bog is a mosaic of habitats, with their own plant and animal communities. Often, trees and plants have specific relationships to species within an ecosystem. Our featured species on this Bogdiversity Thursday is a tree that has a whole host of specialist insects and even birds that use or rely on this species in all seasons. Today, let's take a closer look at Quaking Aspen!

Quaking Aspen, sometimes known as Trembling Aspen or Poplar, is a conspicuous species on the landscape of much of northern Minnesota. A variable tree species, Quaking Aspen can be mostly white to dark gray along their trunks with variable black marks along its bark. Though very similar to Paper Birch, Quaking Aspen doesn't have peeling bark. The name "quaking" comes from the movement of their leaves in the slightest breeze.

The biodiversity supported by Quaking Aspen is huge. Not only is this species the preferred nest tree for birds like Northern Goshawk and Yellow-bellied Sapsucker, but it also has a relationship to lichen, fungi, and a variety of insects. Below is

information on just a few of those species who call Quaking Aspen home:

As noted above, Yellow-bellied Sapsuckers utilize Quaking Aspen for both foraging and nesting. In fact, in recent a study completed by Mike North found that over 95% of Yellow-bellied Sapsucker nests documented in the study were found in Quaking Aspen!

One the coolest species that use Quaking Aspen is Aspen Serpentine Leafminer. This moth species creates beautiful leaf mines on the leaves of aspen. These leaf mines are made by the caterpillars of this moth species, which serves as a refuge from predation.

Another cool species that uses Quaking Aspen is Poplar Twiggall Fly! Sometimes hard to find, this fly species makes rounded galls on smaller branches of aspens. It is much easier to find this gall fly during the winter season. Keep your eyes out for this species when snowshoeing around the Bog this winter!

Our final species is much more conspicuous than the previous two. Poplar Sunburst lichen is a bright yellow, foliose, tree-based lichen that grows specifically on Quaking Aspen. Many of our bright yellow-orange lichens are difficult to identify, unless you look at them closely. Poplar Sunburst lichen typically have obvious apothecia, different than the closely related Powdery Sunburst lichen.

There is more information about these species included in the photos below!

(Photos of Yellow-bellied Sapsucker by Sparky Stensaas; Photo of Aspen Serpentine Leafminer by Sam Guida; Photos of Quaking Aspen, Poplar Sunburst lichen, and Poplar Twiggall Fly by Head Naturalist Clinton)



Quaking Aspen can look very similar to Paper Birch, but this species lacks the peeling bark commonly seen on birches.



The softer wood of dead and dying Quaking Aspen make great homes for a number of cavity nesting species. If you look close, you can see the nest hole excavated by this male Yellow-bellied Sapsucker.



What a beautiful leaf mine! Aspen Serpentine Leafminer is such a cool moth. These mines are made between the cellular layers of the leaf.



Can you find the gall in this photo? Poplar Twiggall Fly makes larger, round galls on the twigs of especially smaller aspens.



Poplar Sunburst lichen is abundant along the trails behind the Welcome Center! Keep your eyes out for it on your next visit to the Welcome Center!