

Monarch Way Station

May 13. After almost two months of signs and portents, spring comes in a sudden burst of color and warmth. The winds have shifted from north to west, and the world is green again.

As I always do, I've been watching each sign and portent that I know how to read; but I have been watching particularly eagerly and a bit anxiously for the re-emergence of the common milkweed plants at the Monarch Way Station. I marked the spot where they grew last year, and have checked them almost daily since the middle of April . . . and seen only bouncing bet and mugwort and grasses coming up. But today, the fresh milkweed sprouts appeared. What a relief and a pleasure to see them again!



Common milkweed (*Asclepias syriaca*) shoot emerging in a patch of bouncing bet (*Saponaria officinalis*) shoots.

They stand out with their thick stalks and long, fuzzy leaves that are almost white on the undersides.

This year's Monarch migration is moving a little more slowly than last year's, because the cold north winds lasted so long. As of May 11, the Journey North website had one report of adult Monarchs in New Jersey.¹ The Generation 2 butterflies will arrive at our Monarch Way Station in early June. I feel as though I'm preparing for a party, setting out native nectar plants that will be in bloom when they arrive.



May 3, digging up clumps of orchard grass, setting in new first-year wildflower plants (photo by George Elliott)

¹ You can follow reports of the northward migration at this site:
<https://journeynorth.org>

This year, the Conservation Commission is adding lanceleaf coreopsis, baptisia, more lavender hyssop (it was so popular with the butterflies last year!), and two species of asters to the Way Station. Last year's mountain mint, purple coneflowers, lavender hyssop, and woodland sunflowers are coming back vigorously. George has contributed a few annuals that he grew from seed – cleome and salvia – that may begin blooming before the perennials do. I'll post again when I see Monarchs at the Way Station. If you see them before I do, please let me know!

Pollinators in Our Yards

Bloodroot blossoms opened a month ago, during the second week of April. Mining bees (*Andrenidae* spp.) and sweat bees (*Agapostemon* spp.) emerged at the same time. I saw dozens of small bees buzzing madly through our patch of bloodroot day after day in April, but very few actually landing on flowers. I've had this experience before! I think that our bloodroot patch is more of a dance-floor for meeting partners of the opposite sex than a restaurant for the early bees. Bloodroot provides no nectar, but some bees do seek the pollen.



Female sweat bee on bloodroot, April 16

Common bumble bee (*Bombus impatiens*) queens were emerging from their winter hibernation holes about at the same time as the mining and sweat bees. They were definitely looking for nectar. Having mated last summer, they already contained all the eggs they would lay this season, but they'd been in diapause (arrested sexual development) all winter, and now needed to

refuel with nectar and pollen in order to “plump up their ovaries,” as one bumblebee expert puts it.² These queens want to find food close to the ground as soon as they emerge from their winter burrows!

At the edges of our yard, we have extensive patches of naturalized ground ivy (*Glechoma hederacea*) – low plants with abundant, fragrant flowers³ that offer food for hungry bees in a month when little else is blooming at ground level in our yard, except for the periwinkle (*Vinca minor*), purple deadnettle (*Lamium purpureum*), Dutchman’s breeches (*Dicentra cucullaria*) and the nectarless bloodroot. On April 21, I counted 26 bumble bee queens in the ground ivy alone. Cellophane bees, honey bees, and andrenids hummed around in the same pastures.

Only the honey bees were intent on *collecting* pollen and nectar at that point; they were filling their nectar sacs (aka “honey stomachs”) with nectar and their corbiculae (“pollen baskets”) with yellow pollen to take back to their hives. The bumble bee queens all had bare legs; they were either moving from flower to flower guzzling nectar or zigzagging low to the ground, searching for suitable nest spots (different from their winter hideouts). The hum was audible.



Bumble bee queen feeding on ground ivy (*Glechoma hederacea*), April 16

² <https://www.bumblebee.org/lifecycle.htm#Bumblebee>

³ *Glechoma* is listed as an invasive weed in CT, and indeed, one should probably not plant it. But as invasive weeds go, it’s one of the least troublesome. It doesn’t strangle trees or take over woodlands. It just creeps into lawns. Now that I know how useful it is to emerging bumble bee queens, I will continue to benignly neglect it.

The bumble bees were definitely most interested in the ground ivy in those early spring days, but they sampled the garden flowers as well as the weeds and wildflowers. You can see the queen's bare hind legs and long proboscis (tongue) in this photo (April 16).



