Date and time: Monday September 1 2014 2:00 - 6:00 pm
Weather: Pr 0 mm; RH 82%; BP 101.3 kPa; SW 10-40 kmh; cloud/sun; T 28º C
Activity: Practising the Bee Protocol

It was not an ideal day for a honeybee count. The wind was up and cooling clouds kept interrupting the sun. An early walk along the counting trail during a lull revealed plenty of honeybees about, but strong winds later would bend and wave the goldenrods back and forth, while flying insects would sequester on leaves or cling to flowers, hiding not only from the wind but from our prying eyes.

Star of the show: The Honeybee *Apis mellifera* gathers pollen from blooms of goldenrod.

Still, we needed the practice, not having performed the protocol since 2012. So at three o'clock, we began. We stopped at each counting station, slowly turning clockwise and recording all pollinators seen within seven categories. One person calls out the insect, while the other records on a form with a tally mark.

Apart from carrying out the protocol, we did very little else, feeling our age and enjoying the shade of the Nook by the trailer — the natural gathering point for TTLT special events and tours. I did, however, take the portable trail cam down to the river, setting it up on Mussel Beach. What animals will it catch?

Not surprisingly, a certain excitement accompanies our first glimpse of what a trail cam has captured. Last week, for example, it took a picture of the weasel that currently calls the trailer home. Her name is Wendy and judging from the food cache she keeps in one of the cupboards (neatly enough), she and her young ones have made a sizeable dent in the Meadow Vole population. Of course, we'd love to catch a cougar in one of our trail cams, but I'm beginning to think that we'd have the same chance of catching a sasquatch!

Between times we continued the hunt for new arthropods on site. Pat found the distinctive Black Damsel Bug (*Nabis subcoleopterata*) next to the Lower Meadow, two copulating Robber Flies, a large Horsefly (both images unusable), not to mention a Micrathena spider in the Nook. (See IMAGES below.) During the Bee Protocol, another large Pelecinid wasp showed up. Pat also spotted the same growth of Gymnosporangium (?) (on a Hawthorn branch) I noticed a week ago.

Phenology: New England Asters now coming into bloom.

New Species:

'Wavyband Hahniid'	*Antistea* [*brunnea*]	FCB oaKD AuXX/14

Note: We already had *Antistea* recorded as "*Antistea* sp" in the ATBI log, but only now have an idea of a species. However it does not count as a "new" species, since the previous record of Antistea may have been this species — or not.

Bee Protocol: Having made a counting trail, set up a station flag every 6 m along the trail. At each station count all the "pollinators" (see below) within 3 m of the flag, then move to the next station. Today's count used 7 stations only, having a total area of 198.3 m^2. The appropriate scaling factor is therefore 10000/198.3 or 50.43. The resulting population estimate, expressed in honeybees/hectare is 1765.1. This is far lower than it should be, owing to unfavourable conditions on site. Subsequent estimates will undoubtedly be higher. How high remains to be seen.

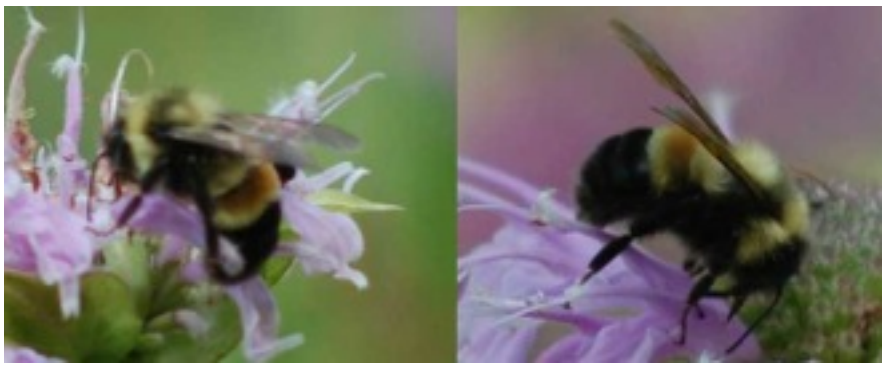
In the overall protocol, one counts not only honeybees, but bumblebees, large and small wasps, as well as large and small flies. In this case, "large" means larger than a housefly, "small" being anything else. The results of previous counts appear on the next page (Honeybees only). The resulting estimates are subject to the usual statistical fluctuations and must be considered approximate only, with perhaps a 10% error term. The resulting population estimates do appear to show a decline in numbers, although not precipitous.

year of count	peak count	number stations	area covered	scale factor	population estimate (hb/ha)
2009	291	17	480.6 m^2	20.8	6052.8
2010	149	9	254.4 m^2	39.3	5855.7
2012	87	10	282.7 m^2	35.4	3079.8

Readers Write:

Kevin Barrett, a nature lover in Wisconsin, writes wistfully: "I enjoy these reports. I'm about to do a woodchuck count on my property. One or more of the cute little varmints thinks my garden is his all-you-can-eat salad bar. I purchased a live trap and plan to relocate him/her/them…though I wouldn't wish such a garden pest on my worst enemy. If I can figure out where [politician's name] gardens I might reconsider."

Keith Langdon of the Great Smokies ATBI and Biologist with the US National Parks Service writes, "[I] was studying a new book just out on *The Bumble bees of North America* by Williams, Thorp, et al (2014). One of the species, the Rusty-patch bumblebee (*Bombus affinis*), formerly of wide distribution 15 years ago (including the Smokies) is now near extinction. There are records from Ontario, was wondering if you have any recent records ?"



Query from The Bulletin: Has anyone in the local area seen a Rusty Patch Bumble-bee in the last year or two? Here is what it looks like, not to be confused with the lookalike Orange-belted Bumblebee, *Bombus ternarius*.

IMAGES:

This Spined Micrathena spider (*Micrathena gracilis*), probably the most bizarre spider in Newport Forest, hangs from its bridge line, with carapace (cephalothorax) uppermost and spiny abdomen below. Looking closely, you can see its legs gripping the line at the top. Micrathenas love to build their orb webs across trails, leaving to us the decision whether to duck under the web or walk through it. New field: micro-eco-ethics?

Fall webworms wander about in confusion as we shake them from a web gathered with the aid of a long pole from a young Black Walnut near the trailer. The species *Hyphantria cunea* is highly variable in both coloration and, to some degree, markings. Take a look at what seem to be six different “species” at the following link:

http://www.pbase.com/tmurray74/moth_caterpillars