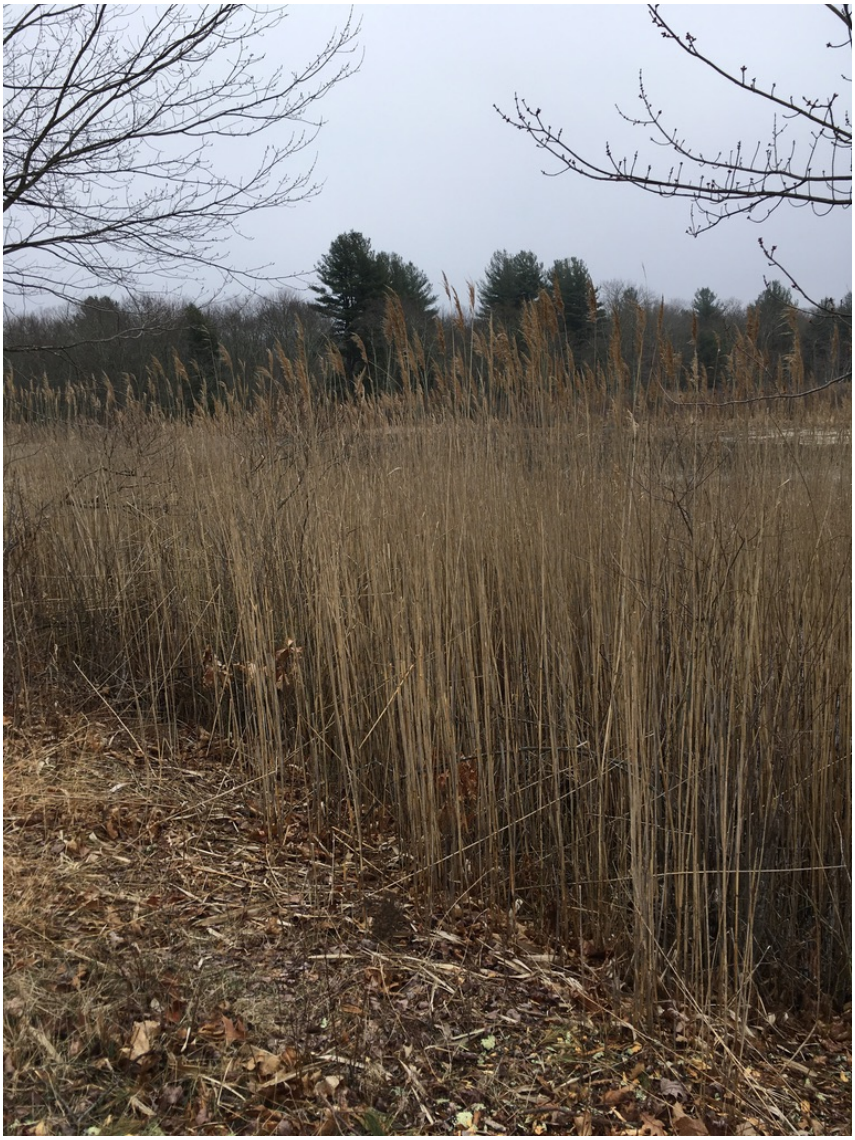
Field Notes – Fourth Week of March
Carrie Crompton

OVERTURE TO SPRING

If I were a composer, I'd write a piece based on what I heard as I walked along the Airline Trail on March 26, a misty, mild late-March afternoon:

The low ostinato of quacking wood frogs, the high staccato of peepers, the "chucks" and "conquer-ees" of redwings, the pathetic cry of wood ducks startled into flight, the occasional soft trilling of juncos whose winter stay in their southern range is almost over. The rustling of last year's reeds and marcescent oak leaves. Sounds of the old year, sounds of the new. I would have to invent a melody to suggest the swoop of the just-arrived tree swallows above the marsh. I would call it "Renewal."

But this piece would not be as good as the real thing. If you have a chance to walk along the edge of a marsh this week, take it—as a ticket to a concert.



