

**Date and time:** Wednesday October 14 2015 1:35 - 5:25 pm.

**Weather:** Prec. 15 mm; RH 52%; BP 101.3; sun/cloud; NW 10-20 kmh; T 15°C

**Activity:** We walk the Thames River Trail to assess forest cover.

Today's main project was to look for dead trees, gaps in the forest cover and other potential problems for the forested areas on site. The oldest of these areas is called the Riverside Forest. It consists of many mature trees mixed with several younger stages, from seedlings to saplings. Our assistant Will Cable and I set out for this forest by taking the river trail over the bluffs, then down into the outer point bar section (Bluebell Woods), where eagle-eyed Will spotted a nearly entire deer skeleton concealed in the vegetation. In the image below, Will holds up the year-old skull of a youngish buck, along with one mandible. Behind Will is the river.



Proceeding into the Riverside Forest, I tried to match a survey map plotted back in 2002-2003 (See IMAGES.) with the trees around us. My compass immediately produced puzzling results when I tried to locate the plot map in relation to our position. I did not remember until later that the marked end of the needle points south, not north. Thus the map ended up backwards and I ended up confused.

However, we had also come to check the state of canopy closure, ground cover,

and other environmental indicators. Continuing the walk, we found three large gaps in the canopy overhead and several interesting fungi underfoot. The first was a large, all-white mushroom fruiting on an old log, then came a peculiar, trumpet-shaped, smaller mushroom with purple gills. I have been unable to identify either of these, so I hope to get an opinion from mycologist Greg Thorn. Other fungi were easier; readers can see them on the “Old Species” list below. Two bracket fungi and a comb-tooth fungus, all fruiting on dead wood.

Having passed under two more large openings in the canopy, we came at last to the foot of the Hogsback and began the long (to me) climb to the top. Sitting on the rest-bench there, the spot seemed unusually sunny, so I looked behind me, only to see something like a war zone: a two-hectare block in which *all* the trees were bare of leaves. Some of the trees had complete branch systems, with a leaf or two still clinging, but others had dead tops, with many branches being mere stubs with no twigs and now in the process of disintegrating. How many? I didn't bother to count them, but it seemed that at least half the trees were dead. (See IMAGES below.) I was reminded of something Steve Logan told me during his latest visit: Moravian-town has lost a “lot” of trees, especially ashes, in recent years.

We followed the main trail off the Hogsback and down into the Blind Creek Forest, already devastated from years of tree loss and now filling with tall herbaceous vegetation as though attempting a form of reverse succession. Here we found a puzzling stalked polypore growing on a liner log. It had all the features of the Brown-bay Polypore (*Polyporus badius*), except the cap was quite circular and a deep purple. Speaking of liner logs, throughout our walk, Will and I followed the practice of seeking new liner logs from branch debris and adding them to the trail.

Back in the Lower Meadow, we hunted for more insects, catching a large Two-striped Grasshopper and noting an abundance of much smaller *Melanoplus* species seemingly everywhere. It resembles *M. infantilis*, a species that is not supposed to be in the area.

Our final foray of the day was to visit the creek to change the sd card in the portable trail cam on duty at the rapids. We also made a few sweeps with an aquatic net from the shore, catching a tiny minnow and a Greenside Darter.

**Phenology:** Leaf-fall in progress.

## New Species:

Allard's Ground Cricket	<i>Allonemobius allardi</i>	LM/HBF KD Oc14/15
Satellite Fly	<i>Senotaenia</i> sp.	LM KD Oc14/15
Creek Chub	[ <i>Semotilus atromaculatus</i> ]	FC/LR kd/JS Sp06/15

**Species Notes:** The Ground Cricket was a surprise, but undeniable. The Satellite Fly was fished out of the rain gauge where it had drowned. The Creek Chub is a tentative ID from John Schwindt (UTRCA) on the basis of imagery that I sent him.

**Old Species:** (30 % of today's recorded species were new.)

White Cheese Polypore (*Tyromyces chioneus*); Bear's Head Tooth (*Hericium americanum*); 'Snow Bracket' (*Gloeoporus dichrous*); Bold Jumping Spider (*Phiddipus audax*); Two-striped Grasshopper (*Melanoplus bivittatus*); Mason Wasp (*Ancistrocerus* sp.); Greenside Darter (*Etheostoma blennioides*).

