**Date and time:** Friday November 19 2021 2:15 - 4:25 pm.

Weather: Pr 26 mm; RH 67%; BP 103.0 kPa; cloud/sun; W 20 kmh; T 4° C.

Contents: A pressure-filled fungal foray yields two more new species.



All trees are now bare; only the grass is green.

It has been very rainy lately, not to mention throughout the year. Our total rainfall on site is heading for record territory, with 1090 mm as of today. Because of the rain, the ground was soggy and, although I think my 4WD would have made it, I have also learned that discretion is the better part of valour here. New Field Assistant Linda Parker and I decided to walk in.

We were late arriving and sunset would come sooner than ever, so our time on site would be rather limited. The original plan was to visit the Fleming Creek rapids for a survey of the under-rock denizens. Kick-fishing, I thought, would be fun. But when we arrived at the Nook to look down at the creek, it was already backed up from the river, not flowing and brown with runoff. The rapids were completely submerged so the water would be over our boots in any case.

Plan B involved a fungal survey; it had been raining and the best time to go looking for fungi is right after a rain. Linda agreed to be the spotter. She had already started to do this naturally during our previous visit. Before we left for the

foray, Linda was staring across Fleming Creek when she thrilled to the sight of a White-tailed Deer running through the woods, its tail up like a flag. So we set out.

Strangely enough, the very first specimen she came across, an orange bracket fungus growing on a log, turned out (much later) to be a new species for us! Later, I looked down at my feet to find myself staring at a black crust fungus that I had always called "Carbon Crust" without realizing that we had never actually identified it. Now it was my turn to fond a new fungus. (See **New Species** below.) But time was precious and we had to keep moving, with Linda preceding me along the trail while I (feverishly) recorded the latest specimen,

More fungi showed up at the Elbow, a white bracket and a large brownish bracket that was familiar to me: *Daedaleopsis confragosa*. Here, Linda spotted a crayfish chimney, different from the one we found during the November 3 visit. All along I was hoping to see a mushroom or two but none ever showed up. We turned off to explore a spur trail, the last leg of the Thames River Trail that circles the property. Here, among other finds, some wonderful growths of another fungus also known to me showed up, the Turkeytail Polypore, *Trametes versicolor*. (See IMAGES.)

The overcast grew darker as the sun neared the horizon and we decided to start back, finding one or two more fungi on the way out. Passing through the Hole into the Lower Meadow, Linda wondered at a small cluster of red and orange berries of the Climbing Bittersweet vine. The colours stood out against the Grey Dogwoods.

We cleaned up camp and began the long walk back to the road. I had just closed the farm gate when a white truck pulled up, a friendly face greeting us through an open window. It was a local farmer, Victor Matos by name, who has a farm on the next line over. An old friend of the Newport family, he wondered what was going on here. He seemed quite interested in learning that it was a conservation area. We exchanged email addresses before going our separate ways.

## **Biological Inventory** (ATBI)

## **New Species:** {Fungi}

'Milk Fingers'	Irpex lacteus	BCF/E slGT Nv03/21
'Deer Bracket'	Trametropsis (Trametes) cervinus	BCT lpGT Nv18/21
'Carbon Crust'	[Diatrype stigma]	BCT kdGT Nv18/21

**Species Notes:** We have used the square bracket notation for the third species. The brackets indicate a best guess in the presence of lookalikes.

## **Readers Write**

Rebecca Smythe, a local naturalist, writes about ground-scanning radar:"Thank you for the Interesting bulletin! I hope someone will be able to scan the whole area for you some day using the technology used for surveying underground topography at ancient archeological sites! Have you ever watched "Digging for Britain"? I hope you have a chance to see it if you haven't already!"

Sandy Levin, a well-known local naturalist enthuses oner the Chimney Crayfish: "Hi Kee, terrestrial crayfish habitats are rare. Good find." See website at <a href="https://ontarionature.org/wp-content/uploads/2017/10/crayfish.apr08.pdf">https://ontarionature.org/wp-content/uploads/2017/10/crayfish.apr08.pdf</a>>

Greg Zeigler, a nature lover in Santa Fe NM, urges us to watch this stunning video of moonrise over the high arctic. (time lapse) at the following site: <a href="https://www.youtube.com/watch?v=UU-hHiKUYTM">https://www.youtube.com/watch?v=UU-hHiKUYTM</a>

Consulting mycologist Greg Thorn has identified the fungi we collected today: "Glad to hear you got out before the snows and cold set in. Your first three [images] look identifiable: *Trametopsis* (*Trametes*) *cervina*, *Irpex lacteus*\*, and *Daedaleopsis confragosa*. . . . I was just reading about "bus fungi" - the species you wait years to see and then two come along in short order.. [next batch:] I think photo 1 shows the top - likely *Trametes pubescens*. #2 is likely *Diatrype stigma* (Asco) or something close to it. The rest are, as you said, *Trametes versicolor*."

## **Image Gallery**



*Irpex lacteus* — a new fungus growing on a stick found during our November 3 visit.





New fungus #2: *Trametopsis cervinus*, an orangish/brown bracket detached from its log, with upper surface above and pore surface below.



New fungus #3: a crust fungus resembling Diatrype stigma



The Turkeytail fungus comes in many colours of its decorative bands, as the Latin name *Trametes versicolor* hints at.



Linda Parker holds the *Irpex lacteus* find. A fungus on a twig is generally small, while fungi on logs can get quite large. I explained to Linda how the most important part of a fungus, the mycelium, is inside the substrate (wood or soil) while the showy part is simply the reproductive organ that disperses spores.

The lower image gives a good idea of the branching process by which mycelia develop into treelike structures inside the substrate and entirely hidden from view. Mycelia are made up of hyphae, tiny threads that literally grow into the substrate, absorbing and digesting nutrients (lignin or cellulose) as they grow.

