

Time: 2:35 - 5:45 pm

Weather: PC 5mm; RH 48%; BP 101.8 kPa; clear; SW 5-15 kmh; T 36° C

Activity: maintenance with Kee (weather station) Steve and Neil

When I arrived on site Steve and Neil (up from New Jersey for the big Labor Day pow-wow at Moraviantown) were already hard at work deep in the forest, so I set to work at moving the weather station instruments to their new post and dismantling the old one. I couldn't help noticing during a break that although the goldenrod in the Lower Meadow was now 60% or so in bloom, there were individual plants already setting seed, turning brown in the process, as below, with several



plants already “browning out” -- and many more to come. We cannot recall this happening so early in the Goldenrod blooming season. I attribute it to sparse groundwater in the top metre or so of soil, deeper groundwater from last year's plentiful rains remains sufficient for the trees. There were few insects flying

around the Lower Meadow, perhaps owing to the hot dry winds blowing from the southwest. There were few birds about, as well, so no list for today.

Steve and I had set the post for the new weather station over a week ago and the instruments could now be mounted: hooded thermometer, wind vane and velocimeter, rain gauge and snow pail. These weather logs have been maintained for 12 years now with an average of 55-60 records a year, including about 12-15 visits in the winter season.

Steve and Neil came out of the woods around 4 pm looking like death warmed over. They needed drinks -- and fast. I opened the hamper. The main trail had been entirely groomed and all deadfall cut away. Steve also reported that the beaver has taken out a second tree from the river bluffs, this one a dead elm. We speculated that this tree was destined for a new dam.)

As usual, I was invited down to the powwow, so we set out as soon as Steve and Neil were re-hydrated.

New Species: (a search of old files turned up a grasshopper I neglected to record.)

Longhorn Band-wing

Psinidia fenestralis

Nk KD Sp08/10

Bee protocol:

It's (high) time for the bee protocol, a flexible technique for taking census of honeybees and other pollinators. One establishes n counting stations, each marked by a surveyors flag, along a counting trail. The exact size of n doesn't matter, except that the larger it is, the more precise the count becomes. The stations must be at least six metres apart along the trail. The counter spends between one and two minutes at each station, counting all pollinators within three metres. The pollinators are sorted into classes: honeybees, bumblebees, large wasps, small wasps, large flies, and small flies, with size boundaries easily determined. The counts are averaged over all stations and then converted into densities, making it easy to estimate the total number of pollinators at work in the Lower Meadow at the time.

In 2009 and 2010, the protocols were started in late July and our goldenrod phenology data shows that the main goldenrod bloom started earlier in those years.

IMAGES:



Steve (right) and Neil (left) finish loading Neil's van with the weed-eater and chainsaw prior to the departure for Moraviantown. Neil drives an '07 Freestar, while we have an '06 Freestar (background) specially equipped with big-block all-terrain tires for off-road operations.



Ready for the Powwow: two young dancers get used to their outfits and practice a few steps, while proud parents look on. Friday evening marks the official beginning of the event, gathering momentum slowly. Dancers gather at the Community Centre, while singers and drummers fill the evening with ancient songs and the steady throb of drums.

Moraviantown was founded in 1790 by the Moravian Fathers who had taken one division of the Delaware people under their wing, doing what they could to protect them from the chaos of the American frontier on one hand, while undermining their ancient spiritual life, on the other.

At the time when Moraviantown was founded, there were few European settlers in the area. The Flemings, a Scottish family, pioneered a farm a mile or two downriver. The Newports, an English family, came much later. In those days, the river was the main highway