

Field Notes – June 21, 2023
Carrie Crompton

SOLSTICE STATUS REPORT

Trees

Back in early May, when the trees were still leafing out, it was possible to identify species by their characteristic blends of leaf pigments – the chlorophylls (different shades of green), carotenes (varying shades of orange and yellow), and anthocyanins (reds) -- as well as by their degree of leaf-out on a given day. I could pick them out along the side of the road —

yellow-green: sugar maple
red-green: red maple
silver-green: big-leaf aspen or cottonwood
golden-green: tulip tree
green-green: birches and cherries.



May 2

June 20

Now the green is almost uniformly dark – chlorophyll has masked the other pigments – and it's hard to distinguish species while driving, except by the glossiness of the leaves and the overall texture. So much plant tissue growth and development in seven weeks! I'm seeing some effects from the drought of summer 2022; some birch and maple canopies appear a little thinner than they did last year. The sycamores are struggling to re-leaf after losing their first flush of leaves in

the May 18 frost. This happens fairly often, I've noticed; it takes a while for the second rank of buds to open, but they seem to be doing so, if slowly. On a walk in Gay City yesterday (June 20), I noticed that a lot of the younger trees are putting on a second flush of growth right now – a reminder of how the leaves looked two months ago, and a promising sign for next year.¹



Fresh leaf growth, June 20. Clockwise from top left: red or black oak, red maple,

¹ This second growth is traditionally called “Lammas growth,” which refers to the feast day of August 1. The new leaves are produced from buds produced earlier in the same season, rather than in the previous year. We’re five weeks ahead of August 1, so I’ll just call it “Solstice growth.”

white oak, witch hazel.

All but one of our hardwood trees have finished flowering for this season and have gone (or are going) to seed. The last will be the American basswood, which grows along the Hop River and on the shores of Andover Lake. The flower buds are fattening, but I don't hope or expect to see open flowers until early July.

Shrubs

It seems that there's always at least one native species blooming at any given moment after mid-April. Most have airy, white blossoms. (Exceptions: the intensely pink wild azalea, and the pink-tinged maple-leafed viburnum and mountain laurel.)

The bloom sequence flows from the woodland edges in mid-March to field edges in early June to full sun in fields and wet places at the solstice time.

Are we at the expected point in the sequence now? Yes! Here are my recent records for the shrubs that begin to bloom just before the solstice, and are highly visible right now. As you can see, there's some spread in my first bloom dates, but it's usually a week or less.

Staghorn Sumac

Rhus typhina

Male flowers (open, looser panicles than the female ones)

2018: June 21

2019: June 12, along Rt. 91

2020: June 23, along Rt. 6

2021: June 15, generally out

2022: June 16, ours, generally out along Mass Pike

2023: June 15, ours, generally out on Rt. 384



Swamp Azalea

Rhododendron viscosum

2018: June 16, Andover Lake Island
2019: June 20, Andover Lake edge
2020: June 13, Andover Lake Island, very first single blossom.
2021: June 17, Andover Lake Island, very first single blossom.
2022: June 13, Andover Lake Island, very first single blossom.
2023: June 15, Andover Lake Island, very first few blossoms.



Silky Dogwood

Cornus amomum

Wet ground, at lake or stream edges.

2019: June 19, ours; June 23, all out on the Lake
2020: June 20, ours.
2021: June 12, ours.
2022: June 14, ours.
2023: June 14, ours, very first.



Maleberry

Lyonia ligustrina

Wet places, lake and stream edges.

2018: June 16, Andover Lake Island
2019: June 23, Andover Lake Island (the first)
2020: June 20, Andover Lake Island (the first)
2021: June 17, Andover Lake Island (the first)
2022: June 13, Andover Lake Island (the first)
2023: June 15, Andover Lake Island (the first)

Thoreau: June 20, 1853. "The bosky bank shows bright roses from its green recesses, the small white flowers of the panicked andromeda, beneath yellow lilies."



I note that Thoreau also saw the maleberry (which he called "panicked andromeda") on June 20 170 years ago!

