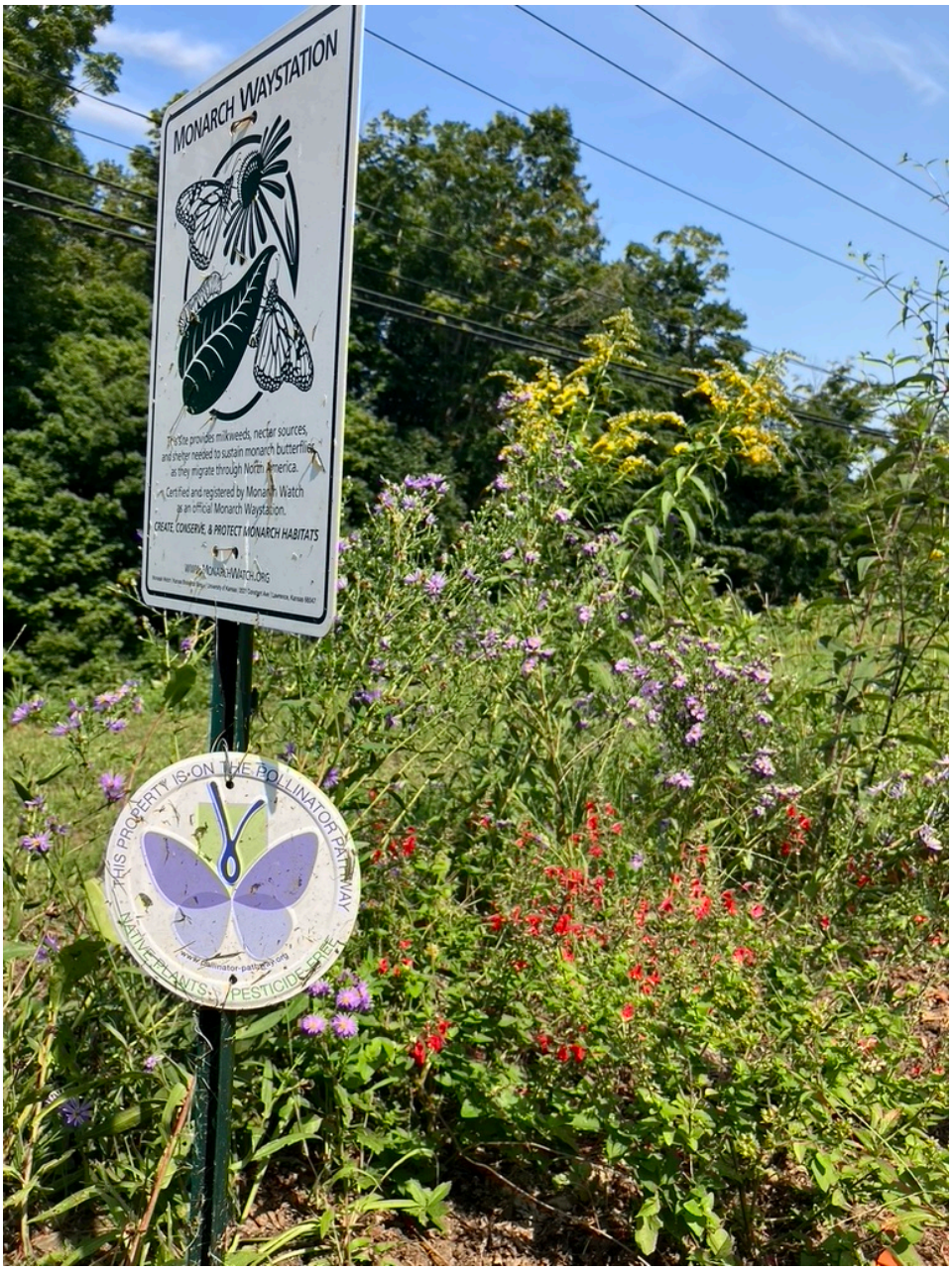
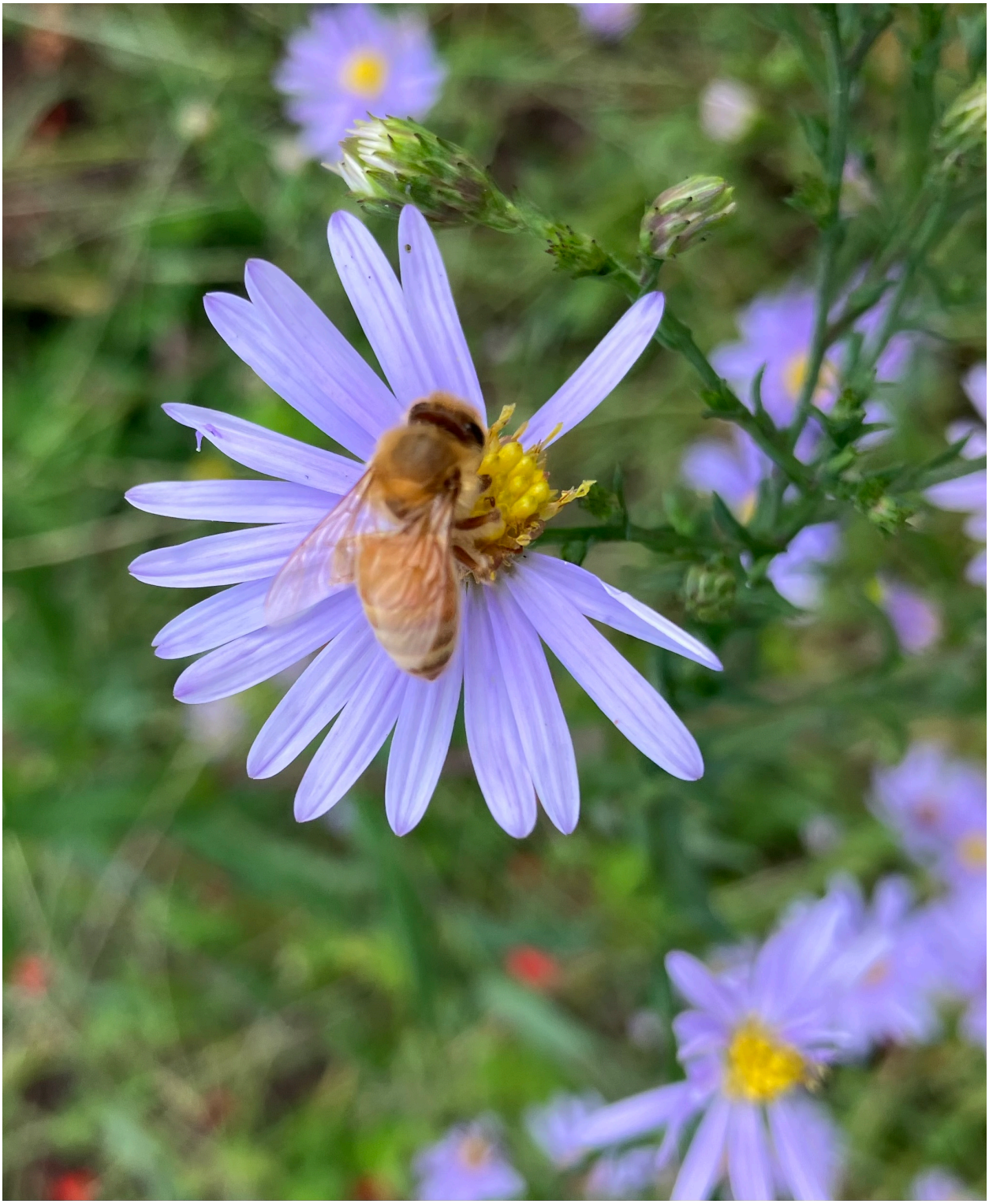
Field Notes—September 12, 2022
Carrie Crompton

