

Time: Thursday 2:10 - 6:15 pm

Weather: PC 6mm; RH 61%; BP 101.3 kPa; calm, sun/cld; T 30° C

Activity: collecting plants (Kee)

I had planned today to take the canoe upstream to Clam Island, an extensive shoals that harbours a rich assortment of mussels. Steve had agreed to assist me, but was late arriving on site. While waiting for Steve, I decided to carry out the first installment of this year's Bee Protocol, an easily implemented survey method to get a handle on annual numbers. The protocol was first implemented in 2009 in res-



Jonathan Dewdney

ponse to alarming stories in the media about worldwide declines of pollinators, particularly honeybees. Today the Lower Meadow was abuzz with bees, flies, wasps and butterflies and I muttered “What decline?” to myself as I proceeded from station to station to carry out the succession of two-minute counts.

I had just finishing the count when Steve's van rolled in. He looked wan and a bit unsteady as he stepped out. "The old problem is back!" He referred to cardiac arrhythmia, a recurring debility that strikes Steve with unpredictable episodes that can be years apart or only months. He was *hors de combat* for the day, but we sat in the Nook to chat for a while, discussing the book Dancing With a Ghost by Rupert Ross. (Google it.) I finally saw him off in a cloud of encouraging words.

No trip to Clam Island! I would have to change gears quickly. One of the day's projects involving the canoe had been to paddle up Fleming Creek to see if the beavers were building a new dam. Should I simply walk over to the creek and follow it? The veg would be tough going. I finally decided simply to visit the river and collect plants, shifting the focus from arthropods to vegetation. A Gray Tree Frog called from the creek below, reminding me to check the camera at the rapids before I left for the river. I'm glad I did, as we got our first trail cam record of a Great Blue Heron. It was fishing in the rapids.

The river was up slightly, thanks to the aftermath of a weakened tropical storm Isaac. A Great Blue Heron took wing from the rapids downstream as I ventured onto the clay-and-gravel beach. At my feet, a flash of red caught my attention. A grasshopper had just landed nearby and instantly became invisible. Searching, I finally found it, perfectly camouflaged. It was a "Beach Grasshopper" or "Seaside Locust" depending on whom you talk to: *Trimerotropis maritima*. At Newport Forest we are barely within the northern limit of this species. It isn't new to the list, but I have been following this species on occasion, from Nymphal stages in the spring to full-blown adults in August.

I set about to collect plants, knowing that the exercise was likely to be futile; our plant list, at least when it comes to the vascular species, must be getting close to completion. Dare I say 85% complete? The last bit is always the toughest. It surprises even seasoned field biologists to learn that almost no matter how large the sample, the list of plants you have seen just once (called "singletons") remains stubbornly long, with still others waiting in the wings. (Population Biology is what I actually do.)

I collected a very squat sedge-like plant, a few asters (just in case), and several other plants with daisy-like flowers to take home to Pat. She later identified them as the New England Aster, Nodding Bur Marigold, Beggar Ticks, Swamp Beggar Ticks and Lanced-leaved Coreopsis. She thought none of them were new, but a search of our list revealed that one of them was (see below) so the exercise paid

off. In the meantime, she still has one or two specimens in suspension.

A chipmunk raiding the bird feeder reminded me it was time to go, so I packed up, drove out to the gate and off down the road. I stopped at the Fleming Creek bridge nearby to inspect the dam built by beavers last year. If water has backed up behind it, there is probably a new dam downstream from the earlier one. The water was backed up.

Birds: (7)

American Crow (BCF); American Robin (RSF/MB); Blue Jay (GF); Great Blue Heron (TR); Northern Cardinal (BCF); Red-bellied Woodpecker (GF)

Phenology: Goldenrod now 95% in bloom (at peak) but very few Asters, lots of Silver-spotted Skippers around -- saw about half a dozen.

New Species:

Painted Lady *Vanessa cardui* UM EC Au26/12

Lanceleaf Coreopsis *Coreopsis lanceolata* MB kd/PD Sp06/12

Note: The first species was reported by Erin Carroll on August 16, but I confused the Painted Lady with the American Lady (already on the list), telling her “Thanks, but we already have it.” Wrong.

Bee Protocol:

I established 10 counting stations set 6 metres apart along the old watering trail through the Regeneration Zone portion of the lower Lower Meadow. The trail meanders through several patches of goldenrod and other plants in a more or less random fashion, giving us a representative set of habitats. I counted pollinators in 7 categories, as below: These represent the sums of counts over stations.

Honey-bees	Bumble-bees	Other bees	Small flies	Large flies	Small wasps	Large wasps
87	00	02	06	13	00	02

It amazed me that, in spite of seeing bumblebees commonly in recent weeks, none

were in evidence on this occasion! The area covered at each counting station is given by the formula

$$A = 9\pi = 28.27 \text{ sq m}$$

A one-hectare area therefore has $10,000/28.27 = 354$ times the area of a single counting circle (to within 0.001) and if the average station held 8.7 honeybees, the total number working a one-hectare area (the approximate size of the Regen Zone), would be approximately 3077. This figure is certainly not an accurate count, but an estimate with an error that is probably less than 10% 95% of the time, as the statisticians like to say.

In past years the highest daily counts were 4951 (2009) and 5871 (2010). No count was taken last year. We are probably still not at the peak of the season. In any case, we do not appear to be in the midst of any marked decline. We plan to report the next few counts, then give a final report in a few weeks time.

Readers Write:

Mora Gregg, Winnipeg, Manitoba: "I am still enjoying your reports from Newport. These days I am hosting a rabble of mourning cloaks (I am pretty sure they are mourning cloaks) who are feasting on ornamental fruit. I am a little bit concerned that I might step on one because they blend in so well with the background. My little camera is not designed for this type of photography but here is a picture anyway." (See IMAGES.)

New Reader Oussama Hamza from Fredericton, New Brunswick: "These are very interesting bulletins to read and a relief from the electric/concrete madness!"

Patty Frank from San Diego, California: "Your account of the river trip is wonderful, a trip back into history. I so appreciate how Indian names explain so much, like the Delaware word for vulture being "dirty" hawk, not only how the bird looks when it's eating carrion, but the thought underlying the word, probably, associated with eating dead things. Also enjoyed the children all dressed up for the pow-wow."

IMAGES:



These pretty blossoms of *Coreopsis lanceolata*, a common plant in the area, relieve the otherwise barren aspect of Mussel Beach. The plants grow at the foot of the river bluffs, right next to the beach. Pat was sure she had already logged it, but the datum may have fallen between the cracks in our communication.



Cousin Eric sent this image of a Ground Hog up a tree near Cambridge, Ont.. I didn't know they could do that! Or is it a Tree Hog?



Mora Gregg's Mourning Cloak. These butterflies overwinter as adults.