Common Elderberry

Sambucus canadensis

2018: June 13, Riverside Drive
2019: June 16, along Rt. 6
2020: June 17, Riverside Drive
2021: June 9, along Rt. 6, generally out by June 15
2022: June 14, West Street near Gay City
2023: June 15, Rt. 6



These are the usual suspects for the third week of June. It lifts my heart to see them again at the 2023 Solstice. And I'm looking forward to some elderflower fritters for dinner.



<https://www.finedininglovers.com/recipes/dessert/elderflower-fritters>

Pollinators

The cellophane bees in Andover Cemetery (field notes April 14) have long since gone underground, awaiting next spring. So have the large aggregation of andrenid bees that followed them.

The bees I see every day in greater numbers are the bumble bees. It's a good year for them at our address. They are all over the garden flowers – especially the catmint (*Nepeta* 'Six Hills Giant') and the sundrops (*Oenothera fruticosa*). They're also all over the male staghorn sumac flowers and the silky dogwood. In the past week, I've done some rough estimates of the numbers, and am seeing upwards of 250 every day. I know that it's more than we've ever had before, so I think my efforts to design gardens that provide flowers without a break, beginning in mid-March, are beginning to pay off!

This morning, I saw my first male bumble bee of the season, identifiable by his yellow mustache. This signals that at least one bumble bee queen in our yard has decided that it's time to start producing males and gynes rather than worker daughters.

This bee appeared to be waking up from a night of rest on a daisy flower. (Males, once launched into the world, do not return to the maternal nest at night.) He was not moving, so I went to get my iPhone . . . and he was still there when I got back from the house. He suddenly pooped – a milky squirt – and started grooming himself, using his legs to comb his hair and clean his

antennae. He showed no interest in nectaring on the daisy. As soon as he finished his toileting, he flew away.



Male bumble bee (*Bombus impatiens*) waking up after a night's rest on a daisy.

Here are a few other photo highlights from the past week or so:



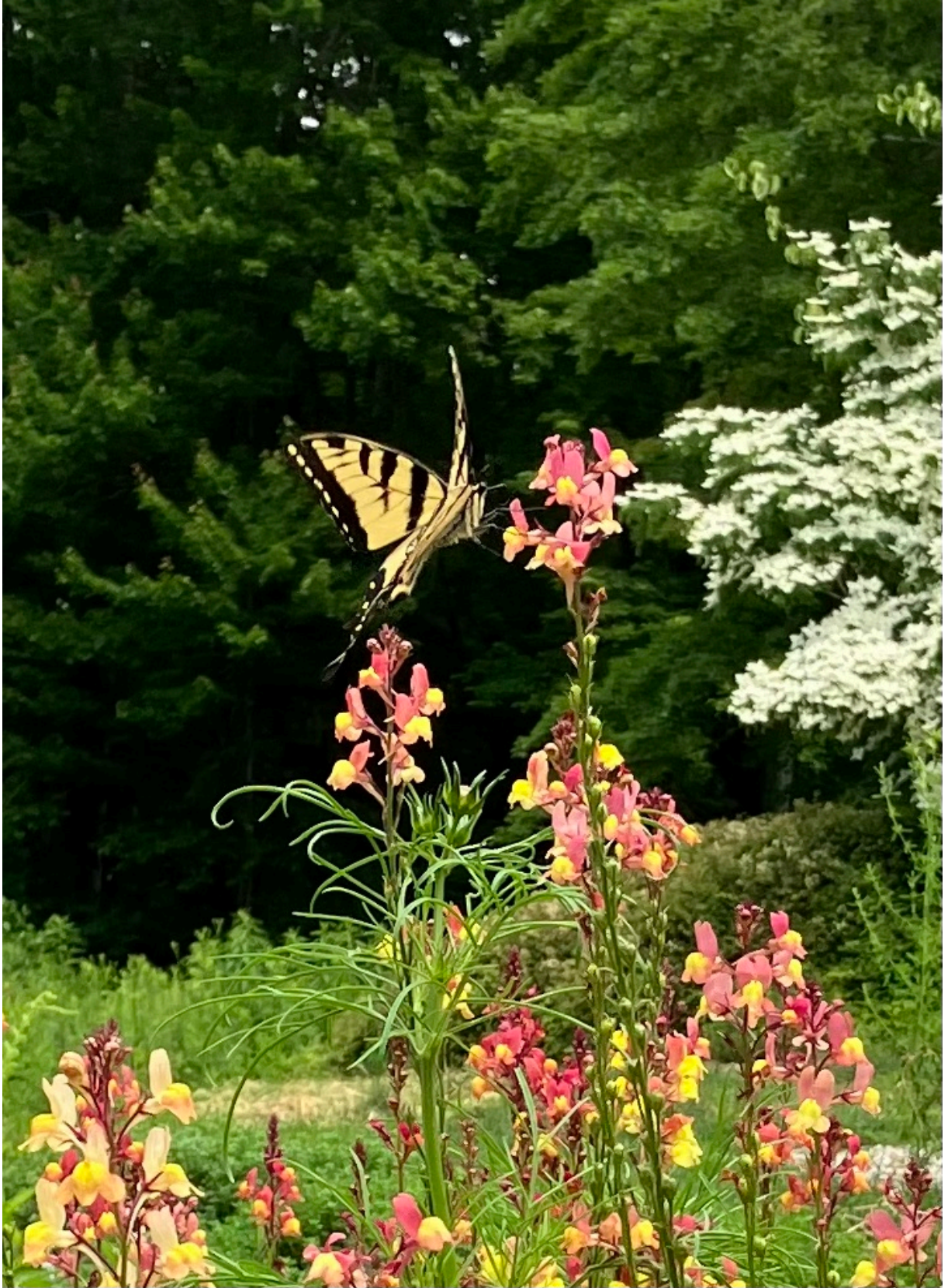
Female bumble bee on cosmos

Notice that the outside ring of disc flowers opens first on cosmos and other Asteraceae. The bees methodically collect nectar and pollen from the outside in.



Male carpenter bee on linaria, June 19, 2023

Unlike bumble bees, carpenter bee males are present throughout the season. You can always tell them from the female carpenter by their yellow faces, and you can tell them from all bumbles by their shiny abdomens.