Monarch Way Station

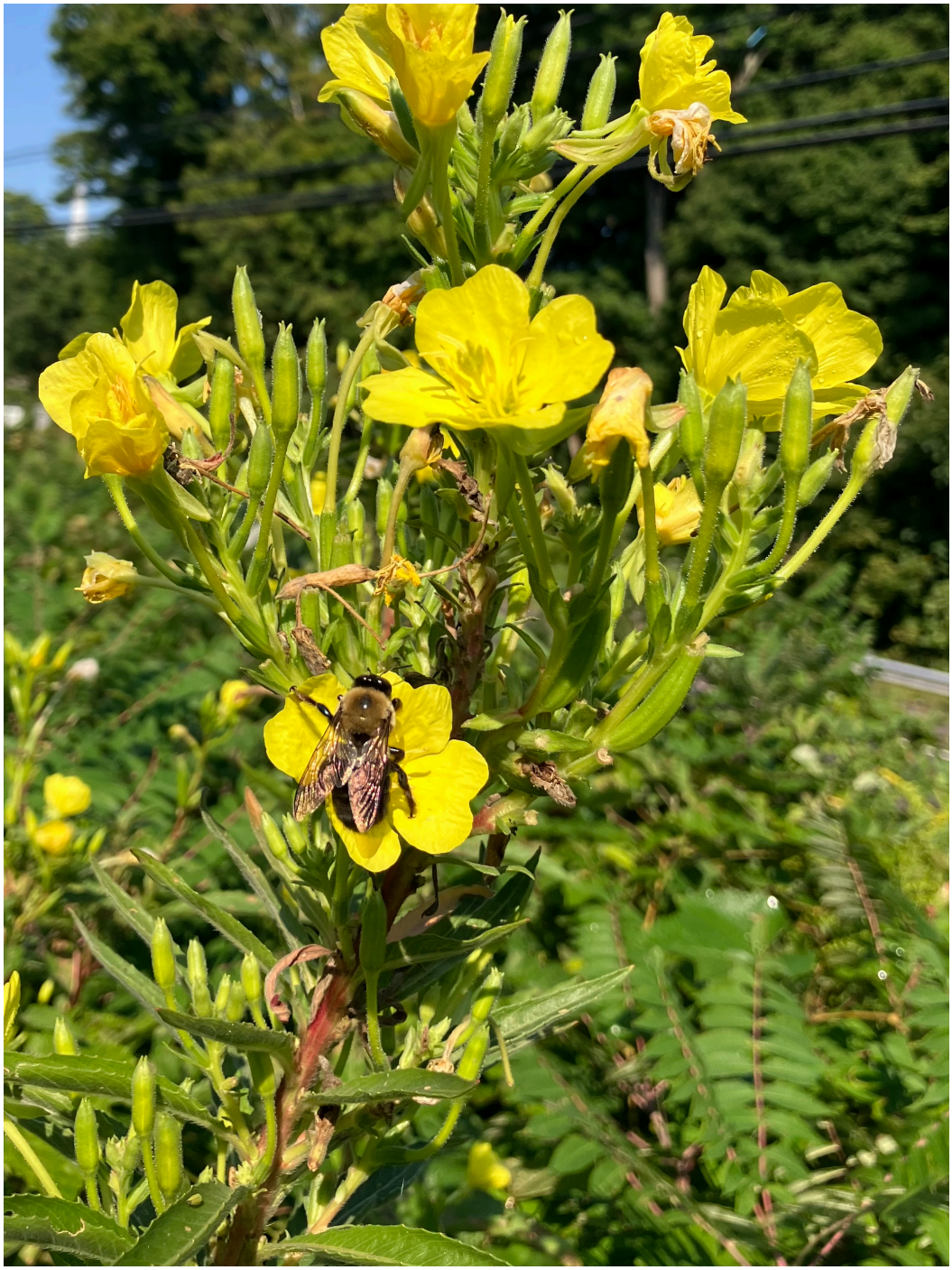


The patch of fall-blooming asters we planted last spring is helping to round out the flowering season for the pollinators in the Way Station.



Honey bee on smooth aster (*Aster laevis*), September 9

But I can’t help noticing that the untended vegetation lining the rail trail is more popular with the pollies.



Carpenter bee on evening primrose (*Oenothera biennis*), along rail trail, September 8

