Weather: precip. 25 mm; RH 78%; BP 101.3 kPa; sun/cloud; calm; T 36° C

Purpose: to collect insects

Participants: Kee and (later) Darren

My purpose today was to collect insects in the Lower Meadow, but when I stepped out of the van the heat and humidity hit me like a sledgehammer. The temperature (97° F for our American readers) was one of the highest we have ever recorded on site. A brilliant method I had devised for collecting insects in the meadow would have to put off for another day, as I couldn't face the idea of working in the open.

"Hydrating" with a Coke in the shady Nook, I heard a tree crash over down in the Fleming Creek floodplain forest. Was it a Bitternut snag? Mustering courage for a walk to the river, I set out for the gamut of mosquitoes known as Edgar's Trail. I was attended on the way by Ebony Jewelwing Damselflies, who snatch mosquitoes out of the air and dine on them. "The enemy of my enemy is my friend."

Mussel Beach brought no relief. I had forgotten about the double-sun effect when one is near water on a sunny day. Stifling. My clothing was soaked, so I returned to the base camp with background music supplied by an Oriole across the river.

Although my "brilliant" scheme for collecting insects in the Lower Meadow had to wait, Providence intervened with two finds: In the rain gage I found a new flower beetle and later, on the trailer deck, I found a new grasshopper with distinctive brown wings and a V-shaped insertion behind the pronotum. (See new species below) Strangely enough, I had earlier figured that two new species would be a reasonable return on my investment in the new collecting method.

I decided to do some kick-fishing in the creek rapids. In rubber boots and with my trusty, all-purpose aquatic net, I went down the hill to the creek. Kick-fishing in the rapids is fun and almost always productive: Facing downstream, you jam the hoop of the net between some rocks ahead of you and then kick the rocks upstream of the net, dislodging all sorts of critters, from insect larvae to darters, minnows and crayfish. Interesting finds are placed in a water-filled baggie for closer examination. On this occasion I found a Greenside Darter, an unknown minnow, several Clearwater Crayfish, an aquatic beetle larva, nothing exciting.

I had barely been back in the Nook a minute, when Darren's Jeep rolled in. He had come to borrow my "wolf ears" a high-sensitivity headset that picks up

virtually all ambient sounds, from faraway birds to internal digestive noises. In the middle of our chat in the Nook, an odd-looking butterfly flew in to alight on the cold drink bag. It wasn't an anglewing or fritillary, but somewhat darker. I tiptoed to the trailer to retrieve the butterfly net. We put the newcomer in a baggie (see IMAGES below) and checked a handbook of Southern Ontario butterflies. Whoa! A Tawny Emperor: "Uncommon" but already on our list, thanks to a butterfly expert who visited Newport Forest a few years ago. Neither Darren nor I had never seen one before today.

After Darren left, Lily visited the Nook along with 5 of her kits. It must have been hot in those raccoon coats!

Birds: (15)

American Robin (GF/E); Blue Jay (GF); Bobolink (HL/UM); Common Flicker (EW); Common Grackle (GF); Common Yellowthroat (LM); Eastern Towhee (GF); Field Sparrow (UM); Mourning Dove (BCF); Northern Oriole (TR); Redbellied Woodpecker (Tr); Rose-breasted Grosbeak (Tr); Song Sparrow (TR); Tree Swallow (Rd); Yellow-billed Cuckoo (HB); **Best bird** = Bobolink

New species:

Northern Green-striped Grasshopper Chortophaga viridifasciata LM KD Jl19/11 'Four-striped Flower Beetle' Trichiotinus affinus LM KD Jl19/11

Note 1: Although it was dead, this beetle led me on a bit of a chase. It was obviously a Scarabeid, so I checked the mug shots for that family in Marshall's book, getting a superficial match with the genus *Euphoria* (!), but falling short in the presence of a pair of white stripes on either side of the abdomen and a pile of fine hairs on the underside. None of the many images I checked on the web had the two white stripes. Backing off, I checked other genera and, two websites later, got a match with *Trichiotinus*. Bingo. There were the paired white stripes on either side of the abdomen. Area checked, habitat checked, and so on. The name included the Greek word "trichos" (hairy), referring I suppose to the furry pile.

Phenology:

Monarda (aka "Bee Balm", "Bergamont") bloom has peaked.

IMAGES:



One way to examine butterflies (and other small animals) is to slip them into a baggie, taking care not to damage them. Here Darren holds up the Tawny Emperor. That is not a misshapen finger in the upper right, but Darren's leg.



The Northern Clearwater Crayfish is one of the most common in the Fleming Creek riffles. (with apologies for the terrible focus -- it's time I got a better digital camera)