

**Date and time:** Monday October 13 2014 2:25 - 4:30 pm

**Weather:** Pr 23 mm; RH 92%; BP 101.7 kPa; rain/ovcast; calm; 17° C

**Activity:** Environmental scan.

It was raining when I arrived on site, but not cats & dogs, just kitties & puppies, so to speak. The rain ended ten minutes later and I went outside the trailer to look around, startling an American Toad in the process. Pat wasn't with me but looked at the image later at home. "Just make sure it isn't a Fowler's. You never know." Fowler's it turns out, has multiple small warts in place of the large ones, as below.



I took a walk to the river to look for new fungi, among other things. The weather was warmish and humid as I walked along the bottom of Blind Creek, looking for a suitable place to take a sample of soil and leaf litter. Here was a marvellous troop of brown mushrooms with caps splitting to reveal white tissue underneath. But what happened to the gills? Nothing but a smooth white surface presented itself where gills should have been. Here was one for our mycological consultant.

At the River Landing the way out to Mussel Beach was blocked by a large pile of river drift, including a young willow that had been uprooted in the last flood. By the time I got back to camp, the sun had emerged and the air quickly warmed to the day's predicted high of 20° C. Suddenly, there were insects everywhere I looked.

And just as I wondered if any spiders were about, one showed up on my windbreaker. It reminded me of a Black Widow\*, but no hourglass. Whew! Lady-beetles of all persuasions decided it was time for their annual fall convention at the trailer. They congregate by the hundreds, if not thousands, and every time I opened the trailer door, in they flew by the dozens. They seemed to be seeking warmth, even as their tiny metabolic engines slowly failed. Their corpses would eventually litter the counters, cushions and floors over the cold months. Meanwhile, several paper wasps joined the lady beetles on the warm aluminum walls.

Grasshopper populations are now peaking in the Lower Meadow. Most of these are the common Two-striped Grasshopper (*Melanoplus bivittatus*). By 4 pm, a new shield of high cloud moved into the area, re-cooling the air. Not feeling totally energetic, I decided to leave.

\*It was a *Steatoda*, not a *Latrodectus*, anyway.

**Phenology:** Lady beetles congregating; Leaf-fall reaching halfway point.

#### **New Species:**

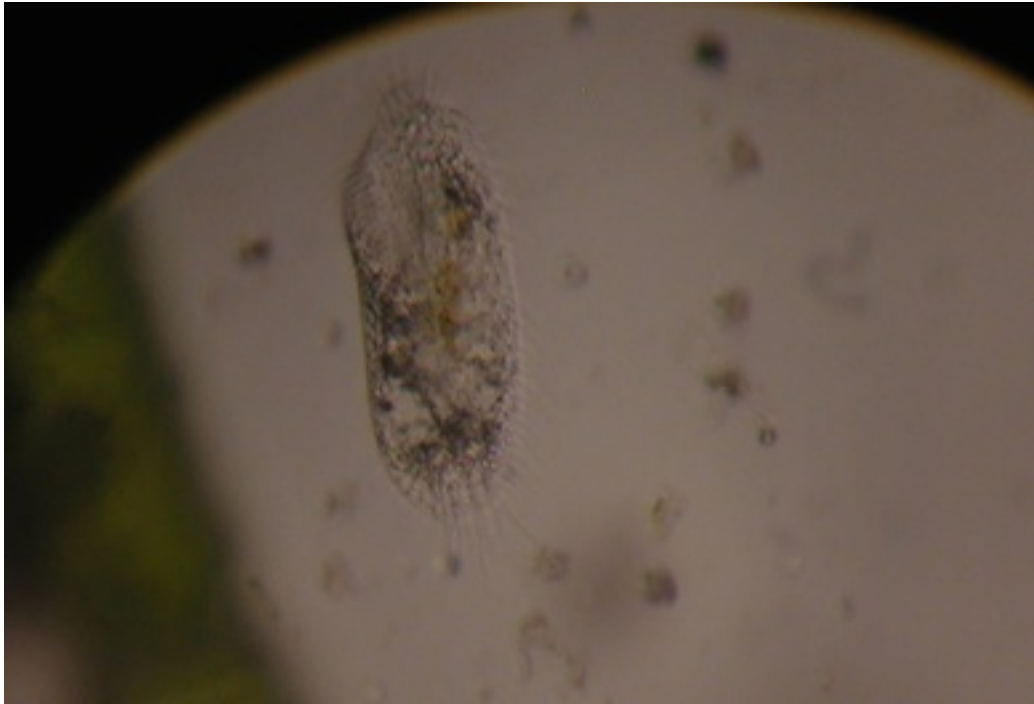
'Narrow Stigeoclonium'	<i>Stigeoclonium [tenue]</i>	FC/LR KD Oc02/14
Caddisfly	<i>Hydropsyche</i> sp.	MB KD Au29/13
Scarlet Plant Bug	<i>Lopidea media</i>	LM KD Je22/13
'Bordered Stink Bug'	<i>Mormidea lugens</i>	LM KD Je27/13
Golden Tortoise Beetle	<i>Charidotella</i> sp.	LM KD Je19/13
'Whiterayed Tachinid'	<i>Tricopoda lanipes</i>	LM KD Au29/13

**Notes:** *Stigeoclonium* is a small filamentous alga that had never appeared in creek samples until today. The remaining species all appeared when we discovered a neglected cache of dated images from the summer of 2013.

#### **Readers Write:**

Steve Palero, a biology grad student at Guelph University, reacts to our image of an alleged cougar: "How sure are you that the possible cougar photo isn't an image of an adolescent deer with its ear turned to face behind it? The angle of the shoulder and everything else about the image appears to be consistent with it being a White-tail! I don't see the nose that you are referring to." I wrote Steve to explain that a deer cannot be ruled out at this stage, owing to the peculiar angle of the head.

#### **IMAGES:**



I found the missing camera adapter and am now taking micro-images again, slowly improving my technique. Shown above is a species of hypotrich called *Oxytricha*. The anterior is up in this image. There you may make out a row of frontal cirri (like little legs composed of fused cilia). And so with the posterior or caudal end. The name “Hypotrich” means “hairs beneath”, in effect. The ventral surface is equipped with many such little legs and the hypotrich can perform rapid darting motions in both forward and reverse gear with these remarkable organs.



Jumping spiders like this *Phidippus audax* help to keep the trailer clear of flies. Here the *Phidippus* carries a fly it has caught and paralyzed — off to a location where it may dine in peace, away from the bio-paparazzi. It will not actually eat the fly, as such, but merely suck out its internal fluids through hollow fangs. “Waiter! There’s a soup in my fly!”