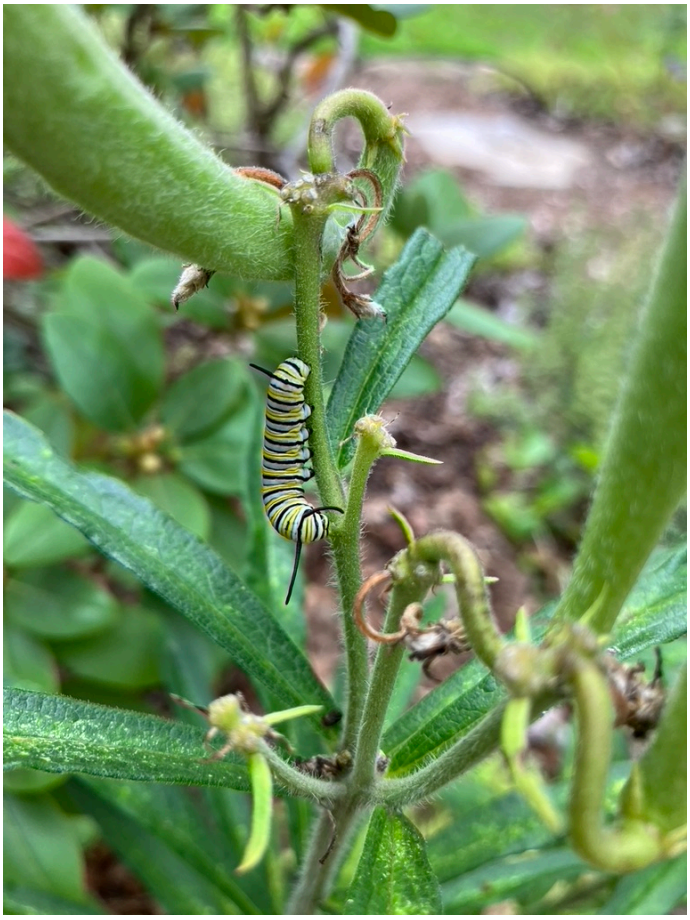
There are lots of carpenter bees on the evening primrose and hundreds of bees and wasps working the Japanese knotweed that lines the trail near the Monarch Way Station. The evening primroses are native, but the knotweed is alien and vigorously invasive. I shudder to see ever more knotweed stems sprouting from well-established rhizomes along the trail each spring. By early September, they are covered with lacy inflorescences, which are always covered with pollinators -- honey bees, bumble bees, wasps. I wish that the native goldenrod and asters had as much appeal! The insects do love the knotweed nectar, but their feeding results in the pollination, seed production, and proliferation of an almost-impossible-to-eradicate invasive plant.

Honey bees on Japanese knotweed *(Polygonum cuspidatum*) along rail trail, September 8

I've seen no Monarchs at the Milkweed Café since early July, nor any evidence of egg-laying or caterpillar growth, either. I'm afraid that the patch of three plants was simply not compelling to the butterflies this year.

Pollinators in Our Yards

I've kept a close eye on the patch of native butterfly weed in our home garden, where pairs of Monarchs courted every day for three weeks, from July 9 to July 29. I didn't notice larvae on the leaves until August 10, by which time they were fat 5th-instar cats, ready to pupate. This one was headed down to the bottom of the stalk, where it rested until dusk. It had disappeared by the next morning – I hope because it had found a good place to hide.

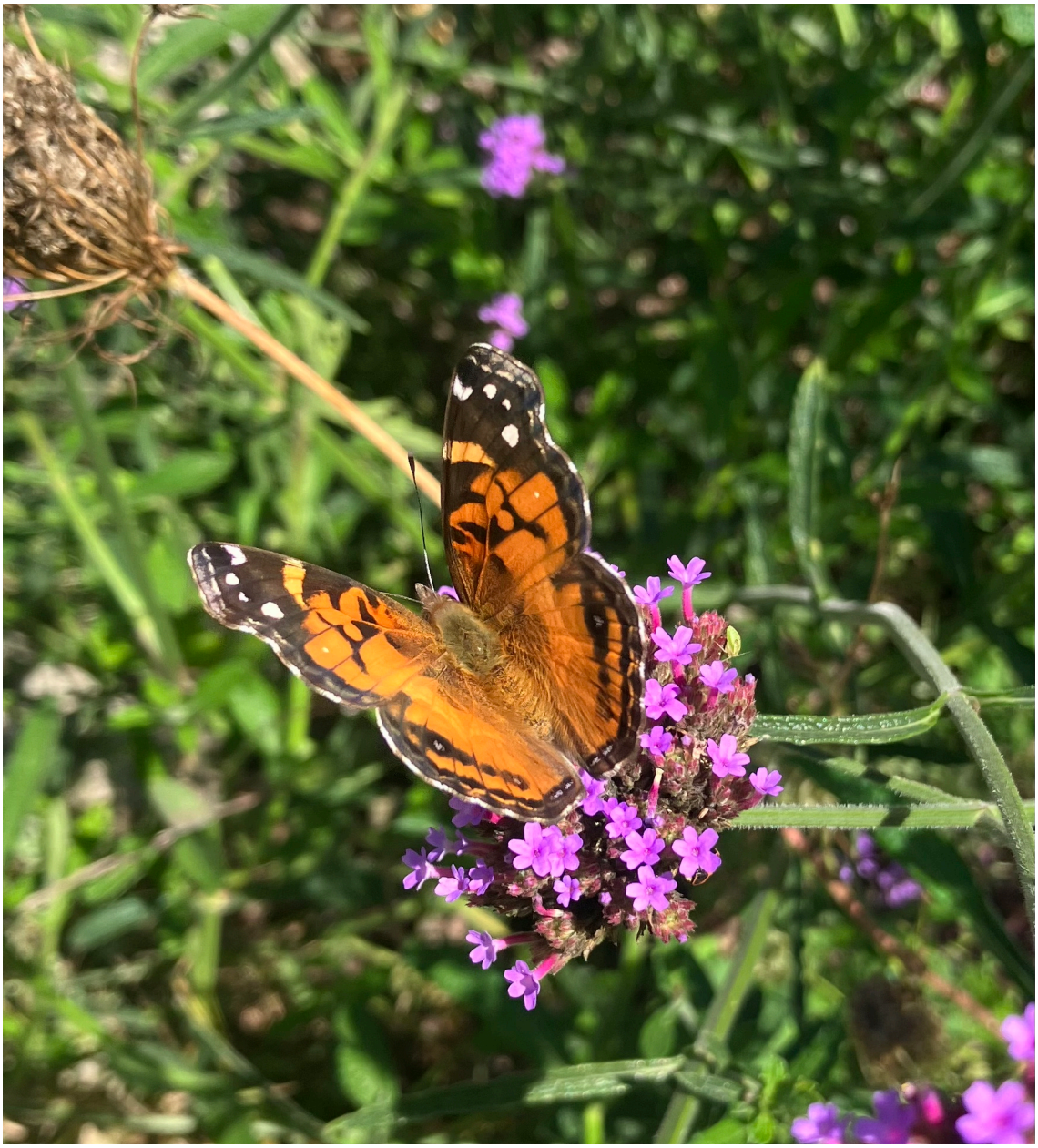


Monarch caterpillar (one of several) on butterfly weed, August 10.

Now I'm still seeing single Monarchs – not pairs – in our gardens. Was the Monarch I saw a few days ago a Generation 3 female (still in reproductive mode), or a Generation 4 female (in diapause) on her way to Mexico? At this time of year, she could be either.