Tiger swallowtail butterfly on linaria, June 19, 2023



**Pure gold-green sweat bee (*Augochlora pura*) on *Coreopsis lanceolata* in the
Monarch Way Station
June 19, 2023**

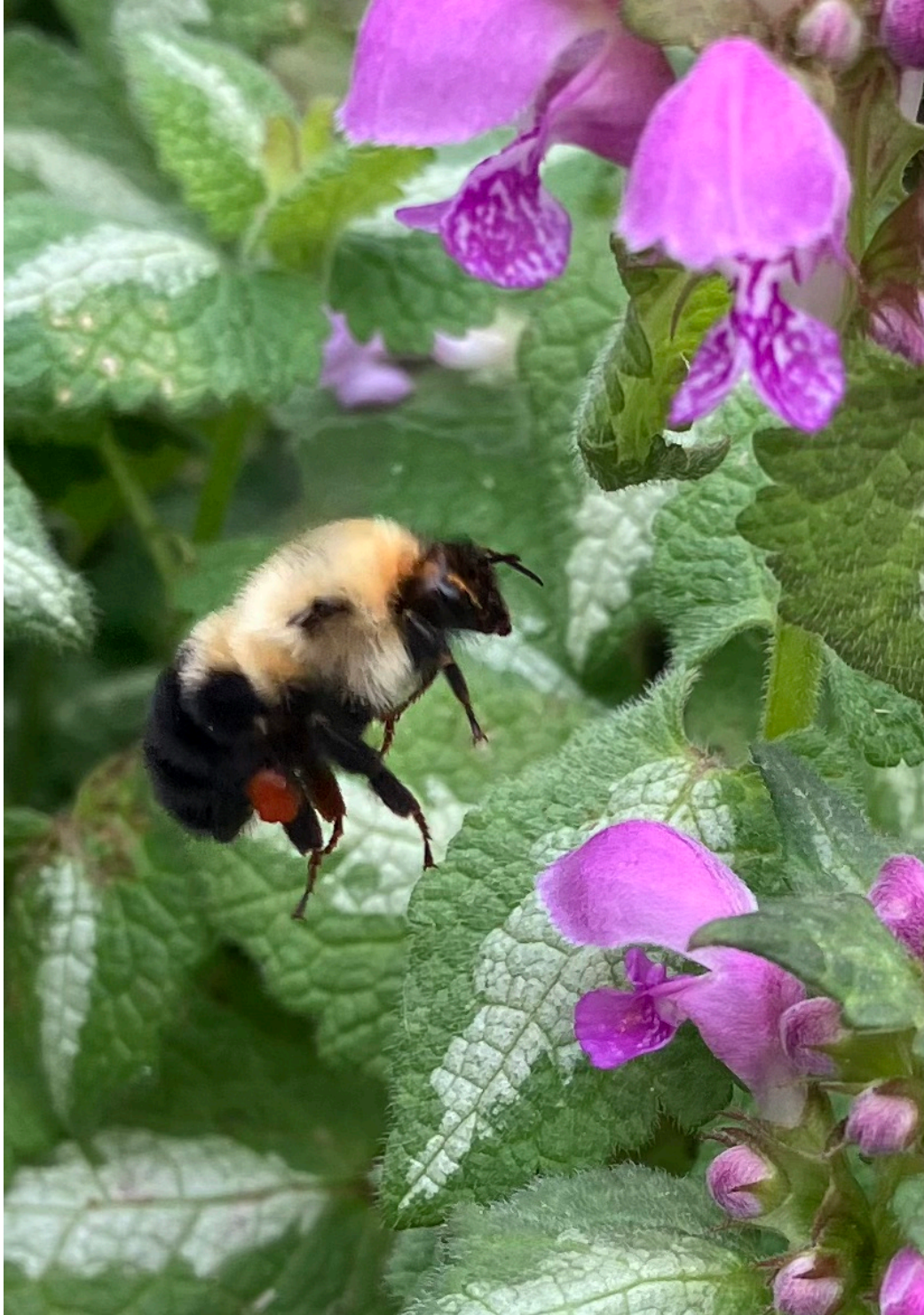
Adult gold-green sweat bees build nests in moist rotting wood.² I wonder if this one has a nest in one of the rotting cedar fence rails that I used to border the Way Station last winter (not because I was thinking about sweat bee nests, but because the wood was free).

² Featured Creatures/University of Florida Entomology
https://entnemdept.ufl.edu/creatures/MISC/BEES/Augochlora_pura.html



Miner bee on kousa dogwood (*Cornus kousa*), June 9, 2023

We hear a lot about the bees' needs for native plants, and it's true that native plants are the only proper food for native specialist bees. But it's also true that the generalist bees which are most common in our gardens – bumbles, honeys, sweat bees, and some miner bees – will use any nectar and pollen that's to their taste, even if it comes from a plant native to East Asia, like the kousa dogwood. I feel much less guilty about having planted this tree when I see the bees all over it, especially since they could just as easily be dining on the native silky dogwood (*Cornus amomum*) blooming just as profusely nearby!



Bumble bee on spotted deadnettle (*Lamium maculatum*), June 8, 2023

Notice the vibrant red pollen the bee's collecting in her corbicula! I get a kick out of the way her yellow fuzz turns orange when it comes in contact with the anthers inside the hood of this flower. Check out the flower itself:



***Lamium* blossom, with anthers open, spilling red pollen, June 9**

And here's another *Lamium* aficionado:



Peck's skipper (butterfly) on *Lamium*, June 9, 2023

Bumble bees wake in the cool of the morning,
Butterflies fly the heat of the day. . .
They stop and smell every flower in the garden
Let's do the same . . . on this Solstice day.

