Date and time: Monday March 22 2016 1:50 - 5:30 pm.
Weather: Prec. 10 mm; RH 62%; BP 101.8; cld/sun; NW 10 km/hr; T 5ºC
Activity: A walkabout with Donald Craig.

Donald Craig met me at the property with his ATV in tow. He promptly unloaded it and followed me in just in case the traction was poor. He has customized this all-terrain vehicle by adding a tool box in front.

Wasting little time, we set out for a walk around the main trail (about 1.5 km) with frequent stops to examine trees, discuss their diseases and record interesting fungi and plants, as well. The walkabout turned into a rolling lecture on forest ecology. Don is a qualified Forester and serves on the Newport Forest Stewards Committee.

Our first stop was called by Donald at a Slippery Elm just inside the Blind Creek Forest. The elm had died several years ago. It had shed its bark in a heap about its base, like discarded clothing. Don explained that this was the work of the European Elm Bark Beetle, most elm infections being the work of this insect. He explained that the larva likes to chew away at the inner bark or cambium layer. As for the dead elm cores, they may stand for another 10 years.

Further on we came to the log of a Bitternut Hickory that had died during the infestation of 2005-6. That was the work of the Hickory Bark Beetle. Although

some destructive beetles like the Elm Bark Beetle may prefer sick trees to healthy ones, the Hickory Bark Beetle has no such preference.

When we got to the river, Donald gave me some quick lessons in forest ecology over time. I pointed to the fallen trunk of a Black Willow, now in an advanced state of rot. “Where did that tree come from?” I was thinking of floods. “Probably right here”, replied Donald. At one time, this large willow may have been growing beside the river — just as willows presently do on the opposite bank. Turning to look behind us, into the Blind Creek Forest, Donald remarked that back in the 1980s, the entire area had been open to view, with cattle grazing everywhere. How did he know that? “I used to hunt in here.” He knew the Newport family and had walked the property more than once during the period in question.

We followed the trail up over the river bluffs were Donald stopped once again to point out leaves of the Chinquapin Oak scattered about our feet. The Hogsback was not the sole growing site for these magnificent trees. Looking at the river, he said that it seemed unusually clean, running in spate instead of the usual muddy brown. A curious tree caught our attention. Perched on the very rim of the bluffs, it leaned backwards at about 30º to the vertical, yet at a height of about 25’ it made an abrupt bend into the vertical. What happened there, explained Donald, was that the whole mass of soil supporting the tree slid downslope several feet, losing some root-hold and allowing the tree to lean over. After it re-rooted and began to grow again vertically, it made the angle we now see.

Off we went over the bluffs and down into the Riverside forest, noting hundreds of Virginia Bluebells now in their purple leaf phase, emerging from the leaf litter. Further on we passed a beautiful *Cerrena unicolor* fungus on a log, its centre rich with green algae. Here too, noted Donald, the woods had been very open to light, with cattle grazing. True, there were lots of Black Walnut about, but these were there only because that species likes lots of light. Once the canopy closes, the young Black Walnuts, being shade intolerant, would be doomed. “Do you see any walnut saplings around?” he asked. “Mainly maple and ash species.” One way to understand where a forest is going is to examine the young recruits.

On the way up to the Hogsback, we stopped again at a place where the log litter of dozens of semi-mature Butternut Hickories remained from the Hickory Bark Borer infestation of 2004-5 brought on by several drought years in a row. Here, many young Sugar Maples struggled with what Donald called The Cobra Canker (*Eutypella parasitica* - See images below.) This fungal disease is the most serious

disease of Sugar Maples in Ontario, according to Donald and, although not always fatal to a young maple, all too often is. More information is available at this link. <http://extension.psu.edu/pests/plant-diseases/all-fact-sheets/eutypella-canker-on-maple> It was in this disease "hot spot" that I spied a beautiful fungus growing on an already diseased maple. The ascomycete called Leafy Brain Fungus (*Tremella foliacea*) had turned a darkish purple and hardened over time.

Just a little further upslope brought us to the next exhibit. Here, a fungal disease of the *Nectria* type had attacked its host tree, a Black Walnut. The appearance of target-like rings on bare wood suggests the name "Target Canker" (*Neonectrica ditissima*). (See IMAGES.) Beside the walnut a young American Beech reminded Donald of another fungal pathogen that attacks Beech; the Beech Bark Disease originated in Europe, arriving in the Halifax area in 1913. A little web research revealed that this disease has become a new and very real threat to American Beech trees, essentially partnership between the Beech Scale insect (*Cryptococcus fagisuga*) and another Nectria fungus, *Neonectria faginata*. Something to watch for in the future — or is it already here?

