Date and time: Thursday August 28 2014 2:25 - 6:30 pm

Weather: Pr 0 mm; RH 55%; BP 102.2 kPa; calm; sun/cloud; T 22° C **Activity:** Finishing inventory of Mussel Beach and setting up Bee Protocol

We wasted little time getting to the river in order to finish the mussel inventory. The river was lower than ever and one of the "lagoons" had drained to the point of revealing long parallel scour marks, as in the image below. We resumed the collection process just beyond the end of this lagoon, working our way downriver



to a pile of stones and scrub that marked the terminus of the beach. Along the way, I placed any mussel I wasn't entirely sure of in a bucket to be taken home, cleaned and worked on later. We finished around 4:30 pm and made haste back to camp in order to set things up for the honeybee count, soon to take place.

A highlight of today's mussel inventory was the discovery of two Threehorned Wartybacks, a rare mussel in Canada. Only a single valve was available from each individual, an adult (left valve) and a juvenile (right valve). We had already collected this species from a nearby shoal out in the river, back in the days when we kept a canoe on site. As we left the beach Pat spotted a Viceroy butterfly. With the inventory of mussels now completed, we could turn our attention to the flush of arthropods typical of the late summer. On the way back we flushed a large "game bird" in the woods. (See the bird report.)

The usual mix of old friends and new species showed up. Pat drew my attention to a new moth feeding on goldenrod in the Lower Meadow. It wore a handsome cloak of red and brown. She was later molested by an Aerial Yellowjacket in the Nook and later by a new hoverfly, as in the list below. I had contented myself with a sluggish, half-dead horsefly earlier on the beach, as well as some elusive Wolf Spiders. Back in the Nook we found yet another *Mangora spiculata* weaving a beautiful orb web in one corner of the Nook.

We have mentioned in past issues the mysterious lack of fungi this year. Greg Thorn, our fungal consultant, thinks that perhaps the ground has been too dry, owing to the rather short duration of most of the rain events of 2014. However, on this visit we found several troops of a graceful white mushroom that we think might be *Clitocybula ocula* sprouting beside the trail into the Blind Creek Forest.

To finish up, we planted yellow surveyor flags every ten meters along the old watering trail through the Regen Zone, still very "meadowy" and still a good place to conduct our annual Bee Protocol. The flags will mark counting stations.

Birds: (13)

American Crow (EW); Belted Kingfisher (TR); Blue Jay (GF); Cedar Waxwing (TR); Common Flicker (GF); Common Grackle (GF); Field Sparrow (UM); Gray Catbird (BCF/LM); Killdeer (TR); Northern Roughwinged Swallow (TR); Redbellied Woodpecker (GF); Song Sparrow (LM); Spotted Sandpiper (TR)

Mystery Bird: While returning to camp from the river, we flushed what I thought of as a "game bird" at the Elbow where the ground is wettest in the Blind Creek Forest. Pat thought it was perhaps an American Woodcock, I was thinking ducks. Neither of us was swift enough to see the bird clearly, although we both had the impression of a reddish brown colour. "It didn't sound like a Woodcock to me." I said, "More of a whirring than a whistling." Do Woodcocks sometimes look reddish brown? Could it have been a Ruffed Grouse?

Phenology: Goldenrod spp. now 80% in bloom, Asters about to start their bloom.

New Species:

| 'Black-and-white Mangora' | Mangora spiculata | ET/VP KD Au24/14 |
|---------------------------|------------------------|------------------|
| Arcigera Flower Moth | Schinia arcigera | LM/HBF Au28/14 |
| False Stable Fly | Muscina stabulans | LM/ET KD Au21/14 |
| 'Difficult Horsefly' | Hybomitra [difficilis] | MB pdKD Au28/14 |
| 'Pink-eyed Syrphid' | Toxomera [geminata] | GF pdKD Au28/14 |
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Mussel Survey (preliminary Report)

The mussel inventory project yielded some 157 individual mussels from no less than 15 species, only one of which was new. The most abundant species was the Mucket clam accounting for 64 of the 157 individuals. The rarest mussel was the one we found today, the Threehorned Wartyback (*Obliquaria reflexa*).

Readers Write:

The alarming report of birds bursting into flame above a California solar farm (previous *Bulletin*) is explained by Patty Frank of San Diego: "The solar project Jonathan refers to . . . has been getting quite a bit of air time down this way. The referenced solar project that has killed the birds is a power tower technology, not separate photovoltaic panels generating electricity. Mirrors reflect onto the power towers, which heats steam to power generators, which produce electricity. There was a prototype 30 years ago built by SoCal Edison."

Bruce Parker reports on some mysterious night sounds while camping on Pelee Island in Lake Erie: "We heard this particular insect call each evening. I illuminated a tree where I heard it from with a very bright flashlight. The light didn't seem to bother the source. I have attached a recording of the sound which I recorded last year when I was also on the island." We reply: "Sounds like a katydid to us. On our first night in the trailer a dozen years ago we were deafened by accusations and denials: 'Katy-did, (No) Katy didn't. (Yes) Katy did, etc.' into the wee hours."

Pablo Jaramillo a former volunteer at Newport Forest, announces a recent award in Mexico for his conservation work with overwintering Monarch butterflies: "I would like to share this award with you because I know how much you love nature." Attached to the email was a congratulatory letter announcing the 2014 Pollinator Advocate Award for Mexico. If Pablo wishes to share the award, we would suggest Bruce Parker (in the previous message by pure coincidence). Bruce works on Monarch conservation up here at the northern end of things.

| IMAGES |); |
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This Arcigera Flower Moth sports a cloak of simple brocade with reddish-brown scallops, a rufous ruff and a narrow white bands across the outer forewings. The hind wings are bright yellow with a wide black border, rather like an underwing. It has no lookalikes and is easy to identify in the field. *Schinia arcigera* is an "Owlet Moth" in the Noctuid family. The larvae feed on various species of *Aster*, while the adult takes nectar from flowers of herbaceous plants — like this Goldenrod.



Two specimens (half shells) of the strange Three-horned Wartyback appear on the left and complete valves of the beautiful Black Sandshell appear on the right. Both species showed up on the last day of our search.

Mussels have an interesting reproductive cycle. The larval form is a millimetre or less in size, has two rudimentary valves, and a set of hooks that enable it to attach to the gills (in most cases) or fins (in some cases) of a fish. When ready, they detach from their host and sink to the substrate where they begin a life that may last decades.