Milkweed Café

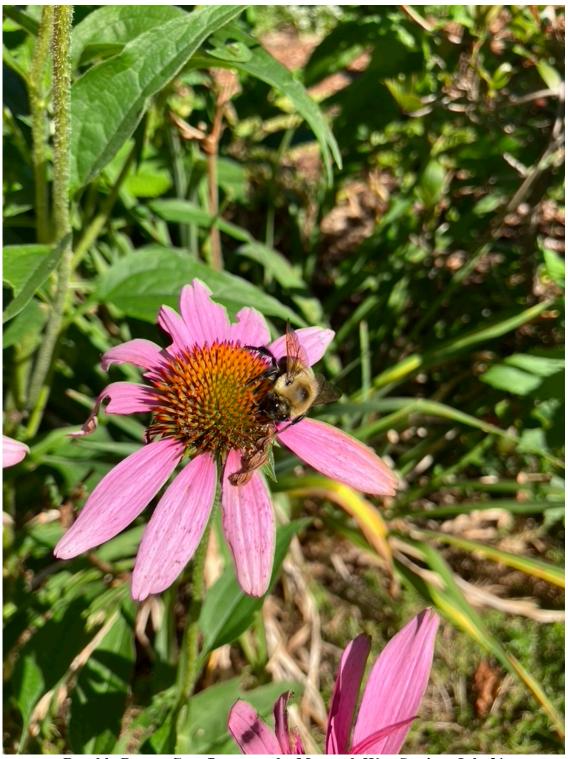
The Milkweed Café is going to seed, with no evidence that any Generation 2 Monarchs have laid eggs on any of the leaves. We may yet see activity when Generation 3 individuals start to fly.



Seed Pods Maturing at Milkweed Café, July 31

Monarch Way Station

The Way Station is parched – we've had no rain for several weeks, and temperatures are high. Nonetheless, there are flowers in bloom, and there are bees visiting them.



Bumble Bee on Coneflower at the Monarch Way Station, July 31

Bee Pasture

The Bee Pasture on Riverside Drive continues to be mowed very tight. It is a pollinator desert for now. I didn't see a single bee or butterfly on July 31.



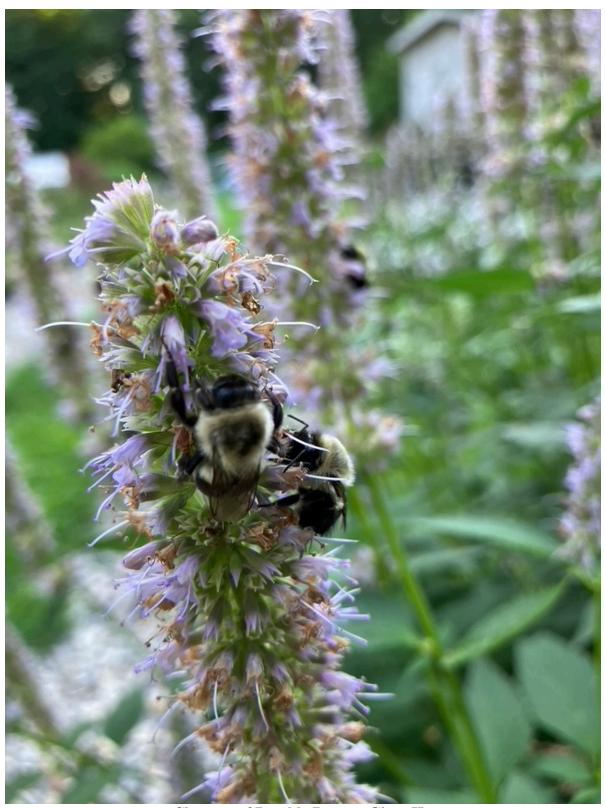
Bee Pasture on Riverside Drive, July 31

Pollinators in Our Yards

There are many winged creatures perching and nectaring and buzzing around the yard at this point! I think we may have a garden of at least 500 bees. I count roughly 60 bumblebees on one Giant Hyssop (Agastache 'Blue Fortune') plant alone, day after day.