View from the Airline Trail, March 26

Using my smartphone camera, I was able to capture some of the visible signs of renewal I saw on the Airline.

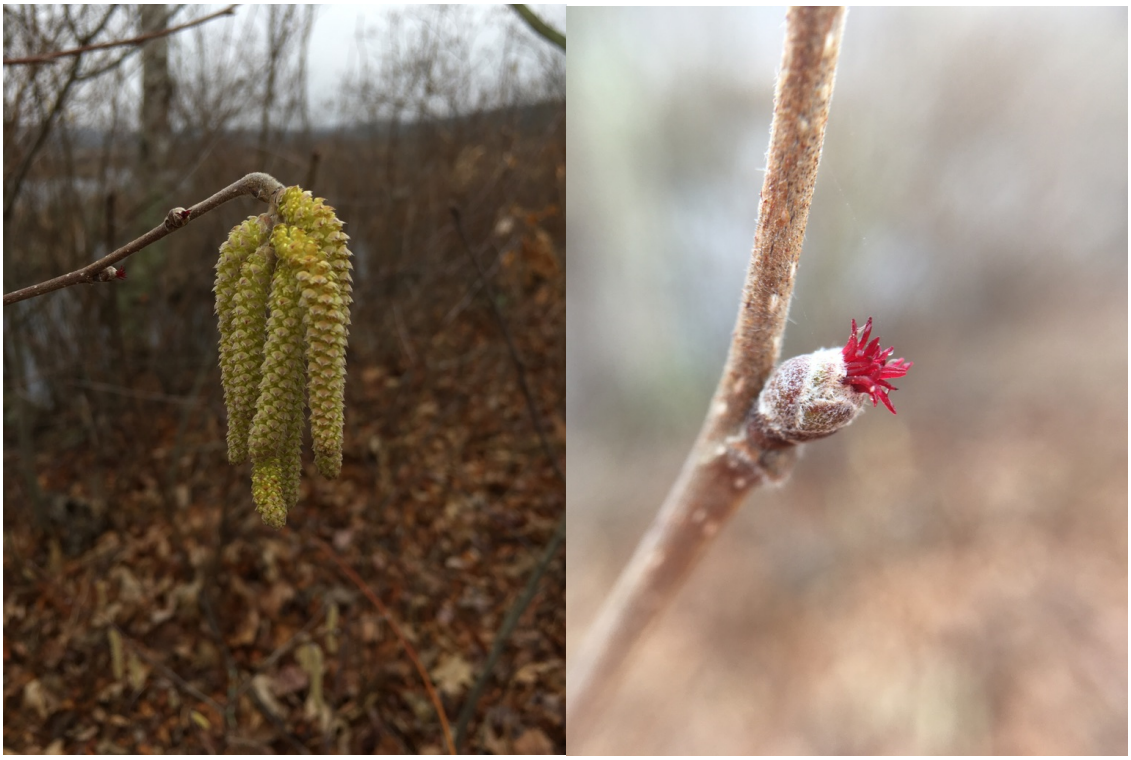
Fire moss (*Ceratodon purpureus*), March 26, Airline Trail

Fire moss is one of the earliest mosses to develop fresh leafy shoots and spore capsules in the spring. The name relates to the fact that this moss colonizes disturbed sites, especially where some kind of fire has occurred. It's often found along railroad tracks – and I find it in the soil where a barn burned on our property back in the 1970s. Ashes, ashes – mosses!

Fire moss (*Ceratodon purpureus*) capsules, March 26, Airline Trail

The twisting setae (stalks) and fresh beaked capsules leap up like tiny flames.

The hazelnuts are in full flower in wet places – along the Airline Trail marsh, around Andover Lake.



Hazelnut (Corylus Americana) – male catkins and female stigmas

The blueberry flower buds are swelling.

