## This Week in the Woods February: Week Four



**This Week in the Woods**, we've been grateful for snowshoes with metal teeth. The walking conditions out there are difficult!

Editor Cheryl Daigle discovered this perfectly shaped capsule attached to a stem. This is a **sawfly cocoon**, and judging by its missing cap and hollow interior, its owner probably emerged last spring. Sawflies (many species) are non-stinging wasp-like insects that get their name from the

shape of the females' ovipositors (egg-laying structures) which often take the form of toothed blades and serve to cut plant tissue. Here's a <u>link to the idtools.org website</u> with macro images of these structures. And here's a <u>University of Minnesota Extension post</u>, explaining sawflies' life cycle. Fun fact: sawfly cocoons (with the pupae inside them) are a common cold season snack for small mammals. As Charley Eisman and Noah Charney note in their book, *Tracks & Signs of Insects and other Invertebrates*, "It has been estimated that a single short-tailed shrew consumes twenty-three thousand pine sawfly cocoons in a year."

Every so often, you'll encounter a red maple with distinctive concentric circles in the bark. This is a **red maple target canker**. It forms when a parasitic fungus invades the tree. As bark expert and author <u>Michael Wojtech notes in this article</u> from our archive, "The circular cracks mark the cycles of the disease's progress and the tree's subsequent compartmentalization. Neither the tree nor the fungus seems to gain the upper hand, and this competition can continue year after year."

We've found several **red squirrel tunnel** entrances – some, such as this one, evidencing signs of recent feeding on cached acorns and other mast. The icy conditions offer an opportunity to peek under the roof of these structures in a way that soft snow wouldn't allow. Here's a (previously shared) <u>Outside Story essay by Barbara Mackay</u>, describing life in the subnivean (under the snow) zone, and here's a <u>fun photo series by photographer Jim Block</u> of a red squirrel popping up from its tunnel near a bird feeder.

One of the ways to promote more diverse wildlife habitat in a forest, is to increase the number of snags (standing dead trees), which offer shelter and food for birds, mammals, insects and other creatures. To produce more snags, a landowner (preferably, with the guidance of a forester) can identify low-value trees and "girdle" them, i.e., cut out a thick ring (or spaced thinner rings) around the trunk, that obstructs the flow of nutrients up and down the tree. Here's a recent <a href="Outside Story essay by Tami Gingrich">Outside Story essay by Tami Gingrich</a> that describes the value of hollow and/or dead trees for wildlife. Not pictured in this photo: the numerous woodpeckers and other birds that have hunted insects in this girdled tree all winter.

Despite their spider-like appearance and lack of wings, **snow flies** (genus *Chionea*) belong to the crane fly group. According to Tom Murray in his book *Insects of New England and New York*, the two species present in the Northeast are both uncommon, so we're counting ourselves lucky to have found one trundling along in a sunny patch of snow. In this <u>post from his excellent "Bug Eric" blog</u>, entomologist and author Eric Eaton explains that the insects live out of sight most of the time, taking shelter, for example, under the leaf litter and in rodent tunnels. In common with many other insects that are active in winter, snow flies produce glycerol, a type of natural antifreeze. If you find one on the snow's surface, it may be seeking a mate. Here's an <u>audio segment and transcript</u> about the insects from the Montana Natural History Center.

We discovered this **hairy woodpecker** in the act of drilling a **hole** in a branch. Our best guess is that it was after some kind of wood-boring insect larva. Here's a recent <u>Outside Story</u> essay about the species by Susan Shea, who describes how hairy woodpeckers hunt by "tapping and listening for the sound produced above the tunnel of a wood-boring insect. After hearing that sound, they chip and chisel the wood away to reveal the tunnel and extract the insect." Another interesting note in this article: although no one's sure why hairy and downy woodpeckers – which aren't closely related – look so similar, this may be a case of the smaller downy evolving to look like the bigger hairy, in order to intimidate other birds.

Assistant editor Meghan McCarthy McPhaul found this **cecropia moth cocoon** attached to an apple tree twig. Cecropias emerge from their cocoons in late spring-to-early summer as beautiful, brown-white-and-orange striped and spotted moths with fuzzy orange-red bodies. Adult cecropia moths (in common with other adult giant silk moths, including lunas) don't last very long; their only objective is to breed, and for their brief lives as moths, they live off of the fat reserves that they accumulated as caterpillars. Here's an <u>Outside Story essay by Steve Faccio</u> describing silk moth life cycles. And here's an <u>article from our archive</u> describing artist Lucy Golden's efforts to raise silk moths as a way to improve their odds against non-native tachinid flies. (Lucy also confirmed the cocoon I.D. for this blog post. Thanks, Lucy!) Finally, here's an <u>image of a cecropia moth</u> from this past June, shared by Harriet Szanto in our monthly Reader Photo Gallery.

In *Lichens of the North Woods*, author Joe Walewski notes that fringed wrinkle lichen got its Latin name, *Tuckermanopsis americana*, from Edward Tuckerman, an acclaimed 19th century lichenologist who "did most of his plant studies on Mount Washington and in the White Mountains." Edward Tuckerman was also the eponym of Tuckerman Ravine, a glacial cirque on Mount Washington that's popular among backcountry skiers. You can find this frilly lichen growing around the twigs and branches of birches and conifers. Here's an *Outside Story* by Rachel Sargent Mirus, describing how lichens survive harsh winter conditions.

Finally, although fiddleheads won't arrive on dinner plates until May, it's cheering to see the **fertile fronds of ostrich ferns** – the species that produces edible fiddleheads – sticking out of the deep snow. Here's an <u>article about fiddleheads</u> from our archive.

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