Bumble Bees on a Single Giant Hyssop Plant, July 31



Close-up of Bumble Bees on Giant Hyssop

The thyme patch is still full of honey bees, as it was in July. Nine years ago, I planted an extensive groundcover of thyme from seed, just to cover a large bare spot in the lawn. It greened up the bare spot, all right, and I was happy. Since then, I've built a flower garden by digging holes in the thyme and inserting shrubs, perennials, and annuals, leaving the thyme to suppress weeds between them. The glossy leaves are gorgeous in the spring, and come summer, the flowers attract hundreds of honey bees.

Now I'm learning that the terpenes produced in the leaves, pollen, and nectar of thyme serve as antibiotics for honey bees, which are normally subject to all sorts of pathogenic fungi and bacteria in their nests. Our visiting honey bees' hive, wherever it is, is healthier because of all the terpenes they bring home to it from our groundcover. If I were to start a new flower garden in a sunny spot, I'd start intentionally with a packet of thyme seeds!



Honey Bee Nectaring on Thyme Groundcover, July 27

¹ Natalies Wiese et al., 2018. "The terpenes of leaves, pollen, and nectar of thyme (*Thymus vulgaris*) inhibit growth of bee disease-associated microbes." *Scientific Reports* 8: 14634

I wonder all the time about "our" honey bees; we don't have a hive, but they show up for work every day in our gardens. Are they visiting from a neighbor's hive? From a hive a mile away? If you have a hive in Andover, I might be seeing your bees every day! Or perhaps we have a wild colony in the woods behind the yard. I'm still mystified as to where they come from and where they go at the end of the day.



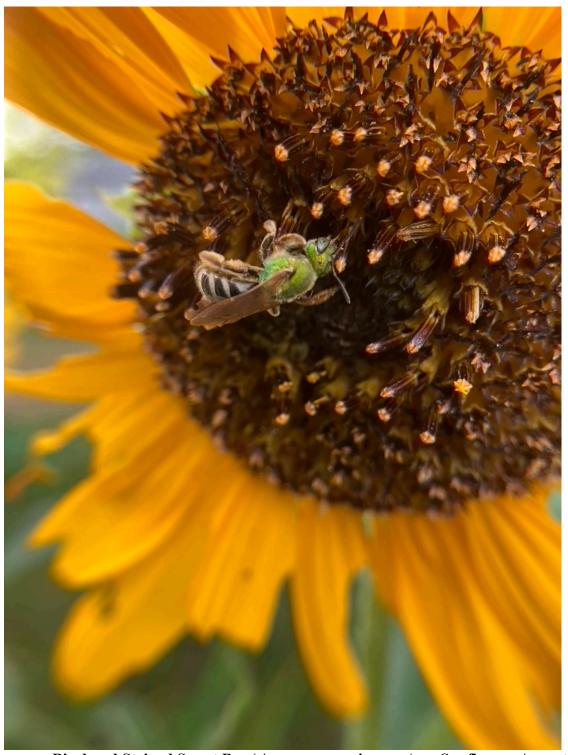
Honey Bee Leaving the Last of the Butterfly Weed, July 27

As for the bumbles, they don't leave the yard at all, it seems. By now, they've finished their nesting season, and with night temperatures in the 60s and 70s, they have no need to shelter underground at the end of the day. At dusk, I see them slowing down . . . and coming to a stop right on the plants where they've been nectaring. There they stay until daybreak, when they start moving again. They need about eight hours of rest at night.