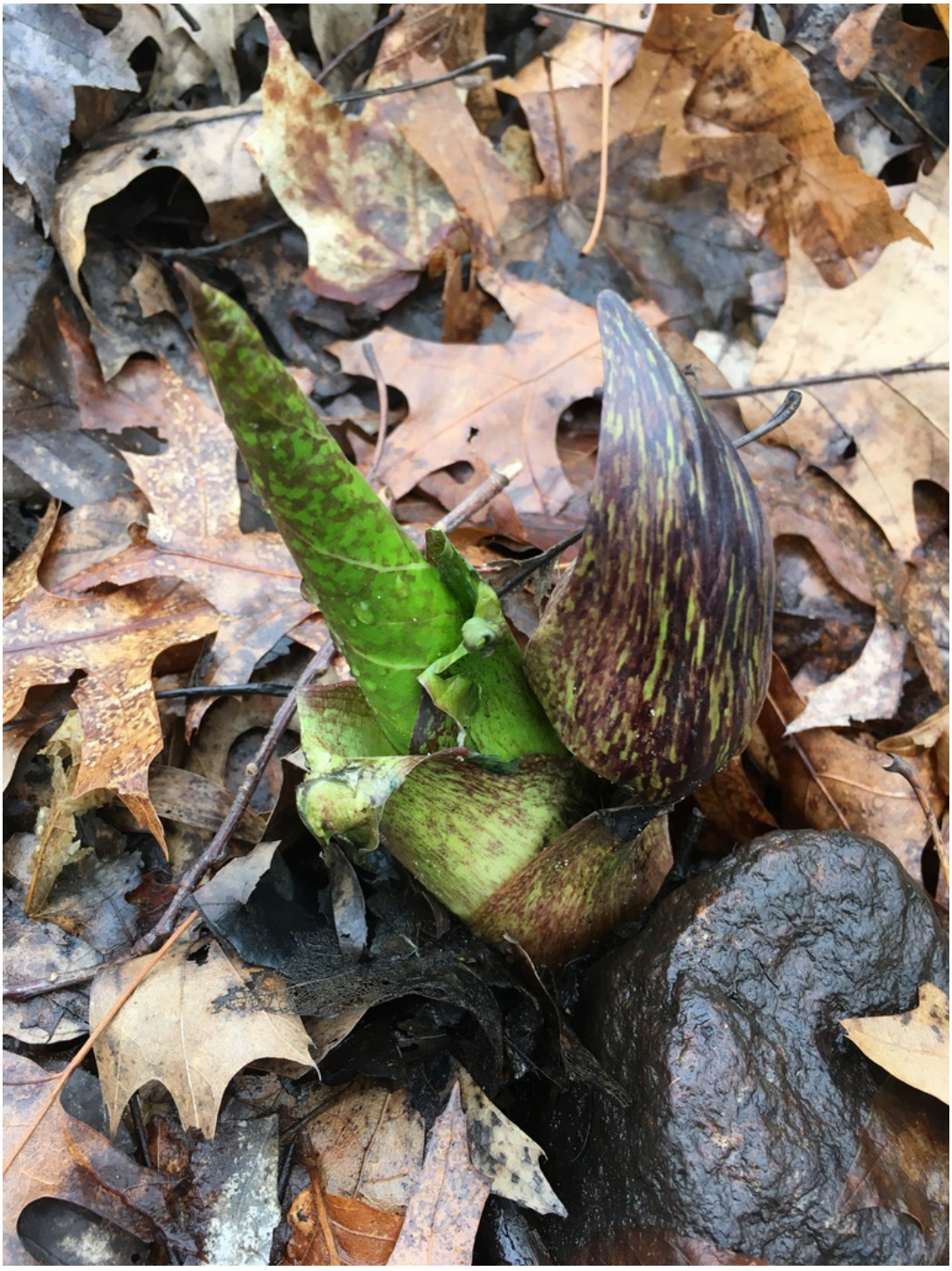
Blueberry (*Vaccinium corymbosum*) flower buds

The red maples buds are cracking open:

Red maple (*Acer rubrum*) buds, just beginning to split

Red maple (*Acer rubrum*) buds, a little further open

This past winter, I have become a connoisseur of skunk cabbage plants, which spiral in both spathe and leaf. The skunk cabbage leaves are just beginning to unfurl this week.