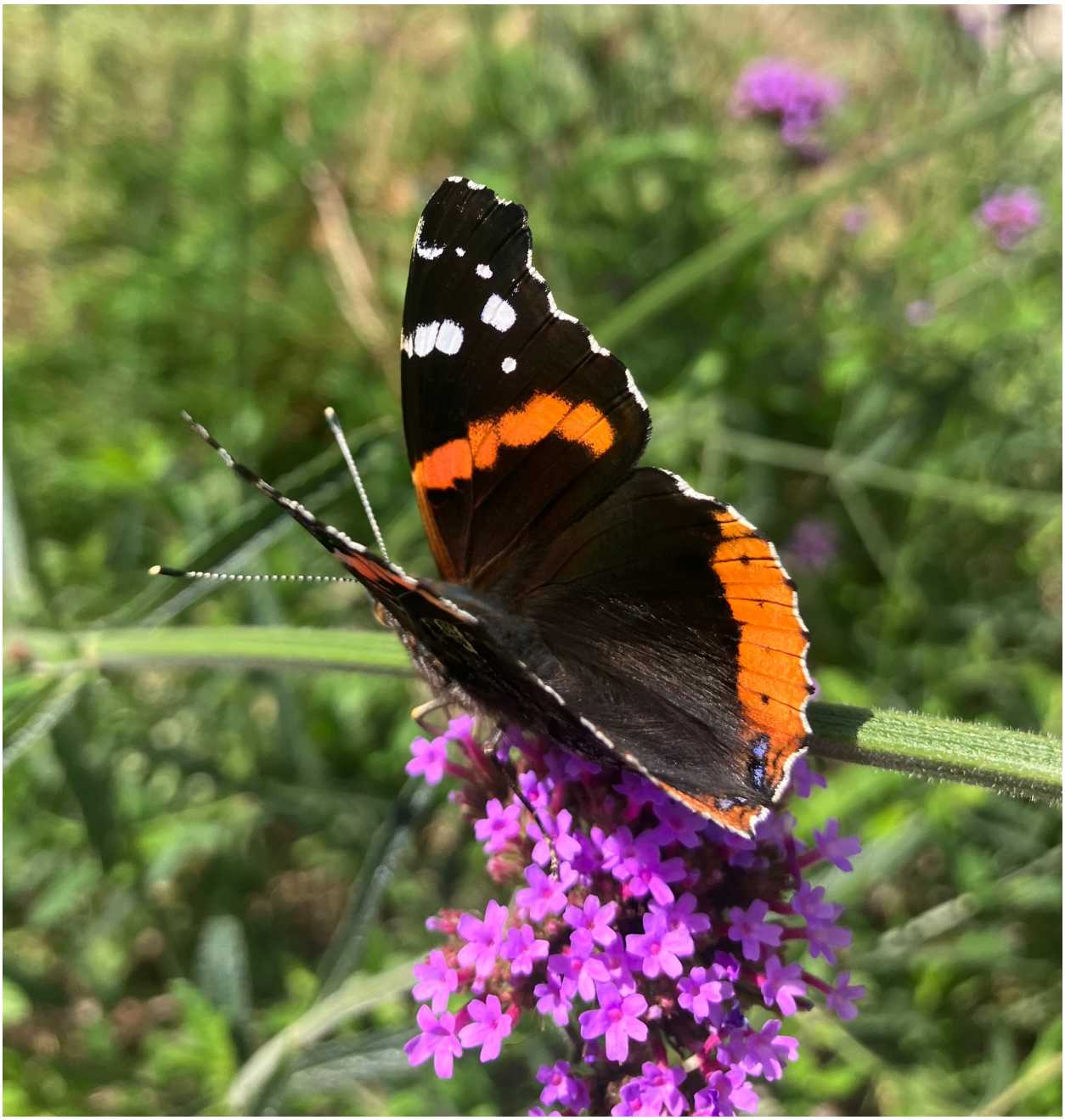
Female Monarch sampling *Verbena bonariensis* and goldenrod, Sept. 9

The day after the much-needed two days of rain last week, our patch of *Verbena bonariensis* was a happening place for butterflies.



American Lady on *Verbena bonariensis*, Sept. 8

Like the Monarch, the American Lady is a migratory butterfly. This individual was likely on its way toward Florida. He or she would have been thirsty for nectar after hiding from the rain for two days. It was in the yard for an hour or so, then flew away.



Red Admiral on *Verbena bonariensis*, Sept. 8

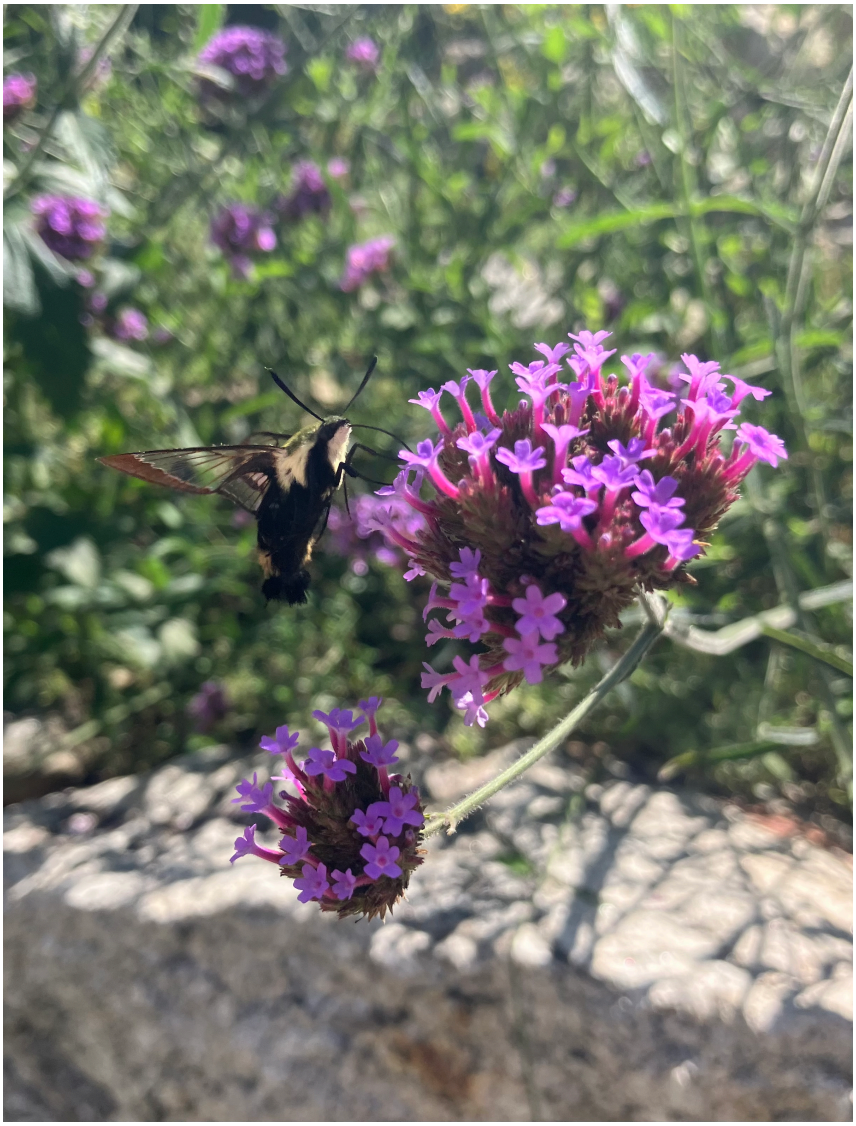
I seldom see Red Admirals in the yard. Their larvae eat nettle leaves exclusively, and we do have nettles in the back yard, so I do look for them. I expect this one was also on its way south for the winter. It was gone the next day.