Bumblebees Settling Down to Sleep on Giant Hyssop

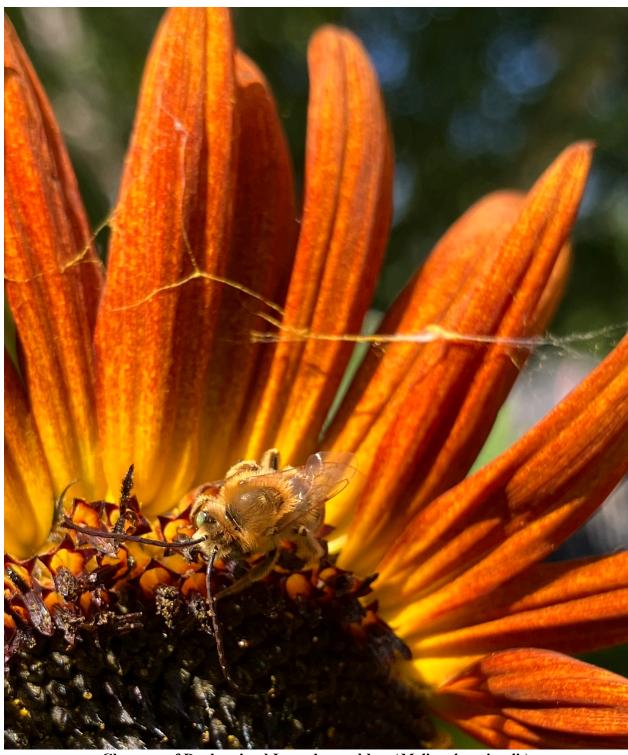
The Sunflowers are finally in bloom, and I can always find a few bees on the disc flowers.



Bicolored Striped Sweat Bee (Agapostemon virescens) on Sunflower, August 8



Two Long-horned Bees (*Melissodes* sp.) and a Ligated Furrow Bee (*Halictus ligatus*) on a Sunflower Disc, July 30



Close-up of Dark-veined Long-horned bee (Melissodes trinodis)

Notice the lovely green eyes and long antennae on this bee!

The mining bees that were so numerous in the spring seem to have gone underground for the season.

But now the squash bees (*Peponapis pruinosa*) are coming up to the surface! These are the true specialists in our yard; they are interested in nothing but the flowers of the Cucurbitaceae family – winter squash, summer squash, cucumbers, melons, and gourds.

These are the only bees that have specialized on a cultivated crop; they started in Central America, pollinating wild relatives of our cultivated squash plants, and since the earliest domestication of cucurbit plants around 10,000 years ago, wherever people planted them, the squash bees have always followed. They are now found all over North America.

Like so many of our native bees, they spend most of their life cycle underground, and just a month or so each summer as adult bees. They show up reliably when our squash plants bloom, around the first of August. I never notice these bees flying around the yard; they hover in the vegetable garden, moving efficiently from one squash blossom to another. I see them in the early morning, drinking the nectar of the female squash blossoms and pollinating them before 10 a.m., when the flowers close.



Squash Bee on Stigma of Squash Blossom, July 29

I don't understand how the squash bees manage to travel from garden to garden in their very short aboveground lives, but if you plant squashes, they will likely find them the first year. If by some chance they don't, the bumble bees will gladly drink the syrupy nectar from the base of the female squash blossom, and get the work done. I find upwards of a dozen bumbles in a single blossom these days. (Yes, and some bad-news striped cucumber beetles, too!)



A Scrum of Bumble Bees Nectaring on Winter Squash Blossom, August 7

Proof of the bees' self-indulgence:



Squash for Us

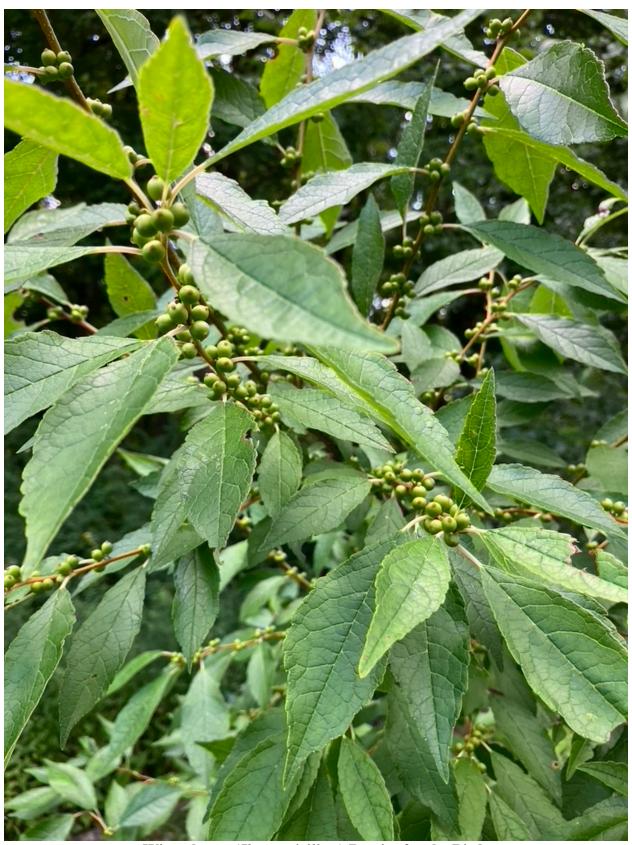
All over the yard, there is proof of the pollies' presence over the past few months.



Raspberries for Us

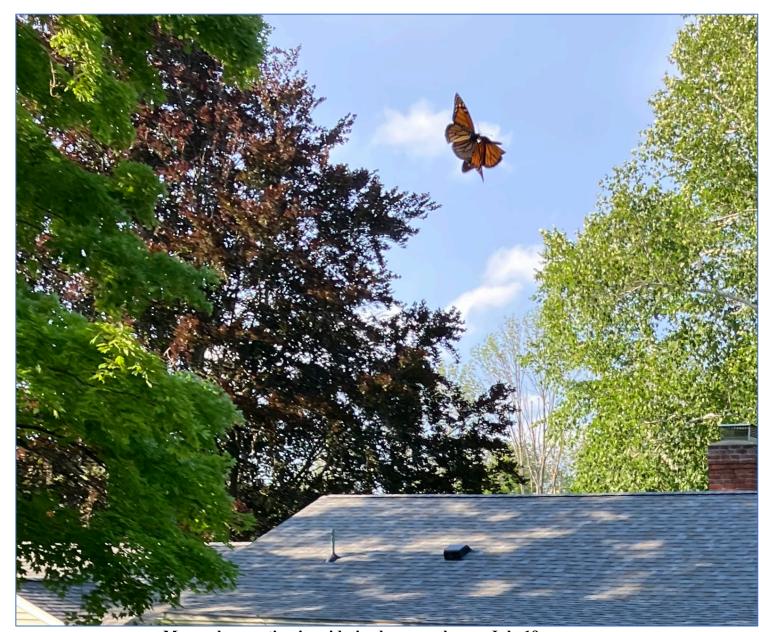


Silky Dogwood (Cornus amomum) Berries for the Birds



Winterberry (*Ilex verticillata*) Berries for the Birds

As for the butterflies, we had at least two Monarchs in the yard every single day from July 7 to July 29 -- three solid weeks of courtship among the Butterfly Weed flowers!



Monarchs courting in mid-air above our house, July 19

Then these Generation 2 butterflies disappeared. I assume that the females deposited their eggs on milkweed plants somewhere near. That generation is now gone; we'll see evidence of Generation 3 soon.

I saw some very fresh-looking Great Spangled Fritillaries in the yard on July 16, and then again on August 7. If you have violets in your yard (as most of us do), you have the host plants for Great Spangled Fritillaries. If you have Zinnias, they will surely visit them!



Great Spangled Fritillary on Zinnia, August 7

American Ladies have begun to appear. Like the Monarch, the American Lady is a migrant that overwinters in the southern U.S. or Central America. It takes several generations to get where it's going in each direction. One generation appears here in CT in the spring; its progeny eat the foliage of pussytoes (*Antennaria* spp.) wildflowers. Later generations use everlastings.



