

Field Notes – First Two Weeks of August
Carrie Crompton

DOG DAYS OF SUMMER

*The quiet August noon has come;
A slumberous silence fills the sky;
The winds are still, the trees are dumb,
In glassy sleep the waters lie."*

—from "A Summer Ramble" by William Cullen Bryant

I hadn't paid much attention to the overstory since the hardwoods leafed out in the last week of May, except when lying in the hammock and looking up through the sugar maple canopy, admiring the way the leaves are arrayed so that each has access to sunlight at least some of the day.



Sugar Maple Canopy

Then came the tropical storm, with winds that made the trees swirl their skirts like flamenco dancers. When it was over, branches that had been high over our heads were arrayed on the ground.



Developing Black Oak (*Quercus velutina*) buds



Immature Black Oak acorns



Developing Red Oak (*Quercus rubra*) acorns and buds / First Shagbark Hickory nuts





Sugar Maple (*Acer saccharum*) samaras Black Birch (*Betula lenta*) buds and developing catkins

Now I see that the oaks, hickories, birches, and sugar maples have been apportioning a lot of their photosynthate to buds and seeds. Usually, I don't notice these developments in August, because they happen so high above my head. I wonder when these changes were triggered; they're certainly in full swing now.

The trees' vascular cambiums have switched over from making to making springwood (large, thin-walled cells) to summerwood (narrow, thicker-walled ones), the dark part of a tree's annual rings. When did that happen? Did it coincide with the beginning of this summer's drought? I find some reports online that suggest that the transition from springwood to summerwood is strongly related to ground moisture, but the trigger still seems to be a bit of a mystery.

Andover is in a state of moderate drought as of this week (according to the National Integrated Drought Information System, drought.gov). We're behind on annual average rainfall for this time of year by about 9 inches. Because rainfall in 2018 and 2019 was above average, the groundwater supplies are (presumably) OK, but the soil moisture? Oh dear, the soil is like dust. This is hard on all our plants. The birches and aspens, always the first to turn, have begun to yellow.



River Birch (*Betula nigra*) leaves, August 11 / Big-tooth Aspen (*Populus grandidentata*) leaf, August 11

The Hop River is still flowing, but its tributary streambeds have been dry or nearly dry since early August:



Blackman's Brook, August 11



Cheney Brook, August 14

I am still watching the insects, which appear to have been unfazed by the storm. (They were able to hunker down below the wind, of course.) The pollinator populations in our gardens seem to be holding steady or possibly increasing; I'm seeing more of the smaller bees, and more wasps and beetles. For the past two weeks, the Mountain Mint has attracted a lot of attention. (The four photos below are of pollinators on Mountain Mint.)



Great Golden Digger Wasp



Great Black Digger Wasp



Wedge-shaped Beetle (check out the fringed antennae!) / Four-toothed Mason Wasp

Dragonflies—“hawks of the insect world”—dart around all day and into the evening, eating gnats, flies, mosquitoes, and other small flying insects. They’re not pollinators, but they are good to have around. Wikipedia says that they are “some of the insect world’s most efficient hunters, catching up to 95% of the prey they pursue.” I feel lucky to have them in our yard. I feel *very* lucky when I get decent photos of them, as their multifaceted eyes see me long before I can focus my iPhone lens on them, and they usually get away before I can get a portrait.