Great Spangled Fritillary on *Verbena bonariensis*, Sept. 8

Great spangled fritillaries are not migratory – they're residents in Connecticut, and I see them in every month of summer. This butterfly appears to be a female, based on the dark "shadow" on her wings (males are a little brighter). She has likely

already laid her eggs near a patch of violets, possibly in our yard. (We encourage violets, not only by mowing around them in the lawn when they flower in spring, but also by letting them spread as ground cover in garden beds). The eggs will hatch into larvae that survive the winter rolled up in leaf litter. Next spring, the caterpillars will crawl to the closest violet plants to eat and grow, then pupate, and produce a new generation of adult butterflies.

A sphinx moth was also enjoying the Verbena –

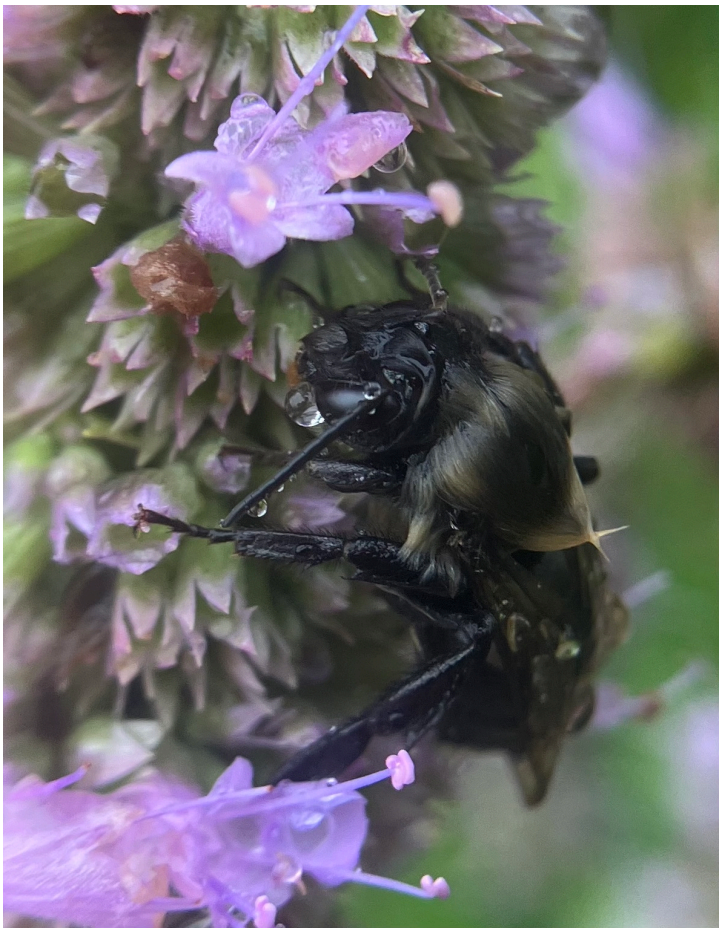


Clear-winged sphinx moth on *Verbena bonariensis*, September 8

Like the great spangled fritillary larvae, the sphinx moth larvae will overwinter in the shelter of leaf litter. (When leaf-raking time comes, think of the pollinators and, if possible, leave them be.)

In my last post, I counted some 100 honey bees working the thyme pasture in the yard. Within a couple of days after that post, they disappeared en masse. They had taken the resources they needed from this yard and gone to someplace that offered them more. But the bumbles were constantly increasing their numbers, it seemed; the giant hyssop continued to bloom, and was serving as a hotel for scores of bumble bees that both ate and slept on the flowers.

During the nearly constant rainfall of September 5-6, I wondered what was happening with them. I went out several times to look at the giant hyssop plant. Oh dear! There were very few on the plant, and of those, some were definitely dead and others looked moribund.