Skunk cabbage leaf (left) and spathe (right), March 26, Airline Trail

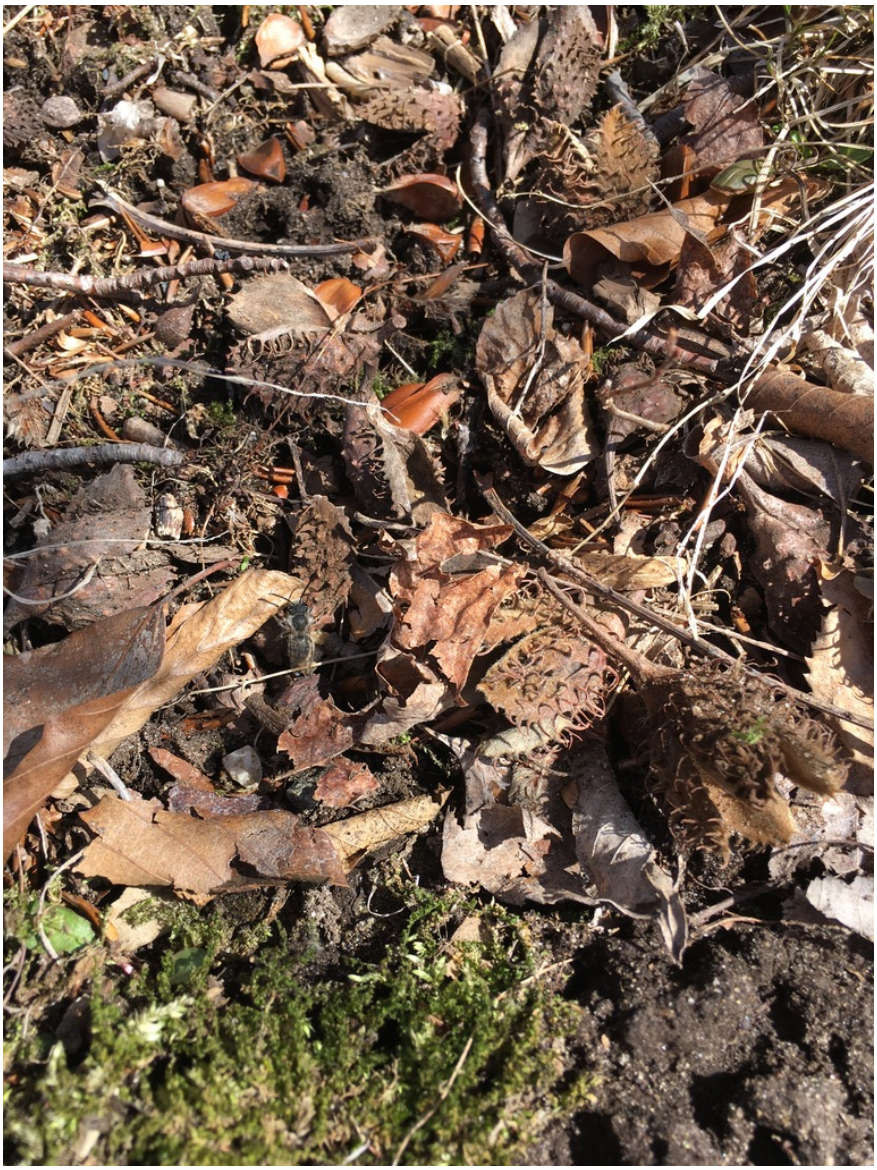
The spiral form of the leaf is still tightly coiled . . .

. . . and now, it's beginning to open.

