Citizen Science & Monitoring Nature

Date and time: Tuesday, May 23 2023 2:05 - 5:05 pm
Weather: RH: 63%; BP 192.2 kPa; haze/sun; 24ºC; Pr 5 mm.
Contents: Seven visitors, one new fungus, one new plant, and a drone.

Drone flies over the Thames River

It was a triple header at Newport Forest last Thursday. Gathered in the Nook were Mycologist Greg Thorn with Field Assistant Steve Logan and an entourage of two Grad Students, Natalie Tateishi and Bruce Malloch. Also present were Will Van Hemessen on the search for new plants to add to the ATBI inventory. Finally, there was me with skilled technician Marcus Krueger and his high-tech drone known as the DJI Mavic-3. Marcus was keen to test his new drone at Newport Forest. An aerial tour of the property would make a useful adjunct to a new website for Newport Forest, now under construction.

Greg was free to visit the site today but not optimistic about new fungal species owing to the recent dry spell. He set out almost immediately, accompanied by Steve and the two grad students. Will vanished along with everyone else,.leaving Marcus and me to launch our aerial experiments. We started by taking the drone up to its maximum operating ceiling of several hundred feet. A monitor on the control box displayed the view from that altitude. Looking up one could hardly spot the drone at that height. Below, clumps of trees sprouted everywhere like green cauli-flowers. At first Marcus wanted to scan the creek, following its course at tree top height. One feature that showed up immediately is how the creek bluffs were

covered by a network of game trails, all of them slanting downwards, with no one trail predominating. I had never been aware of that pattern until now.

Returning from the fungal foray which as Greg said was quite "sparse', several species were nevertheless observed, beginning with the omnipresent Dryad's Saddle (*Polyporus squamosus* — now *Cerioporus*), they found *Ganoderma* a*pplanatum*, four species of *Trametes* (*T. versicolor, T. Gibbosa, T. conchifer, T. pubescens*). Note: T. gibbosa is **not** on the ATBI list. New species? Greg to check. other fungi: *Cerioporus varius*, *Trichaptum biforme*, *Crepidotus calolepus*, *Coprinopsis variegata*, *Coprinellis micaceus,* as well as *Phragmidium* sp. rust.

Phenology: Except for September of 2021 the summers 2021 and 2022 have been nearly devoid of mosquitoes. In today's visit, at a time when mosquitoes are normally beginning to become bothersome, I counted exactly two.

Biological Inventory (ATBI)

New Species:

Wild Ginger	*Asarum canadense* Var. reflenxum	Nk/FCB WvH My23/23
Onion Rust	*Puccinia allii*	Nk/FCB wvh/GT My23/23

Species Notes: Will mentioned that the *Asarum* was a southern variety, rare in these parts. Meanwhile, he found a new rust fungus growing on an Allium (onion). A two-for one bargain!

Readers Write

Andy Szilard: "I constantly admire your steadfast dedication to observing and recording the beauty and variety of the biosphere, the undisturbed nature around us."

Rebecca Smythe: "I enjoyed reading this bulletin previously. Thank you for this and also for including the Wake's Coldstream native plant photos!"

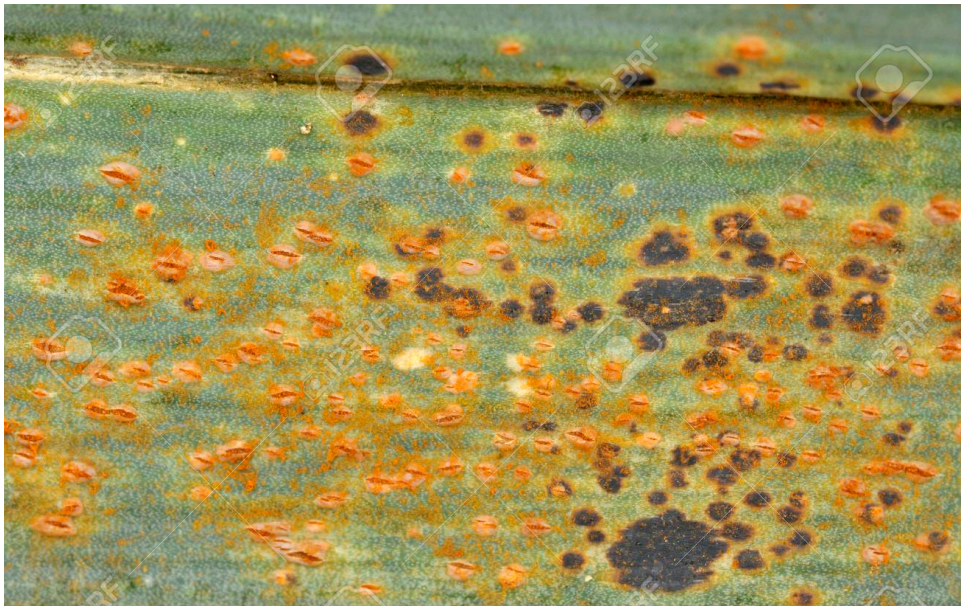
Images

Here is an iCloud Assembly of drone videos and still images. I could not manage the extraction of separate items so I must ask technically oriented readers to send me their favourites for our image bank.

Drone flights: <https://share.icloud.com/photos/0f8HHRKmsjq8teJ22JJZ6DDqg>

Marcus Krueger at the control console, with his drone hovering obediently by.
(The wooden structure, once the front deck of our trailer, is scheduled for removal)

[Canadian] Wild Ginger (*Asarum canadense*) source: Canadian Tree Nursery



Onion [Leek] Rust (*Puccinia allii*) which attacks members of the onion family.
source: Free images

I find the sight of a fresh young sapling like this emergent Sugar Maple both inspiring and encouraging. It seems flushed with energy.