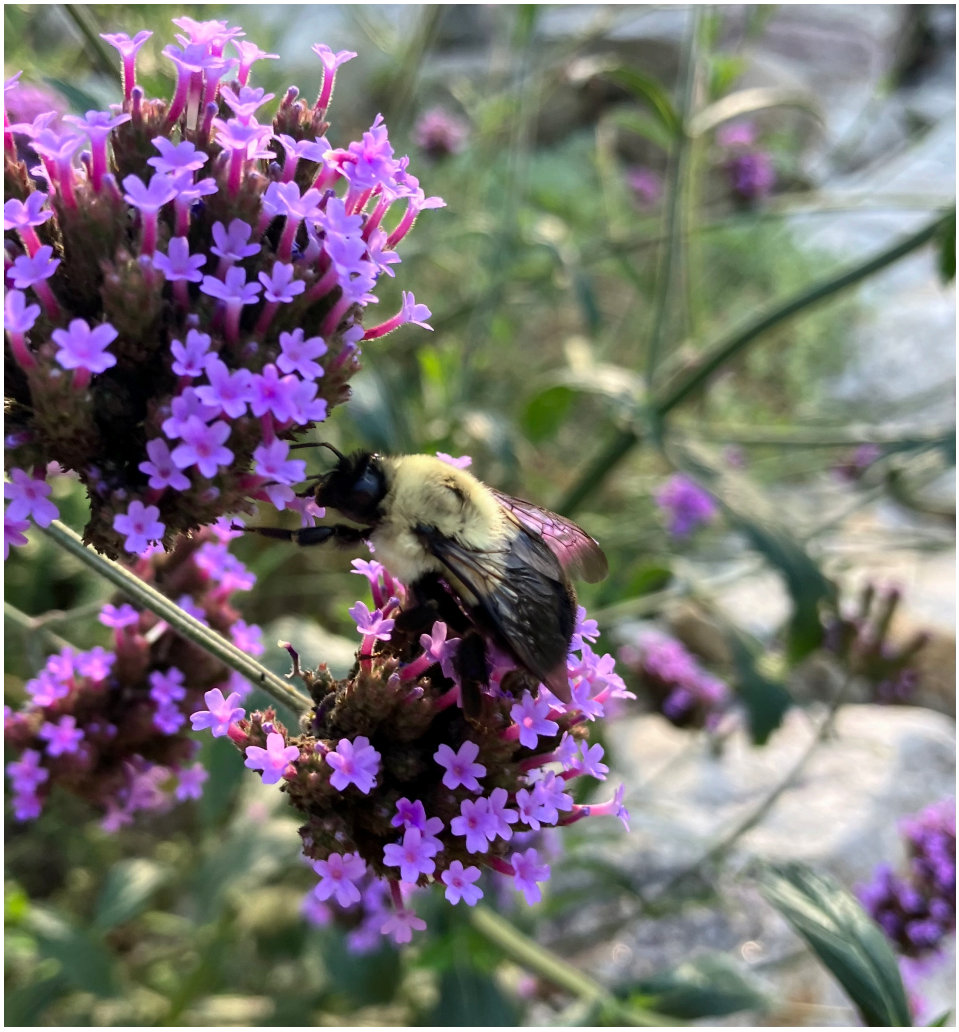


A waterlogged bumble bee on giant hyssop, September 6

I thought, Well, this is it. The season must end.

But the next day, the sun came out, and there were many, many bees on the plants again, busy and buzzy, with dry yellow fuzz. Clearly, they had had the sense to take refuge someplace other than under the flowers during the rain!

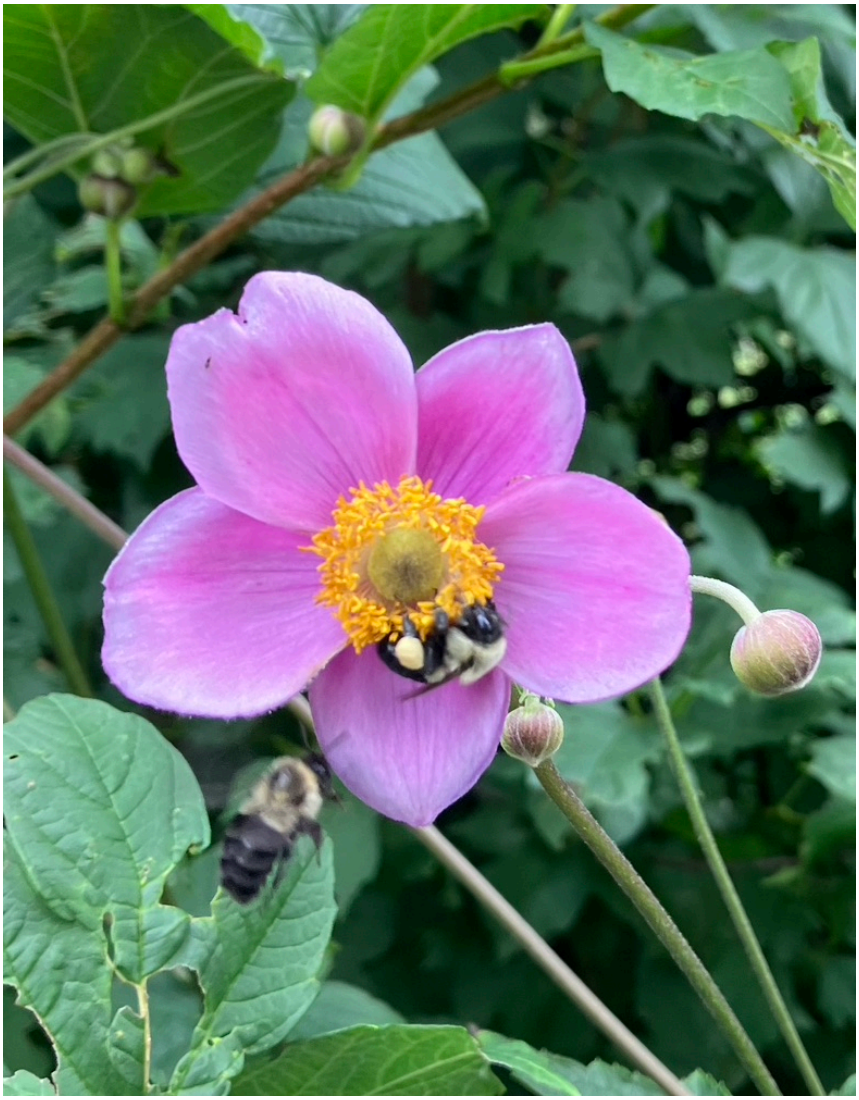
Worker bumble bees live only about 30 days, so it's likely that the ones I saw drowning on the hyssop were "old" bumbles whose time had come. The healthy bees I'm seeing since the rain are of three sizes: tiny males; medium-sized workers and young gynes; and large queens. Most of these bees are young (small and medium-sized), having emerged from the nest since early August, but some of the queens may have begun their lives as mating adults back in July, and they have had some time to fatten up for the long winter's hibernation. Of these, the most successful will live through the winter, appear aboveground in early spring 2023, and produce broods until this time next year — these ladies are the future of the bumble bees in my back yard.



Really big bumble bee on *Verbena bonariensis*, Sept. 10

Above is a photo of a queen bumble bee (perhaps an empress!) that is almost as large as a carpenter bee. When she saw me approaching, she buzzed loudly and flew fast, wide spirals high in the air above my head, as if to say, "This is my territory! Keep out!"[1]