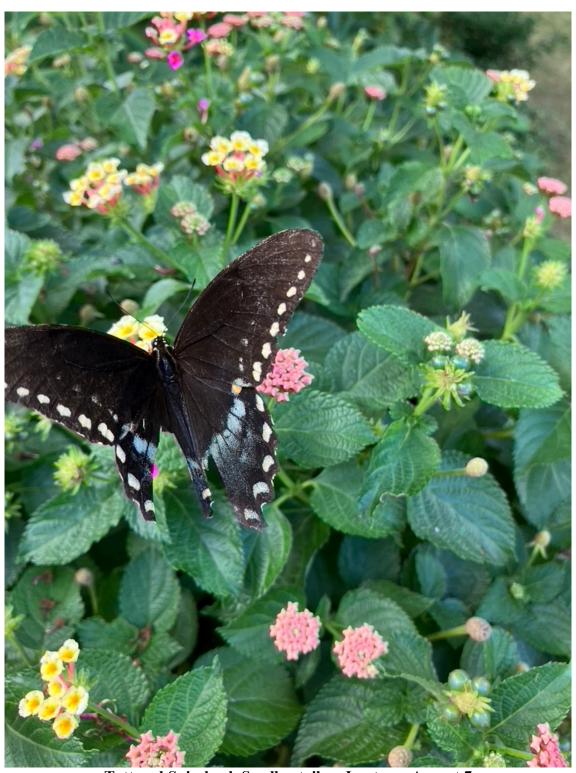
American Lady Butterfly (Vanessa virginiana), July 30

I am seeing the second generation of Tiger Swallowtails and Spicebush Swallowtails in the yard. Their first flights were in May. On August 1, I saw a group of six newly eclosed Spicebush butterflies on one petunia plant. This photo captures only three of them . . .

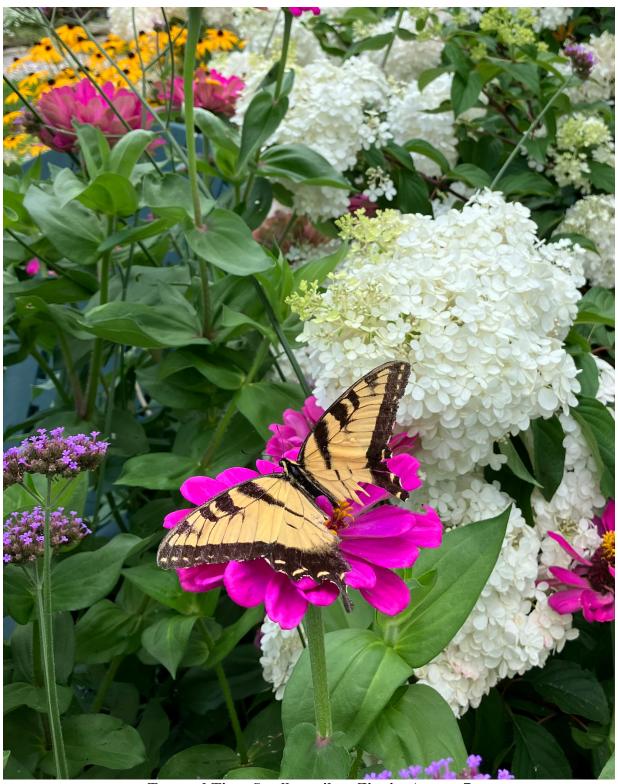


Spicebush Swallowtails on Petunia, August 1

Like most butterflies, these live only a couple of weeks. The ones I'm seeing today are a little tattered. Their days are numbered, but they keep flying and nectaring. I'm not sure what will finally do them in - but it won't be a lack of nectar.



Tattered Spicebush Swallowtail on Lantana, August 7



Tattered Tiger Swallowtail on Zinnia, August 7

As you know, I have come to love the pollies for themselves, apart from valuing their "services" as honey makers and pollinators. Today I learned about a new book (thanks, Monika!) called *The*

Mind of a Bee by Lars Chittka (Princeton University Press, 2022), which documents experiments showing that bees in fact recognize individual people. They can pick a face they know out of a photo line-up! It never occurred to me before that there could be any such relationship between an insect and its gardener/photographer/watcher, but maybe there is! Watching pollies and asking questions about their behavior, I learn something every day.



What a Bee Must Think I Look Like