This Week in the Woods January: Week Two

This Week in the Woods, we've noticed three "fingered" **yellow birch scales** (bracts) and seeds that have recently fallen from their catkins onto the snow. Winter weather helps disperse the tiny seeds; they're so lightweight that even a little wind can send them sliding across the snow. Here's an article from *The Berkshire Edge*, featuring photos of different birch species' scales and seeds and a USDA Natural Resources Conservation Science profile, which describes conditions that yellow birch seeds need to germinate successfully. As the article notes, they can't grow in shade and often get their start sprouting out of mossy logs and other decayed wood.

Over the course of the past few months, we've found multiple **bobcat** caches in a roughly 1-acre area. Thanks to a remote camera, we've realized that the area is being repeatedly visited by two cats, which appear to be a mother and smaller juvenile (pictured, from about a week ago). The timing of when young bobcats leave their mothers and establish new territories is variable, although late winter/early spring is typical. Here's a profile of bobcats from Massachusetts Division of Fisheries and Wildlife that includes details about bobcat family life.

We've previously discussed spalting, the discoloration of wood by fungal infections, that can make the wood especially valuable to wood carvers and other artisans. **Spalted**, or **black line**, **maple** commonly refers to maple wood that has wavy black fungal marks. As noted in this article from Popular Woodworking, other light colored hardwood can have this appearance, too. The lines mark the boundaries between areas in the wood that have been invaded by different fungi. In other words, they're "borders between warring tribes." According to the Forest Service's Forest Products Laboratory, the discoloration "may result from interactions between the wood, the decay fungi, and insect deposits."

If you find a mangled sapling in the woods – a patch of bark rubbed off in a seemingly haphazard way and other areas abraded, with maybe a twig or two snapped as well – you're probably looking at a **deer scrape**, created by a buck to communicate with does and potential rivals. Columnist Susan Morse wrote about the hows and whys of buck scrapes in her Autumn 2013 column for *Northern Woodlands*, explaining that a scrape serves as a "multi-purpose communications system," providing a combination of scents that share detailed information about the buck's fitness to mate.

Meghan McCarthy McPhaul took this photo of a **sun dog** – or parhelion – and **halo** over the White Mountains this past weekend. Meghan has previously written about these phenomena for *The Outside Story* series; as she notes, they typically occur in winter, when sky temperatures drop to -22 degrees or lower and light passes through atmospheric ice crystals. **Sun dogs**, which appear as concentrations of light on one or both sides of the sun, develop when these ice crystals are hexagonally oriented. Sunlight is "bent twice – once entering through one side of the crystal, and again exiting through another side." Look for these phenomena on clear- or almost-clear days, when the sun is close to the horizon.

If you see a big scraggly mass in a tree, and it's made entirely of that tree's own branches and stems, you're probably looking at a **witch's broom**. As Joe Rankin notes in this *Outside Story* essay, "brooming" occurs when something attacks the apical tips (growth buds) of a tree and interferes with the plant hormone auxin. The result is runaway, shrubby growth in the affected stems. Fungi, virus, mites, insects, mammal browsing (see below about nip twigs) and dwarf mistletoe are all possible culprits.

We've noticed a lot of yellow lichen on stones this past week. As always with lichen, it's dangerous to claim 100% identification, but our bet is on one of the *Candelariella* lichens, and more specifically **common goldspeck**, which is a common, rock-growing species in the north woods. As previously noted, a great field book on lichens is Joe Walewski's *Lichens of the North Woods*. For a deeper dive, check out Brodo, Sharnoff & Sharnoff's comprehensive *Lichens of North America*.

We've heard foresters and other tree-knowledgeable folk describe the bark of mature **black cherry** trees as resembling "burnt potato chips." Having never burned potato chips, we take that on faith. In any event, black cherries are easy to identify by their dark, scaly bark – and therefore well-suited for beginner-level winter tree identification. Another sign you've found a cherry: if you snap off a twig and nibble the broken end, you may notice a bitter almond taste. What you're tasting is hydrocyanic acid – essentially, watered-down cyanide – that helps the trees ward off herbivores. This is why people who keep herd animals, often remove or fence off cherries from pastures; the hydrocyanic acid is especially concentrated in green leaves and can poison livestock. Here's a profile from The Native Plant Trust, which notes black cherry's high value both as a timber product and as a mast producer – its late summer fruit feeds a variety of wildlife, including migratory songbirds.

If you're walking along a trail and suddenly encounter bits of conifer stems littering the snow, look up in the tree and see if you can spot a squirrel or porcupine. **Nip twigs** are a sign of winter feeding on young needles and bark, a subsistence food when more nutritious options are unavailable. Squirrel nip twigs are typically a bit longer than porcupine nip twigs, but there's overlap in sizing. Here's a second article from Susan Morse, this one focusing on porcupine nip twigs. You can learn more about her nonprofit, Keeping Track, and an updated and expanded book of her essays *Keeping Track* will be publishing early in 2021, at this link.

Our thanks to The Frank and Brinna Sands Foundation for helping to support this series.

Northern Woodlands
PO Box 270, Lyme, New Hampshire 03768
mail@northernwoodlands.org / 603-795-0660
www. northernwoodlands.org