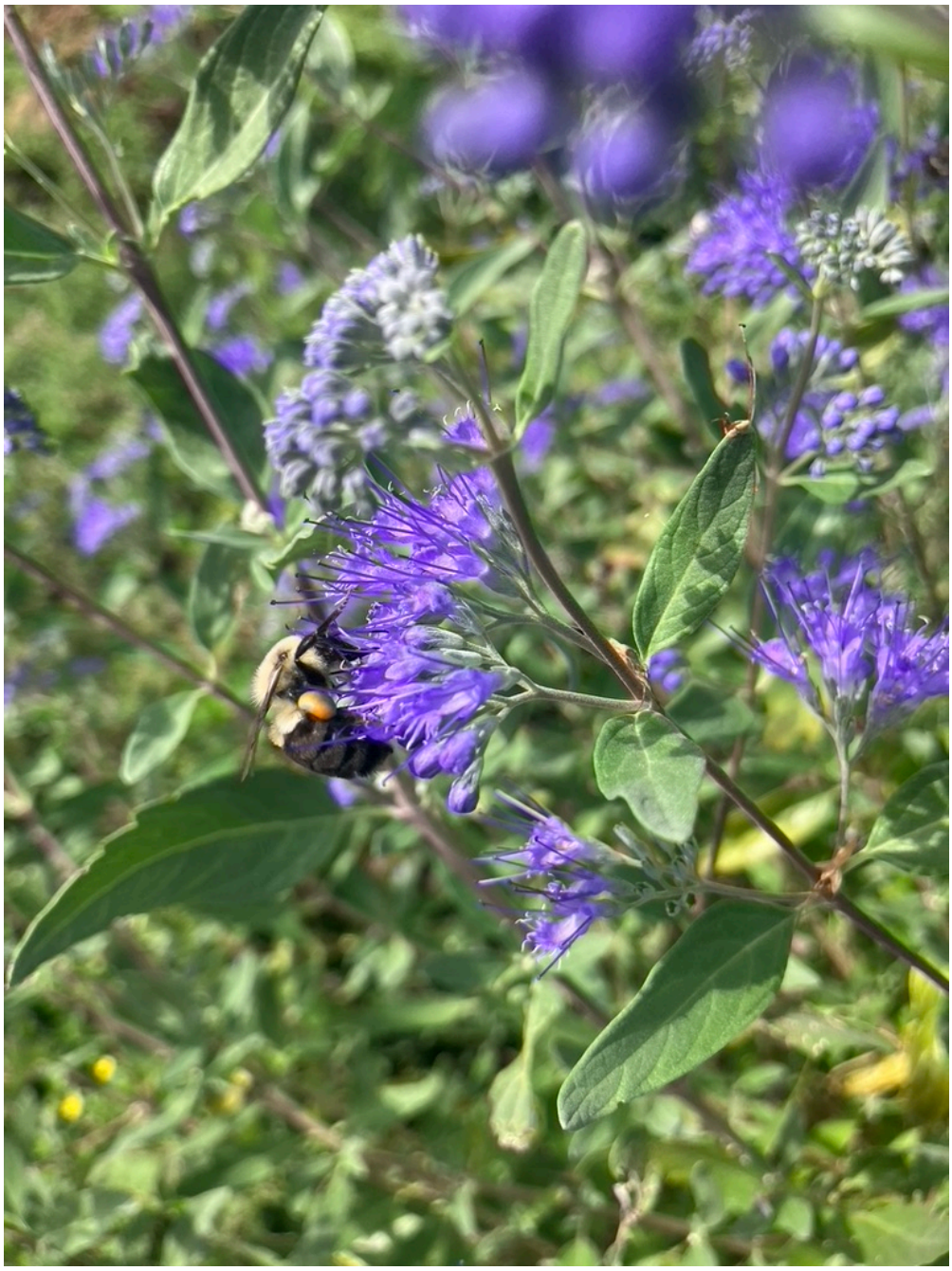
I remember how worried I was earlier in the season, when the proportion of bumble bees collecting pollen seemed to be unusually low. But the numbers of pollen collectors seem to have increased since then, suggesting that at least some queens in the yard have kept reproducing all summer.



Two bumble bees visiting a Japanese anemone blossom, Sept. 7. One is collecting pollen, the other appears to be nectaring only.

[1] Note to self: Be sure to look for an emerging queen in the vicinity of the *Verbena bonariensis* next spring.

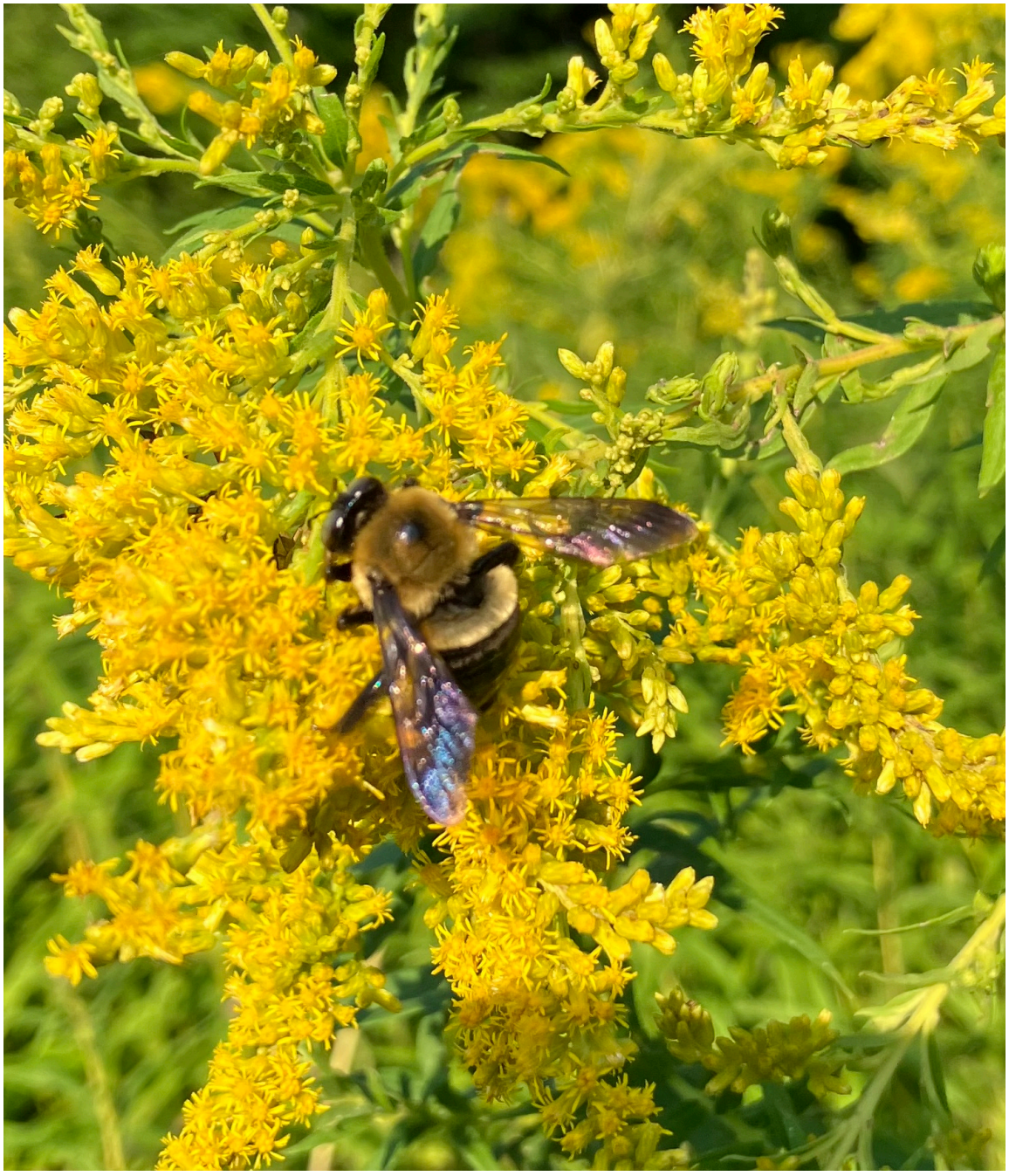
Every day now, I see diligent workers collecting pollen and nectar for their queen's current brood, which may be the last of the season. There's probably a month to go before the first frost, but any gynes being nurtured in the nest now will need that time to emerge and mate and fatten up.