Skunk cabbage flower cluster with a leaf in the middle, March 26, Airline Trail

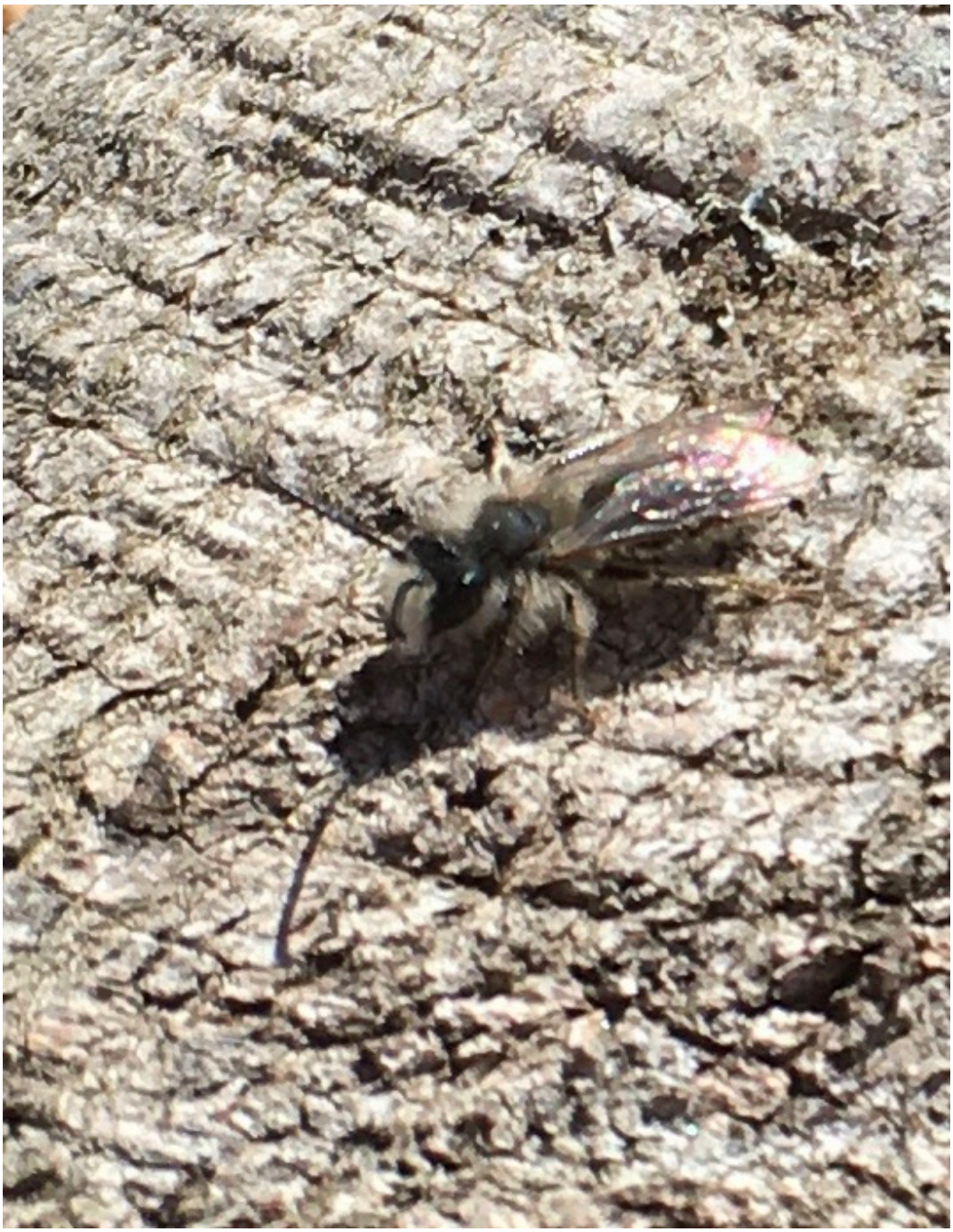
The faint skunky odor in the still air of the wetlands is another sign of renewal. Winter air is odorless, but spring air is not! If I were a sculptor, I'd create a piece based on this photo. I'd do it in metal, to capture the precision of the edges and the smoothness of the rounded surfaces. Maybe bronze and stainless steel. It would be about three feet high; children could peer inside the spathes, but adults would have to crouch. I'd call it "Hope Springs Eternal."