As we continued on over the Hogsback, Donald pronounced the Riverside Forest as basically "healthy." We decided to conduct a search for the (rare) Harbinger of Spring along the downslope to the vernal pond area of the Blind Creek Forest. Already I could hear Western Chorus Frogs making their calls as I followed the main trail down. False Mermaid was sprouting everywhere. Donald meanwhile, traversed the slope midway up, shouting some 15 minutes later, "Found some!" Indeed, he had, as shown in IMAGES. Joining me back on the trail, he pointed out one of the many mature Blue Ash trees on the property. It grew higher upslope but its top was clearly loaded with new seeds. As we completed our walk, Donald also pointed out some previous work by Emerald Ash Borers on ash logs. Leaving the Blind Creek Forest, Donald pronounced it to be in "early successional" stage, instead of the later successional I had assumed — before the dieback there.

Breaking out into the open, I complained to Donald about the lack of Black Cherry on the property, explaining how I had planted one in the Regeneration Zone only to see it die after a few years. We arrived at the trailer and Donald prepared to ATV out when he looked behind the trailer, pointing out a young Black Cherry (dbh 5") growing right under our noses!

Phenology: Vernal Ponds filling, Harbinger of Spring in bloom

New Species:

Heliomyzid Fly	*Amoebaleria helvola*	LM KD Oc10/13
'Green Leafhopper'	*Aphrophora viridis*	LM KD Sp11/14
Nectria Canker	[*Neonectria ditissima*]	HB/RSF DC Mr21/16

Notes: we missed the fly back in 2013 and missed the hopper in 2014! A second possibility that produces nearly identical targets is the fungal pathogen called *Nectria galligena* and the entry here is closed in square brackets.

Trail Cams:

#1 (Hole) Mr13 Raccoon night, Eastern Gray Squirrel day; Mr20 Virginia Deer day; Mr21 Wild Turkey (2) day pm.
#2 (LM) Mr12 Raccoon night; Mr13 Raccoon day; Mr14 Eastern Cottontail night, 6:55 am, Raccoon night, Wild Turkey (3) day, "Patches" night; Mr15 Raccoon night; Mr15 Eastern Cottontail day.

Bulletinss Archive: <http://www.csd.uwo.ca/~akd/newport-forest/> — at bottom.

Readers Write:
(The first two messages refer to a mislabelling of mine in the previous issue and triggered by an overeager spell checker.)

Entomologist Stan Caveney: "Thanks for your report on invertebrates under logs. The genus name of the larva of fire-coloured beetle (Cardinal Beetle) shown is *Dendroides (canadensis*?). Steve Marshall has some images. *Neopyrochroa* has a similar-looking larva. The terminal appendages are wider apart than those of the larva of the flattened bark beetle *Cucujus clavipes*.

Biologist Allen Woodliffe: "I always look forward to reading these. However the Latin names are sometimes hard to keep straight! I noted that you have it as *Desmoides canadensis* in one spot, and *Dendroides canadensis* in another. The correct name, I believe, is *Dendroides canadensis*."

Nature Lover Patty frank: "Your Sow Bug reminds me a bit of a critter we have out this way, the Roly-Poly Bug, also called the Pill Bug for its defensive pose. Kids sometimes have them as pets and I hear they can live up to three years."

Aquatic Biologist Erin Carroll, "Look what I found today! My guess is blue-spotted salamander. They were in Bowen Creek, St. Clair, Lambton County,

IMAGES:

Salamander eggs, perhaps from a Blue-spotted Salamander, found by Erin Carroll. (See Readers Write.)

Harbinger of Spring flowers are tiny. This cluster is about two cm wide and four cm long. Usually the first of the spring ephemerals, phenology records for this plant on site indicate past flowerings no later than April 19 in 2008, March 25 in 2010, April 21 in 2013, and April 15 in 2015, today's sighting being a new record. Time window: March 21- April 21.

Target Canker on a Black Walnut, with an American Beech on the left.

Cobra Cankers on two young Sugar Maples.