Bumble bee queen nectaring on daffodil, April 16

In the last two weeks of April, the north wind returned. As long as the temperature stayed above 50°, bare-legged bumblebees were collecting nectar all day. On the colder, windy days, they stayed below ground, drinking stored nectar from the waxen “honey pots” they’d filled on the warmer days.⁴

⁴ <https://www.honeybeesuite.com/bumble-bees-hibernate-honey-bees-do-not/>

The next big dance party in the yard was on the andromeda shrubs (*Pieris japonica*). Every sort of bee in the yard was intoxicated with the scent of its nectar. It was dizzying to watch them – scores of bees of all sizes – moving through the blossoms at high speed. As with the bloodroot, I think this was a mating space for many species. But for carpenter bees, it's an all-you-can-eat banquet. They poke their proboscises straight through the sides of the blossoms and drink the nectar at the center.



Carpenter bee sipping andromeda nectar through a slit that he's cut in the blossom

Other species, like the mining bee below, come after the carpenters and take advantage of the already-poked holes.



Mining bee sipping andromeda nectar produced after the carpenter bee has left

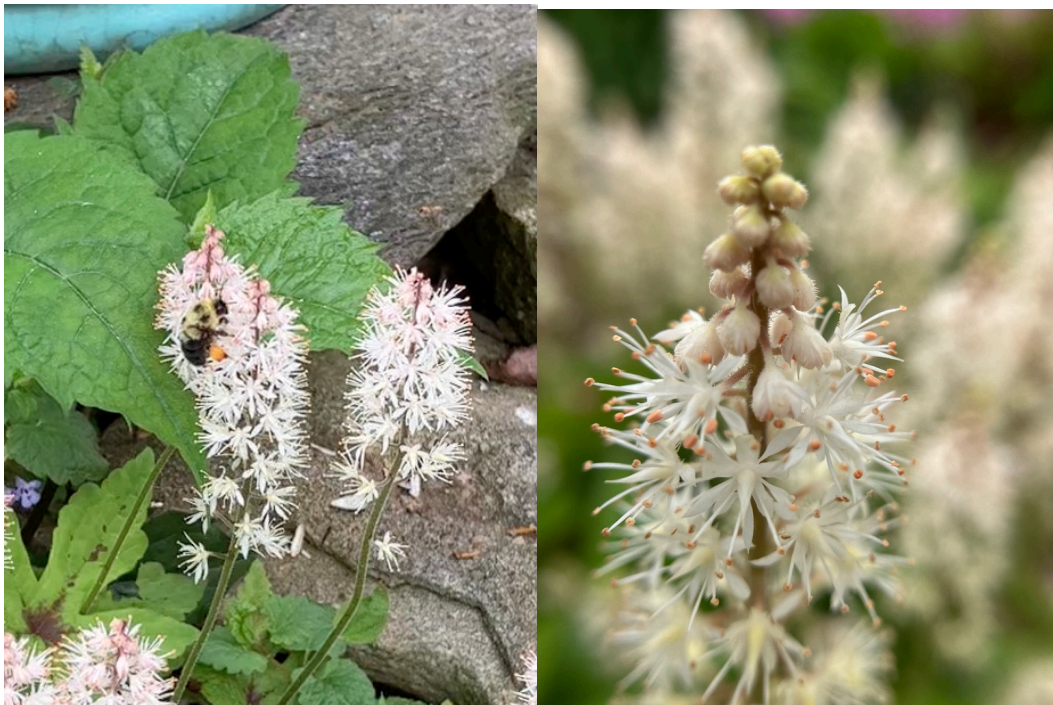
Over the last two weeks of April, almost every single blossom was slit at least once!

Now, I was a little worried about reports online that andromeda nectar is toxic to bees. I love “my” bees, and do not want them to be killing themselves on poison nectar. But beekeepers say that they can’t take in enough nectar at one time to really do themselves in. The danger is more that if the honey bees make that nectar into honey, and people eat it, it can cause temporary insanity.⁵

⁵ <https://en.wikipedia.org/wiki/Grayanotoxin>

For the rest of April, I monitored the bumble bees, never seeing as many as 26 again. Where had they gone? I still saw a few searching for nest holes – ducking into holes in the garden and also into the stone walls. They seemed to go in and come back out rather quickly . . . so maybe those holes were not suitable? It was hard to know.

Then, on April 30, I caught sight of my first bumble bee collecting pollen. Aha! She was either getting ready to lay her first brood of eggs or had already done so.



Bumble bee queen (left) collecting orange pollen from foamflower (right) to provision her first brood.

Once the queen has laid her first small “clutch” of eggs (between 4 and 16) on a ball of pollen in her nest, she will stay underground for a few days, keeping her eggs warm and sipping from her honey pot to keep her energy up. The eggs hatch into larvae after about four days. After that, she’ll be out foraging for short periods of time. (So this is why the numbers of bumbles I saw seemed to fluctuate so much! There were fewer queens out of their nest holes at any given moment.) Four weeks after the eggs were laid, her first daughters – smaller versions of herself – emerge.

May 15. Oh my, I just saw two little bumbles. The next generation of worker bumble bees is already out and about!

Carrie
