

Date & time: Friday December 7 2012 2:25 - 5:25 pm

Weather: Pr 18 mm; RH 78%; BP 101.6 kPa; calm; overcast; T 6° C

Activity: Looking for scale insects, Kee finds a forest of jelly-trees

I had barely parked the van upon arrival on site, when a Great Blue Heron flew up Fleming Creek in full view. Was it trying to tell me something about the creek? I made my way down the creek bluffs to the Lower Rapids to change the card on the trail cam and have a look around. The water was remarkably clear, looking



almost drinkable. I could see to the bottom of the pool just above the Lower Rapids. Why were so many stones on the bottom all covered with golden brown mats? What were they? I put one of the stones in a sample jar to take home.

One of today's projects was to try collecting scale insects. It was on the to-do list for 2012 and we hadn't yet gotten around to these cryptic insects the females of

which have no legs, antennae, eyes or other organs. They are essentially egg-laying machines housed under a protective “scale” that sometimes looks like part of the tree. Suffice it to say that throughout my walk to the river and back, I inspected many of the younger trees, limbs and trunks, only finding what looked like an Oyster Scale but turned out to be a small egg-case covered with a soft layer of webbing. I don’t believe late fall is the best time to search for “Scales”.

Returning from the river, I encountered a small troop of odd-looking mushrooms on a Box Elder log right beside the trail. Each cap had a heavily distorted margin and its surface was incredibly slimy (technical term: “hygrophanous”). The stalks were short. I took several pictures with an uncooperative camera, then simply collected two of them as samples for later study.

The rest of my time on site was spent on maintenance. There’s more to conservation than skulking through wood and field. There’s work to be done: cleaning up all scrap wood and piling it neatly behind the trailer, gathering all remaining scrap metal, from pails to broken wheelbarrows and driving them up to the road for later pickup by a scrap metal dealer. Before I knew it, five o’clock had come and a darkening sky told me it was time to leave.

Peter Rabbit* was waiting at the gate, bookending my earlier welcome from the Great Blue Heron. I heard a small voice as I closed up: “Say hello to Pat for me.”

*taxonomic name assigned by the Beatrix Potter School of Ecology, known for its broad approach to animal taxonomy.

Birds: (9)

American Crow (FCF); Black-capped Chickadee (Tr); Blue Jay (Tr); Canada Goose (TR); Common Flicker (FCF); Dark-eyed Junco (GF); Great Blue Heron (EW); Red-bellied Woodpecker (GF); White-breasted Nuthatch (Tr)

New Species: (ATBI List)

‘Truncate Gomphonema’	<i>Gomphonema truncatum</i>	FC/pl KD Dc07/12
‘Slimy Saddle-caps’	<i>Collybia [acervata]</i>	ET/VPC KD Dc07/12

ID Note: The species name is [*tentative*] because this mushroom is not known to fruit in the late fall. However, it matched all the other characters in Phillips’ *Mushrooms of North America*.

Phenology: Thames up 10-15 cm, Snowfree Period 1 now 12 days old

Readers Write: The deer story, sent out as a separate item last week, drew several brief thank-yous, along with these longer messages:

Addressed to Pat: “Tell Kee I really enjoyed his forwarded email with the deer story. I passed it on to Jamie, and he passed it on to his brother Graham . . . a baker in Perth, and into organic food. He arrived in London a few weeks ago with venison for supper - road kill! He had struck a deer near his home (by accident), and had it butchered by a butcher friend. I must say that when we were invited for "road kill" dinner . . . it didn't sound very appealing! But it was delicious.
Aija Downing (a local reader and nature-lover)

“Thanks for sending that story about the deer. It was well written and funny AND it had a happy ending. He almost made it to the Darwin Awards. I had no idea that deer were that strong and clever. Love the Newport Reports . . .”
Suzanne Frank (another local reader and nature-lover)

“Check this out (one of many) <http://www.youtube.com/watch?v=khKrd1RNy2U>”
Peter Dewdney (a man of few words and a brother)

Note: The video shows a deer beating the tar out of a hunter who keeps trying to crawl away from its angry hooves until he succeeds in getting under his truck.