The flowering and pollinating populations outside of the wetlands are beginning to respond to the changes in temperature and daylength. A couple of days after the vernal equinox, I noticed a lot of activity under our European copper beech tree.



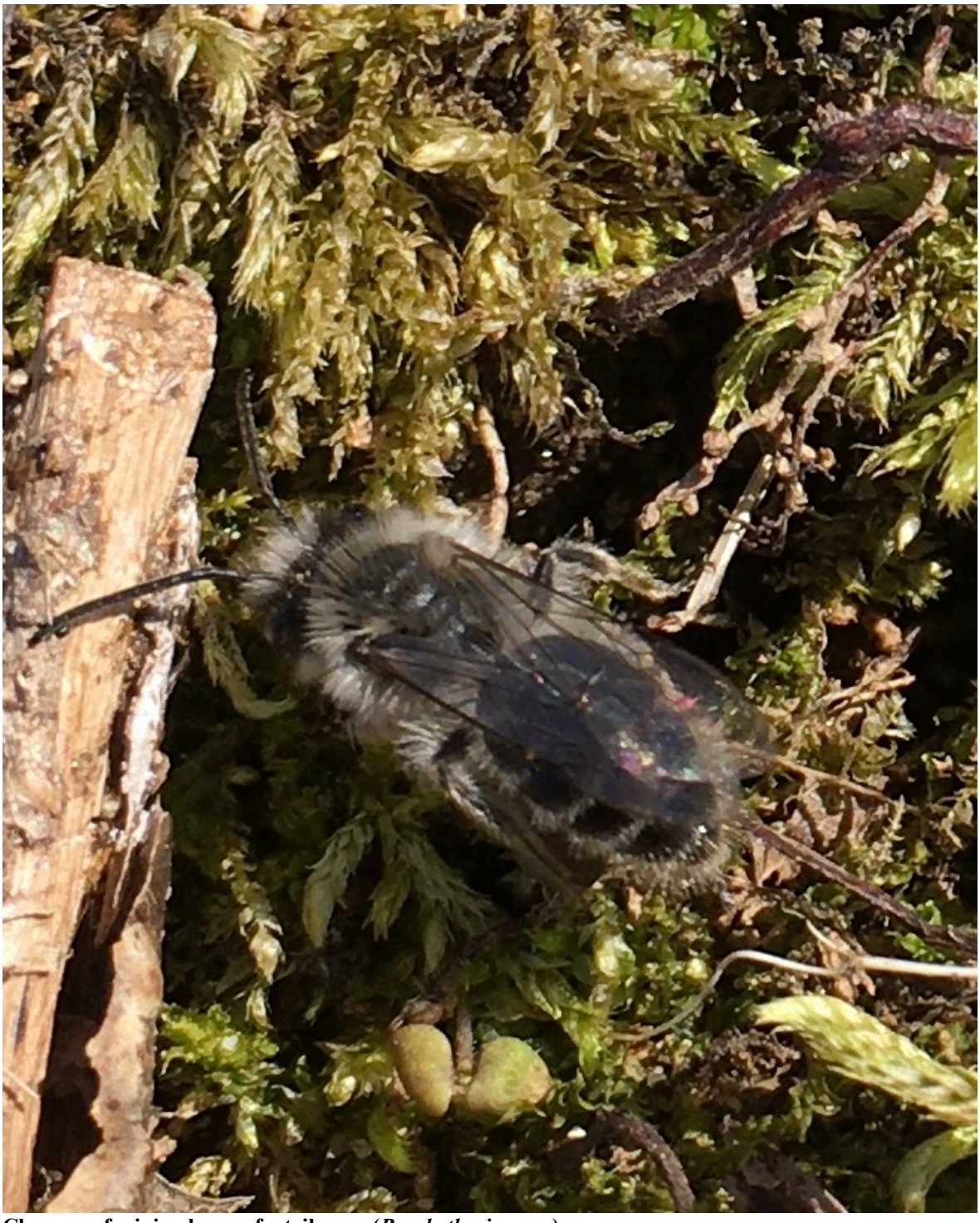
Duff and moss under the copper beech, March 22