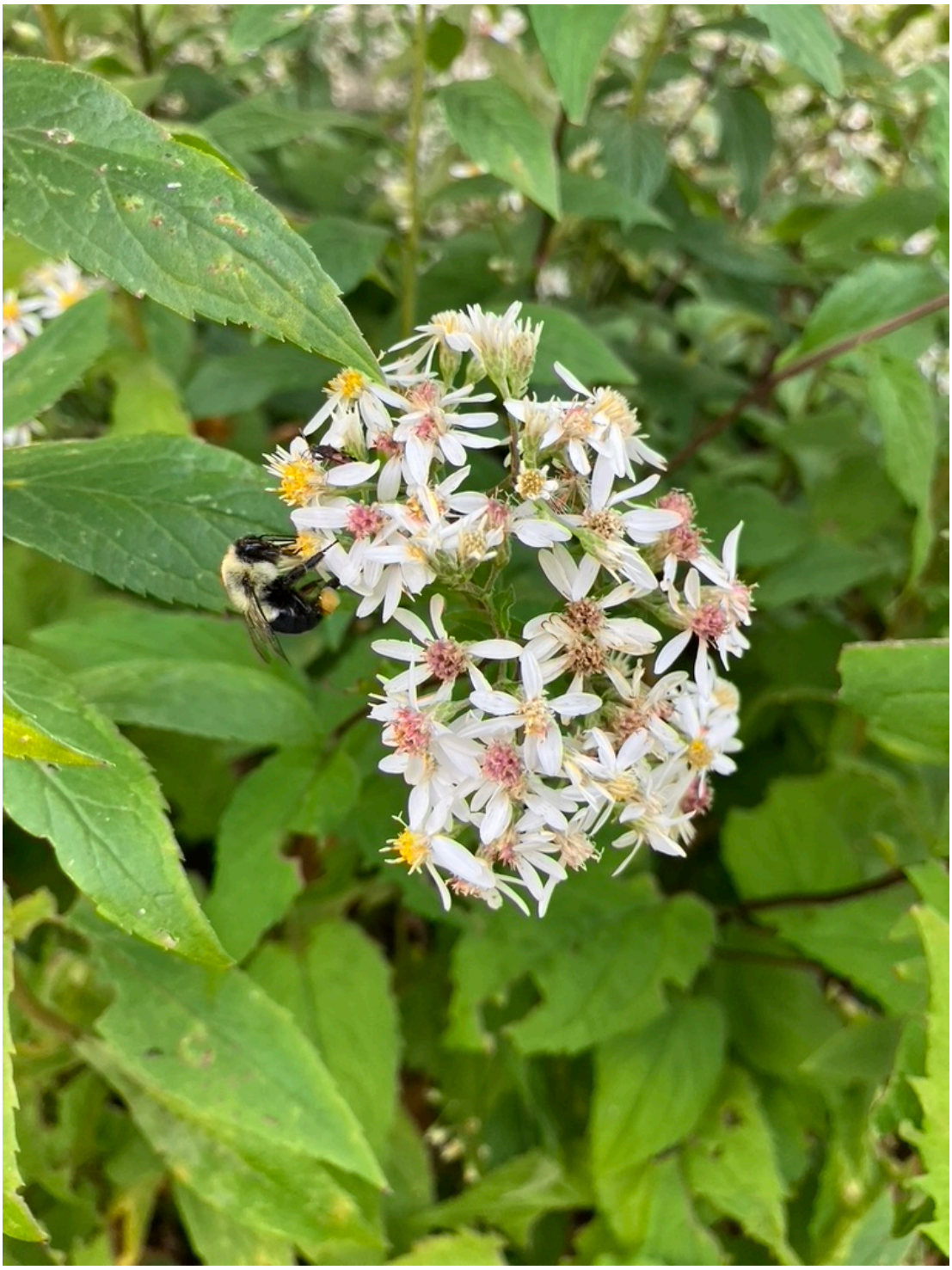
A working bumble bee on Bluebeard (*Caryopteris*), September 9

Bumble bee on Sedum spectabile, September 9

There are perhaps just as many bees (or more) in the extensive spreads of native goldenrod, asters, and jewelweed at the edges of our property as there are in the cultivated gardens, but it's harder to see them except at the very edges.



Carpenter bee on native goldenrod, September 10



Bumble bee collecting pollen on native wood aster, September 10

This bee is collecting from a yellow-centered aster bloom. The pink-centered ones have already been stripped of pollen. The color change is proof of insect activity that I didn't notice at the time. Always something going on behind my back in this yard!

It used to be that I would drive a 5-mile radius around home in order to note first blooming dates for wildflowers, shrubs, and trees. A couple of rounds a week, each week of the spring, summer, and fall, would satisfy my need to know what was beginning to bloom where, to see a few different types of habitat, to be alert to the progression of the growing season. (Blue vervain in bloom? It must be mid-July already!)

Now a radius of 100 feet around the house keeps me busy looking for flower–insect interactions many times a day. Unlike plants, insects are constantly moving, making moment-to-moment decisions about what to do next. Maybe nothing's happening on a cloudy morning, but when the sun comes out at noon, the yard is alive with wings. Every wingbeat, every footstep, every buzz is so tiny, it's hard to believe that these gestures are at the very heart, the crux of continued plant life, bird life, human life. I go out in the yard just to marvel.

Seeing a flower is like hearing the sound of one hand clapping:

Seeing a flower with a pollinator – Ah! That’s more like a two-handed clap! Yay!