

This Week in the Woods January: Week Four

JANUARY: WEEK FOUR

Sparkle snow

Beaver feeding sign

Clinker polypore (chaga)

Black-capped chickadee

Partly eaten staghorn sumac

Barred owl nest (?)

Goldenrod galls

Goldenrod gall fly larva in chamber

Paper birch scale

This Week in the Woods, and more specifically this past sunny Saturday, we noticed how the new snow in the fields glittered. As [Meghan McCarthy McPhaul notes in this *Outside Story* essay](#), 5 to 15 degrees is the best temperature range for “**sparkle snow**,” “when snowflakes tend to form as snow crystals.” New snow may glitter more than old snow (because in old snow, the crystals have started breaking down and don’t work as well as reflectors), and of course, there needs to be the right angle and brightness of light.

It's one thing to find a beaver-felled tree, another to find a tree that the rodents have peeled like a carrot, removing the bark to feed on the nutritious cambium. Recent **signs of beaver feeding** attest to the relatively warm January we've been having, where water remains open in places, and beavers can still get to land instead of relying on underwater food caches. For information on how beavers survive the winter, check out this [Outside Story essay by Susan Shea](#), with a cross-section view of a lodge's interior, illustrated by Adelaide Murphy Tyrol. Fun fact: one of the ways beavers prepare for winter is to store fat in their tails.

Clinker polypore is a parasitic fungus that typically attacks birch trees. The "clinker" part of its name is probably a reference to coal residue, which makes sense, as infection takes the form of a messy, burnt-looking black growth. As Lawrence Millman notes in *Fascinating Fungi of New England*, this formation is "a hardened mass of hyphae erupting through the bark of its birch tree host." Despite its unappealing looks and destructive ways, this is a popular fungus (...by fungus standards); people know it by its Russian name, chaga, and consume it in teas and in other forms, both for enjoyment and for potential health benefits. (There is research suggesting that it may help to suppress the growth of some cancers, but it's high in oxalates and may be harmful to some people.) Here are tips on gathering and processing chaga from [Brett McLeod, in his "Tricks of the Trade" column](#) from the Spring 2020 issue of *Northern Woodlands*.

At the same time beavers were preparing for winter by fattening their tail paddles, **black-capped chickadees** were bulking up their brains. As noted in this [Outside Story essay by Kent McFarland](#), chickadees grow new brain cells each autumn, increasing the hippocampus area, which is responsible for spatial memory. Why do these little birds add energetically costly brain cells, at the start of the starving season? Because their best chance of surviving winter is caching – and recovering – every bit of food they can't eat on the spot, and to do that, they need high-functioning spatial memory. In summer, chickadee brains shrink back again. Here's a [profile of the birds from Audubon](#), and this thought from nature writer and humorist Al Batt, quoted in Julie Zickefoose's brilliant book, *The Bluebird Effect*, "Thank G_d chickadees aren't the size of hawks. Nobody would go outside."

Back in [early October](#), we wrote about **staghorn sumac** and noted its value as a winter survival food, when birds and other wildlife have exhausted better options. Well, its time has finally come. If you look at a stand of these shrubs, you're likely to see signs of feeding on the clustered drupes, as in this photo, where a bird has pecked out one side.

We were excited to see fresh springs of hemlock hanging from a previously used **barred owl nest**. As noted in this [species profile from Cornell Lab's All About Birds](#), although barred owls are typically cavity nesters, they sometimes use old platform nests built by other large birds. And when they occupy a nest, they often add fresh conifer sprigs. It is a little early, however, to start

hoping for chicks. As noted in this [Outside Story article by Carolyn Lorie](#), great horned owl courtship starts as early as the first weeks of January, and barred owls typically begin a month later. Here's a recent [Outside Story essay by Lee Emmons](#), which describes some of the birds' cultural significance.

If you're looking for a fun reason to get out into nature on a bleak January day, consider an expedition to harvest **goldenrod gall balls**. These common ping pong ball shaped galls, caused by a small fly, can be found in fields and roadsides – wherever goldenrods grow. Back at home, if you cut them in half, you'll find a larval chamber and, maybe, a chubby white grub that will wirm and start to twitch in your palm. Or maybe you'll just find a hole where a bird beak entered. Or (as we did recently), you'll find instead a parasitoid wasp pupa. While not for the squeamish, taking apart these galls is an interesting hands-on way to learn about insect life cycles. Here's an [Outside Story essay about goldenrod gall flies](#) by Declan McCabe, who describes investigating galls with his daughter.

Finally, in a [post earlier this month](#), we shared an image of yellow birch scales, which – along with seeds – are falling down onto the snow from their catkins. Paper birch is also getting in on the act, and like yellow birch, takes advantage of wind and hard crusted snow to send its seeds on toboggan rides away from the parent tree. Here's a look at a **paper birch scale** that we found attached to a seed, sliding in the breeze on a trail.

Our thanks to The Bailey Charitable Foundation and 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