

**Date and time:** Thursday Sp05/13 2:10 - 9:00 pm

**Weather:** Pr 0mm; RH 68%; BP 102.4 kPa; clear, N 5-15 kmh (breezy), T 23° C

**Activity:** counting bees and a visit to the the East Ravine

As we descended from the Upper to Lower Meadow, we flushed a pair of magnificent Wild Turkeys from the road. Those, combined with the Turkey Vulture circling overhead, would be our largest birds of the day, closely followed by a flock of Canada Geese later on. We were still setting up camp, when Pat called out. “Come and see these green bees.” She had just removed an old rag from the trailer bench, uncovering a horde of metallic green insects. “Are they Cuckoo



bees,” I asked. Later, we would realize they were Sweat Bees or Halictids. They exemplify a leitmotif of the ATBI effort: life *on* the trailer. There’s always something on (or in) the trailer. Today, however, neither the sweat bees nor the Bristle-tail on the trailer deck, turned out to be new.

Speaking of bees, the next order of business was to conduct the first count of our annual Bee Protocol. Surveyor flags six metres apart along the counting trail marked the stops. Each stop took between one and two minutes while I counted all pollinators in seven “morpho-groups”: Honeybees, other bee species, bumblebees, large wasps, small wasps, large flies, and small flies. Judgments between “large” and “small” were made on the basis of standard insects like yellowjackets and house flies, respectively. The Honeybee counts appeared to be up. Did this reflect a rebound in the local commercial honey-producing colonies? One set of bee boxes is about one km away, another ia at 2.3 km. Based on the evidence for on-site colonies of wild bees, I would guess that most of the Honeybees I counted today were wild. (See the Summary below.)

Our first foray took us to the Upper Meadow. Pat wanted to search for new plants along the east ravine, which borders the Upper Meadow. We parked by the water tank (used for watering newly planted trees in the Regen Zone) and walked to the apple trees near the ravine. These appear to be relict varieties, planted long ago, perhaps even “heritage trees”. The fruit was still rather hard and barely sweet.

I inspected several nearby plants, startled when a Meadow Jumping Mouse went boing-boing-boing past my feet. Following it, I flushed a small hawk that, for a split second, I thought was a rock dove. It flew over Pat’s head and she reported a flash of blue, leading her to believe that it might been an American Kestrel.

While Pat ventured down the ravine a bit, I inspected the branches of a nearby apple tree, finding a Hickory Tussock Moth caterpillar on one of them. An Eastern Redcedar growing nearby had several galls on its upper branches. They looked like miniature boxing gloves, leathery brown, with a few bulges and creases. Next spring they will develop pores from which orange tufts will sprout to release spores of the Cedar-apple Gall. Pat came back up from the gully, near the end of her energy, to report a whole stand of Staghorn Sumac that we didn’t know about. She brought me the gift of a pouch gall that would become our only new species of the day!

On the way back to the car, I pointed to a tall plant with leaves like a dandelion. “Looks like Prickly Lettuce,” she said. “Could be new.” She picked it. We drove back to camp for a break in the Nook before heading to the river. Pat proposed an interesting contest between us -- or one that might become part of a useful class project. Set two one-metre frames at random in a given area and see who can find the most species of any taxon inside them.

Before dinner Pat, with a little help from me, added a new coating of protective stain to the trailer deck. After dinner we headed for the river, where we saw a Killdeer, Cedar Waxwings and a flock of Canada Geese. Returning to camp we set up an electronic vigil for a “mystery bird”. (See IMAGES below.) We left after dark, with little to show for the effort.

**Birds:** (15)

American Crow (BCF); American Robin (BCF); Blue Jay (GF); Canada Goose (TR); Cedar Waxwing (TR); Common Grackle (BCF); Common Yellowthroat (BCF/LM); Eastern Screech Owl (BCF); Field Sparrow (LM); Gray Catbird (GF); Killdeer (TR); Mourning Dove (GF); Song Sparrow (Nk); Turkey Vulture (UM); Wild Turkey (LM)

**Phenology:** Goldenrod 100% in bloom

**Honeybee Protocol:** Today we counted 107 Honeybees along the counting trail. Total area under count was 452 sq metres, so a fair estimate of the number of Honeybees per hectare would be  $(10000/452) \times 107 = 2,367$  (give or take). Since the Regen Zone (where the count was taken) is approximately one hectare, that's roughly how many Honeybees were out there today. Assuming the same density held for other areas of oldfield covered by goldenrod spp, there must have been around 10,000 Honeybees at work today on the property.

**New Species:**

Red Pouch Gall                      *Melaphis rhois*                      ER pdKD Sp05/13

**Old Species:** (illustrating the need for a new approach)

Prickly Lettuce (*Lactuca serriola*) was found by Jane Bowles in 2007. A Jumping Bristletail (*Machilis* sp.) was spotted by Stan Caveney, also in 2007. The Sweat Bee (*Agapostemon splendens*) was found in one Nina Zitani's malaise samples of 2006. The Northern Crab Spider (*Mecaphesa asperata*) first appeared in 2013.

**Mystery Bird Project:** On recent evenings, when one or both of us have stayed beyond sunset, we have been hearing a descending rasping call like the complaint cry of an Eastern Gray Squirrel, but higher and louder. What is it? A discussion with expert birder Dave Martin resulted in an attempt to record the call.

## IMAGES:



This Jumping Bristletail (family Machilidae) represents a very ancient order of insects. The Order Archaeognatha apparently originated in the Devonian Era, along with the earliest dragonflies and other forms.





A focusing cone (reverse megaphone, if you like) is set on a tripod and aimed at what has been the consistent area of origin of the calls in Eva's Woods. A miniature recorder sits inside the cone. Although he regards the probability of a Barn Owl as very low, Dave suggested that we try to record the sounds on the merest chance that a Barn Owl might be lurking in those woods. This bird has become very rare indeed.

We waited until well past sunset with the recorder running. Farm dogs barked in the distance, a Coyote sang, geese honked over the river and distant traffic hummed along Hwy Two. No mystery calls, but a proof-of-concept in any case. The recorder is the size of a cellphone, cost us \$75 at The Source, and has a built-in USB key. Handy and easy to use.