I got in for a closer look, and realized that I was seeing bees – mining bees, the first of the year! There were at least a couple dozen catching sunlight on their wings as they flew just above the surface of the dead leaves, beechnut husks, and mosses. These bees overwinter as adults, so they're ready to fly as soon as the weather warms up to about 60º.



Mining bees mating, March 22, our yard

Mating is the first order of business; the males zigzag around about an inch above the ground, below the level of the breeze, looking for females. This pair was on the bark of a red maple log marking the beech's dripline.



Close-up of mining bee on foxtail moss (*Brachythecium* sp.).

This bee is about the size of a housefly. The hairs on her body are about as long as the leaves on the foxtail moss – 2-3 mm.

Another closeup of mining bee

She has a furry mustache, furry femurs, even little furry skirts between her abdominal segments. She is dressed for the cool weather of early spring, and she looks like a good pollen collector.

I watched the bees for a while, then walked around the yard, looking for any possible pollen sources I might not have noticed yet.

A half-hour later, when I returned to the beech, there were no bees on the scene. The orgy was over. The next two days were also sunny and mild, so I looked again, but all was quiet. I expect that the mated females were already at work digging their new nests. As for the males – well, if they were alive, they were lying low.

Our yard is not offering much in the way of nectar and pollen this week. I understand that mining bees are rather particular about their pollen sources, and I'm not sure what flowers this species prefers. I think the mining bees will have to live on their reserves for a few days until there are more flowers in the yard.

In our yard, the earliest wildflower is common whitlowgrass.

Common Whitlowgrass (*Draba verna*), March 22, near large rock in our yard

Whitlowgrass is not a native wildflower, but it's naturalized in many parts of the world. It grows in colonies around large rocks with a good southwestern exposure, where the sun warms the rock and the surrounding microenvironment. The flowers are so tiny, you wouldn't notice them unless your eyes were seeking something fresh. Like the mining bees and the mosses, they thrive in the boundary layer just above the surface of the soil, well below the wind. Everywhere I've lived for the past forty years, I've found a patch of whitlowgrass opening on the sunny side of a rock in mid-to-late March.

I read that the *Draba verna* flowers attract Andrenid bees. Since we have both in the yard, I hope it works out for them both!

The next wildflower in the yard is the bulbous buttercup.

