

Date and time: Thursday October27 2014 2:25 - 6:50 pm

Weather: Pr 0 mm; RH 59%; BP 101.5 kPa; SE 0-20 kmh; ovcast/sun; T 18° C

Activity: Maintenance. more species, and a flying lesson.

It was a beautiful day for the time of year. I came alone, assistants being unavailable. As a kind of last gasp for ATBI arthropods I made some cursory sweeps of vegetation, now dying and drying. Nought but a tiny Neriene Spider, new as it happened. The only insects to be found clung to the trailer walls having a sunbath, one of them a new Plant Hopper, another a Sarcophagid (?) fly.



I took a walk to the river in order (finally) to return all the mussel valves to their point of origin. (We do not encourage what might be called “sampling erosion”.) The clay beach was still mostly submerged, so I had to be content with a view from the River Landing. The downstream visibility is barely 300 m, owing to a southward bend, as above. Upstream visibility is similarly limited. Before I left, a pair of Great Blue Herons flew overhead from the opposite shore.

Back in camp, I cleaned up the remains of last week’s Fungus Workshop then headed down to Fleming Creek, surprised when I got there at the clarity of the water. One could actually see the bottom! I had brought down the large pickle jar with three rocks taken from the rapids a month ago. Returning the rocks to the creek, I rinsed the jar and was prepared to ascend back up to the trailer when I

noticed a struggling Katydid that had inadvertently jumped into the water. It swam to shore by “crawling” through the newly viscid medium, turning out to be a Short-winged Meadow Katydid (not new).

Back once more in the camp area, I laid out a “heliport” from which I proposed to launch our new quadcopter (a mini-drone) for its maiden flight. Eventually I hoped to take aerial photographs of Newport Forest with the miniature on-board camera.



Quadcopter controller on the left, drone on the right. It may look like a “toy” but it turns out to be a well-engineered precision instrument, with a price to match!

A walk through the Regeneration Zone along the old watering trail brought no further arthropods to view, but I took some good closeups of two kinds of galls on young Black Walnuts. I will probably spend the winter going through our rather large collection of gall images to see what can be made of them.

I was taking a break in the Nook when a Mourning Cloak — surely the last of the season — flew through, reminding me that it was time for the quadcopter’s maiden flight. I carefully connected the onboard electronics to the flight battery, completely forgetting to connect the micro-cam. Pressing a red trigger on the controller is supposed to cause the cam to take an image (or even a video if one wishes).

As I powered up and slowly eased the throttle forward, the quadcopter rose like a giant insect. Onboard gyros kept the machine level as it hovered a few feet off the ground. More throttle. Up the insect rose to about fifty feet. Amazing! Then the wind started up. Uh-oh. I hadn’t learned about steering yet, so I thought it safer to

throttle back. Overdid it. The quadcopter plunged down into the goldenrod where it rested a few feet off the ground. Retrieval was easy. No more flights for now. I had a late lunch in the trailer by which time it was sundown. All day I had been hearing distant harvester machines at work. On the way out of the gate, I noticed a grain truck parked by the Hurdle house and a harvester, lights ablaze, taking off the soybeans behind the house. Driving home, I saw other harvesters at work along #2.

Birds: (5: I even put out birdseed.)

American Crow (FCF); Blue Jay (GF); Canada Goose (LM); Dark-eyed Junco (Nk); Great Blue Heron (TR)

Note: I have no explanation for the low bird counts this season compared to our norms. Lately we have been omitting bird counts as too low to be worth posting.

Phenology: Goldenrod now fully in seed, presenting a uniform grey appearance.

New Species:

	insects	
Predatory Stink Bug	<i>Apoecilus</i> sp.	LM KD J129/13
‘Yellow-banded Leafhopper’	<i>Coelidia olitoria</i>	GF KD Oc27/14
‘Two-spotted Soldier’	<i>Cyrtomoptera divisa</i>	LM KD J107/13
‘Red-marked Horsefly’	<i>Tabanus [calens]</i>	RL ecKD Au17/13
	spiders	
‘Redback Mesh Weaver’	<i>Emblyna hentzi</i>	LM KD Oc02/14
‘U-banded Crab Spider’	<i>Mecaphesa carletonica</i>	LM KD Oc02/14
Filmy Dome Spider	<i>Nerienne radiata</i>	LM KD Oc27/14
‘Minute Jumper’	<i>Talavera minuta</i>	LM KD Oc02/14

Notes: Once more, a few of the species listed above are from neglected 2013 records. The two spiders in the first image below, along with the miniature *Talavera* spider date from two weeks ago. The rest were picked up today, in spite of a dearth of arthropods. The *Cyrtomoptera* beetle took several weeks to ID (off and on), until I finally realized it was a Soldier beetle and not a Cerambycid. We note that as the ATBI project continues, we’re getting down to short strokes, as it were, with a trend toward ever smaller arthropods.

Coming soon: A climate change report that looks carefully at the new Svensmark theory and concludes that the coming winter will be just as severe in eastern North America as it was in 2013/14. Forget global warming. This is solar physics!

IMAGES:



Struggle to the death: the Crab Spider *Mecaphesa carletonica* has used its fangs to take hold of the “head” (cephalothorax) of a hapless Mesh Weaver, *Emblyna hentzi*, like a pair of ice-tongs. Digestive enzymes secreted through the fangs will penetrate the Mesh Weaver, dissolving its tissues into a liquid which can then be imbibed by the crab spider, now using its fangs as soda straws. Game over for the *Emblyna*. The ≈ 1 mm weave of the insect net implies that these are not large spiders.

All spiders have hollow fangs.



A nice eight-point buck poses for Trail Cam #1 at The Hole. Over the next month, as the breeding season nears, the horns will become much larger. I cannot account for the broad ridge running down the forehead. Some male White-tails have a development like this, but nothing so pronounced. Suggestions are welcome. Measuring rod in background mars the image.