## UTRCA fish survey:

John Schwindt sent us this list of fish species found during three UTRCA surveys of Fleming Creek between 2003 and 2005. Each entry includes the common name, G- and S-rankings, abundance, extent, number of individuals and ATBI status (√). Our ATBI list for Fleming Creek includes five species not on the list below. Under the ATBI rules, none of these fish is eligible for the list, since they were found in an off-property location. However, the list gives us something to shoot for.

Blacknose Dace	G5 S5 Abundant widespread	4	
Bluegill	G5 S5 Common localized	1	
Bluntnose Minnow	G5 S5 Abundant widespread	5	√
Brook Stickleback	G5 S5 Abundant widespread	1	
Central Stoneroller	G5 S4 Abundant widespread	3	
Common Carp	G5 — Abundant widespread	1	√
Common Shiner	G5 S5 Abundant widespread	5	
Creek Chub	G5 S5 Abundant widespread	5	√
Fantail Darter	G5 S4 Abundant widespread	2	√
Fathead Minnow	G5 S5 Abundant widespread	2	
Golden Redhorse	G5 S4 Abundant widespread	3	√
Green Sunfish	G5 S4 Abundant widespread	4	
Greenside Darter	G5 S4 Abundant widespread	5	√
Hornyhead Chub	G5 S4 Abundant widespread	5	√
Johnny Darter	G5 S5 Abundant widespread	5	√
Largemouth Bass	G5 S5 Abundant widespread	2	

Least Darter	G5 S4 Common widespread	1	
Northern Hog Sucker	G5 S4 Abundant widespread	4	√
Pumpkinseed	G5 S5 Abundant widespread	1	√
Rainbow Darter	G5 S4 Uncommon localized	6	√
Rainbow Trout	G5 — Locally common	1	√
Rock Bass	G5 S5 Abundant widespread	2	√
Shorthead Redhorse	G5 S5 Common widespread	2	
Silver Redhorse	G5 S4 Common localized	1	
White Sucker	G5 S5 Abundant widespread	5	√
Yellow Bullhead	G5 S4 Common widespread	2	

### **The RSF Mapping Project:**

Over the space of two years, Nic Mihlik (an early full-time assistant) and I completed a large-scale tree-mapping project in the Riverside Forest. Along a 160-metre long transect, we set up eight circular plots, each of radius 10 metres. Using a homemade theodolite, we measured the bearing and distance for everything from old giants to young saplings, ending with eight circular plot maps. They reminded me of star maps, filled with large black discs and smaller ones. We logged 17 Woody species and 951 trees, bushes and vines. Over the coming winter we plan to convert these plots into electronic form, making them more widely accessible.

### **Readers Write:**

Ron Martin, a retired UWO chemist and environmental science instructor, discusses the Eco-puzzle in Bulletin #1004: “It's about the nail in the tree and how a tree grows up. I remember during many walks in the woods encountering an old fence line where the wire had been nailed to the tree and in fact become absorbed in the tree as it grew, outward not upward at that point. So the nail would remain at the same height while the tree grew upward by extending the branches in the crown and outwards by adding a new growth ring every year (at least in the temperate forest).”

### **Catching up:**

Readers who would like to read past issues of the *Bulletin* are welcome to visit the archive at <http://www.csd.uwo.ca/~akd/newport-forest/> Scroll to the bottom.

### **IMAGES:**



A two-hectare “war zone” bereft of leaves whilst surrounded on both sides by still-leafy forest. This area at the very top of the Hogback has a thicker ground cover than neighbouring forest as a response to higher light levels.

We have remarked on the tree-death phenomenon in several previous issues of *The Bulletin*. We are unable to explain the death of so many trees over recent years, except to invoke drying stress and exceptionally cold winters. It hardly cheers us up to hear that another severe winter may be on the way. Where’s global warming when you need it?





**“Unhand me, you brute!”**



**“Whew! That’s better.”**

The Two-striped Grasshopper (*Melanoplus bivittatus*) is one of the most common grasshoppers in the Newport Forest area. During the late summer and well into the fall season, grasshoppers rule!