Bulbous buttercup (*Ranunculus bulbosus*), March 24, our yard

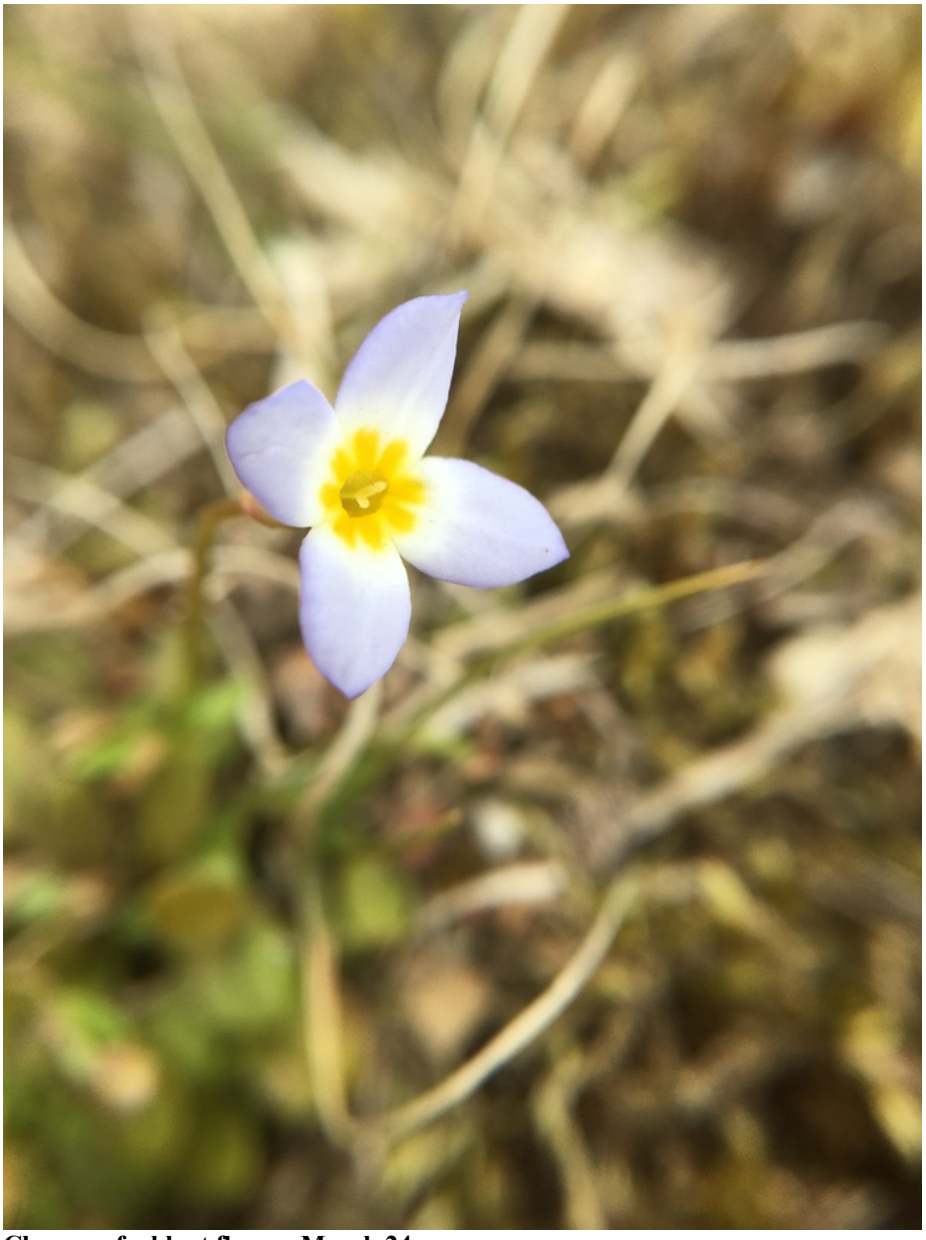
Notice how furry these plants are. Just like the earliest bees, the earliest flowers have warm coats. The hairs create a boundary layer right next to the petals and leaves that provides extra protection from the cold. Like the whitlowgrass, bulbuous buttercups are naturalized from Europe.

It will take you half a lifetime to find out where to look for the earliest flower”
• Thoreau (April 2, 1856).

I’ve had an eye out for bluets for more than thirty years in the fields around Andover. They’re tone of the he earliest native wildflower that bloom outside of the wetlands. They’re in every natural lawn, in cemeteries, around parking lots. My records show that I tend not to find them until mid-to-late April. But my earliest sightings have always been on a south-facing sandy bank in Gay City. Sure enough. I found two open blossoms on that bank on March 24.

Bluets (*Houstonia caerulea*), March 24, Gay City

There was a third flower about a foot away, but I could see no others. These were firsts!



Closeup of a bluet flower, March 24

Nobody sees a flower really; it is so small. We haven't time, and to see takes time - like to have a friend takes time.

• Georgia O'Keeffe

If I were an artist, I'd paint a four-foot square canvas with a portrait of the bluet. I'd call it "Heaven."

I'm longing to see the full carpet of silvery blue in the April sunlight—like a reflection of the Connecticut sky—but I was thrilled to have been present at the first opening. Phenology is a sport in which the earliest sighting is the most exciting.