

Date and time: Saturday June 03 2017 1:50 - 5:50 pm

Weather: Pr 7 mm; RH 37%; BP 101.8 kPa; sun/haze; SW 00-15 kmh; T 22° C

Contents: Hunting arthropods on plants and in leaf litter.



Mother Raccoon takes four kits back home to catch up on their sleep.

The weather on site was perfect for arthropod hunting. Alone for this visit, I could go at my own pace, starting with a single sweep in the Upper Meadow. I should explain that what I call a “sweep” consists of from 10 to 20 strokes. To keep the net open for each stroke, the net must be in a constant state of back-and-forth motion to maintain air pressure on the little guys already in there. To do this, one may use the following pattern: backhand-forehand-backhand-forehand- etc. One must also be somewhat cruel to vegetation, sweeping hard enough to dislodge inhabitants but not enough to break stems or tear off leaves — somewhat inevitable in any case. At the end of a sweep, fold the net tightly back over the rim.

Today I carried out six sweeps in all. A sweep may take only a few minutes, but opening the bag is another matter. Today with each of the sweeps, I carried the net back to the table in the Nook where I could examine the contents without kneeling, straining my back or folding my stiff knees too far. On each occasion I opened the bag very gradually, watching several ants fleeing their prison — always the first to leave. Then come a variety of small bugs and flies that take off before you can get a decent image. Everything left is fair game. But even in the case of Plant Hoppers and Tree Hoppers, one must act quickly before they rocket off to parts unknown.

After four more sweeps in the Lower Meadow Area, I repaired to the Elbow where a sixth and final sweep resulted in one more trip to the table in the Nook. The take at the Elbow was not as plentiful as any of the meadow sweeps. One of the latter, from the interior of the Tree Regen Zone was richest of all in species. It kept my camera and notebook busy for a good half hour. I suppose the higher biodiversity in fauna reflected the higher biodiversity in flora, with shrubs of Ninebark and Grey Dogwood interrupting the steadily declining goldenrod populations.

Between sweeps, I couldn't help noticing that while the mosquitoes were becoming more plentiful, their deadly enemy, the Ebony Jewelwings, were already appearing. Also, I heard many bird calls that I couldn't identify and that frustrated me. I am at best an indifferent birder, knowing only a few calls. But there are plenty of birders visiting the site and (still) adding to the list which now runs to some 146 species.

Birds: (9)

American Crow (EW); American Robin (FCB); Blue Jay (GF); Common Grackle (FCB); Common Yellowthroat (UM); Great Crested Flycatcher (UM); Northern Flicker (EW); Red-bellied Woodpecker (GF); Rose-breasted Grosbeak (GF).

Readers can see the difference it makes, with much shorter bird lists (9) when I visit the site alone, than when Pat is here (18)!

Phenology: Most trees now leafed out; first Ebony Jewelwings appearing.

Biological Inventory Project (ATBI)

New Species: (25% new)

Hieroglyphic Sharpshooter	<i>Neokolia hieroglyphica</i>	LM KD Je03/17
'Yellow-collared Soldier'	<i>Podabrus</i> [<i>rugulosus</i>]	LM KD Je03/17
'Tarnished Snout Beetle'	<i>Sciaphilus asperatus</i>	BCF KD My27/17
Dogwood Twig Borer	<i>Oberea tripunctata</i>	KM KD Je03/17
'Red-eyed March Fly'	[<i>Bibio</i>] sp.	LM KD Je03/17

Species Notes:

Sharpshooters look a lot like Planthoppers, but they tend to have a pointed nose. *Podabrus* is not an easy genus to work with when it comes to distinguishing species, but this seems the most likely one — which is what the square brackets mean. The next two are reasonably straightforward; readers are urged to enter the word “bugguide” along with the name of the species into their browser. You will see the species I am talking about. The March Fly gave me some trouble; while I am reasonably sure of the family (Bibionidae), our specimen has red eyes.

Recurring Species:

Long-jawed Orbweaver (*Tetragnatha elongata*); Long-jawed Orbweaver (*Tetragnatha straminea*); Peppered Jumper (*Pelegrina galathea*); Ebony Jewelwing (*Calopteryx maculata*); Tarnished Plant Bug (*Lygaeus lineolaris*); Meadow Plant Bug (*Leptopterna dolabrata*); Alfalfa Plant Bug (*Adelphocoris lineolatus*); Four-lined Plant Bug (*Poecilocapsus lineatus*) — adults plus nymphs; ‘Bordered Stink Bug’ (*Mormidea lugens*) Brown Stink Bug (*Euschistus servus*); Green Immigrant Leaf Weevil (*Polydrusus formosus*); Six-spotted Tiger Beetle (*Cicindela sexguttata*); Northern Crescent (*Phyciodes cocyta*); Eastern Comma (*Polygonia comma*); Northern Paper Wasp (*Polistes fuscatus*).

Holdovers & Discards:

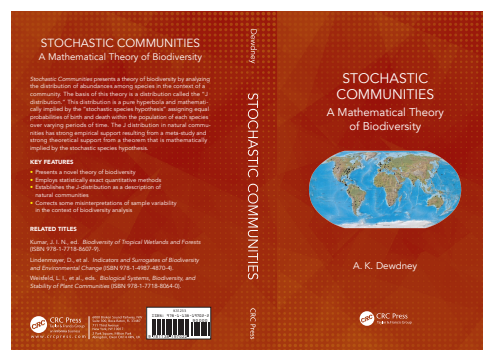
Possible *Euphoria* beetle; grasshopper nymph; red-legged Dwarf Spider; bug nymph copulating with an adult (!); small black bug; green caterpillar; “looper” moth; mosquito; unidentified jumping spider.

Announcement:

My new book on biodiversity is just out from CRC Press. The title may be off-putting to some: *Stochastic Communities: A Mathematical Theory of Biodiversity*. But the “mathematical” part merely consists of occasional interruptions to a text that is easily understood by the “intelligent lay reader.”

The book makes a major contribution to population biology by pointing out errors in past methodologies and by providing a comprehensive theoretical framework that makes sense of population changes over time. It also outlines statistically exact tools for estimating richness of communities within any of the five kingdoms of life.

Access CRC page



@ goo.gl/tnFpSS
Copy into browser.

Image Gallery (below)



Stout Blue-eyed Grass (*Sisyrinchium angustifolium*) peeps out of grassy vegetation in open meadows and in open areas of forests. Not really a grass at all, Blue-eyed Grass belongs to the Iris family Iridaceae.



The “Brown” Stink Bug comes in many shades, including this greyish variety shown above. Most Stink Bugs feed on plants, using their beak To pierce the epidermis and then to suck out the juices.



I realize now in retrospect how clever it was of me to mount Trail Cam #3 right next to a healthy growth of Climbing Poison Ivy. The camera is strapped to a young Hackberry and points out at Fleming Creek, visible in the left background. The coverage area includes a fordable rapids. Tamper with that camera at your peril!