New Nature Guide Just Out:

Stephen Marshall's new book, *Flies: The Natural History and Diversity of Diptera* Firefly Books, has been getting rave reviews. Edward O. Wilson calls it “one of the most beautiful and useful accounts of insect life ever written.”

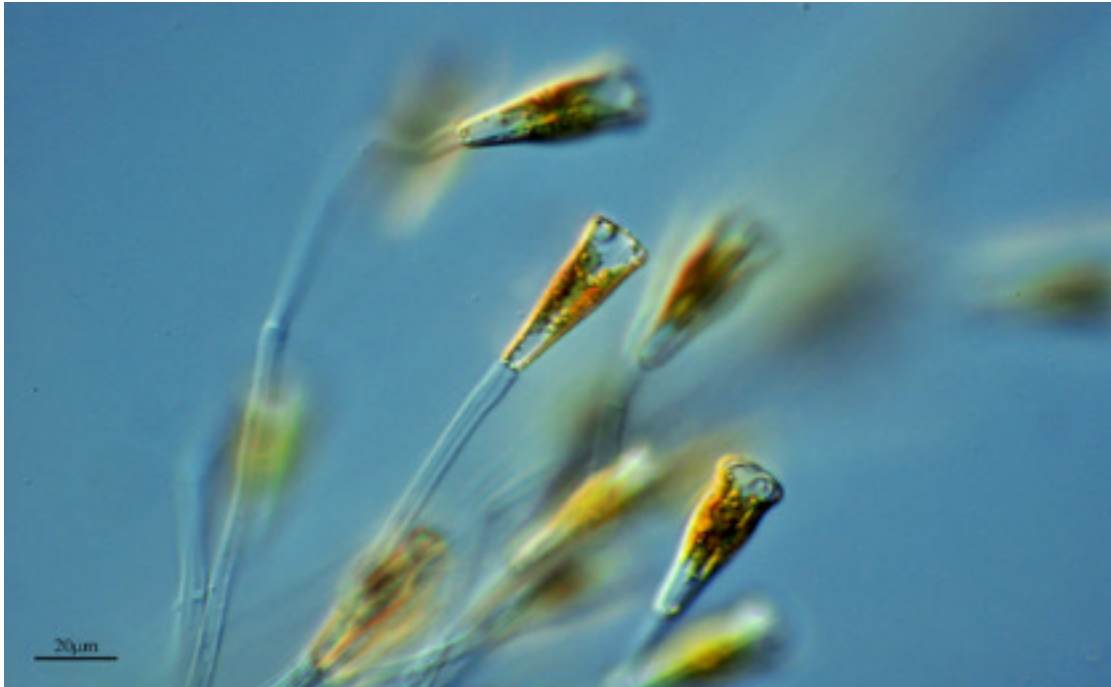
Websites:

All past Newport Forest Bulletins are available for review at the following url: <http://www.csd.uwo.ca/~akd/conservation/Newport.html> Simply scroll to the bottom and click on “archive”.

Erin Carroll's website *Nature in Ontario's Banana Belt* features a visit to the waterfowl at the Strathroy Sewage Lagoon: <http://erintown.blogspot.ca>

IMAGES:

The golden brown encrustations in the creek turned out to consist of gelatinous bumps, each a veritable forest of “jelly trees” -- all grown by the same species of *Gomphonema*. (See New Species) Division of branches reflects division of the adult diatom attached at its base to a



Source: EOL

jelly stalk. Each daughter cell then begins to secrete its own jelly stalk, growing away from the old tube. The golden brown colour of the mats obviously comes from the chloroplast pigments within cells.

Every diatom is a sculptured glass jewel box with exquisite patterns of holes, dimples, ridges and other features that give diatoms a special place in the microbial world. Did I say “glass”? I meant silica, the main constituent of glass. Some diatoms like *Gomphonema* can make both structural silica and the gel form, as occasion demands..

I was already familiar with three other species of jelly-making diatoms from the rapids nearby, but had never sampled the pool bottom.