Eastern Pondhawk, our yard, August 11

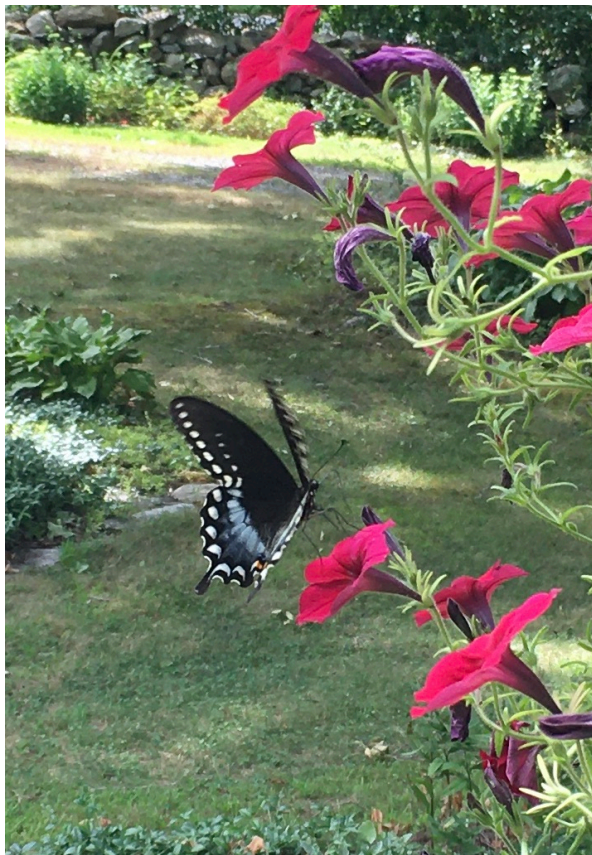


Blue Dasher, Andover Lake, August 11



Halloween Pennant Dragonfly, Bishop Swamp, August 11

And finally, there are butterflies—like flying flowers. The sight of a swallowtail can lift me out of a dog-day lethargy. Watching it, I feel weightless . . .



Male Spicebush Swallowtail

No wonder that in ancient Greece, the word for butterfly (Ψυχή, psyche) was the same as the word for soul.

I'm seeing many Spicebush and Tiger Swallowtails these days, as well as Clouded Sulphurs, Cabbage Whites, and Silver Spotted Skippers, but few Monarchs. Maybe next week!

Crickets and provide a soundtrack to all the dancing of the other insects during the day. Katydid's rackety-rack from sundown until the wee hours of the morning. (But where are the cicadas? I've heard very few so far.)

As the unfolding of summer wildflowers continues, the majority of newly opening species are in the Asteraceae family, formerly known as Compositae. As the old name suggests, this family produces inflorescences ("heads") composed of many individual small flowers. Some of the Asteraceae have only disc florets (like those that make up the brown central "eye" of a sunflower), some have only ray florets (like the "petals" of a sunflower), and many, like the sunflower, have both. In the case of sunflowers, the disc flowers are fertile, each capable of producing a seed, and the numerous ray flowers, each of which has a single large petal, are sterile, serving to flag down pollinators.



Woodland Sunflower (*Helianthus divaricatus*), Hebron Center Trail, August 4

Individual aster flower heads have the same structure as sunflowers—disc flowers and ray flowers—but they are much smaller, and are usually clustered in larger inflorescence structures. I'm seeing two species on my walks these days: Flat-topped White Asters and White Wood Asters.



Flat-topped White Aster (*Doellingeria umbellata*)
Hebron Center Trail, August 4



White Wood Aster (*Eurybia divaricatus*)
Hop River Trail, August 7

The Joe-Pye-weeds, Boneset, and New York Ironweed have large clusters of attractive disk florets, but no rays.



Spotted Joe-Pye-weed (*Eutrochium maculatum*) / Boneset (*Eupatorium perfoliatum*) / New York Ironweed (*Vernonia noveboracensis*)

The goldenrods have minuscule flowers with both disc florets *and* ray florets in huge numbers—hundreds of flowers on each panicle, each one like a tiny sunflower. Each floret produces nectar and pollen. Throughout August and September, a new species—or several—will open every week in our area. Some of them attract specialist bees, but all of them attract the generalist bees as well as butterflies, wasps, beetles, and flies. These first two weeks of August, I’ve seen three new species open: the Late Goldenrod and the Lance-leaved Goldenrod. The Early Goldenrod is still blooming. They are all covered with pollinators—and non-pollinating insects, and insects that prey on both—all the time. A patch of goldenrods is like an insect megalopolis.



Early Goldenrod (*Solidago juncea*)



Dark Paper Wasp on Early Goldenrod



Late Goldenrod (*Solidago gigantea*)



Lance-leaved Goldenrod (*Solidago graminifolia*)

According to what I read online, smart honeybee keepers let the bees keep all the honey their bees produce in goldenrod season; it's not delicious to humans, and the bees need it to get through the winter in their hives. The native bees don't produce honey from the late-season flowers; but the queens that will survive the winter will do so because they have bulked up on this feast.

There's more going on around us that anybody can notice, and it's challenging to keep moving in the heat and humidity, but I hope you are enjoying the bright colors of this transitional time between high summer and fall. The days are getting shorter. We have only 14 hours of sunlight now, comparable to the last week of April. The slant of light really is a little different at any hour of the day than it was a month ago.

Ninety percent of the native/naturalized tree, shrub, and wildflower species I look for in a season have already bloomed. Of those that have yet to bloom, more than half are composites—asters, goldenrods, beggar-ticks, and ragweeds.

More notes at the end of August. Keep well, and keep cool.

A preview of coming attractions:



Fox Grapes ripening along shores of Andover Lake