Date and time: Sunday February 26 2017 1:50 - 4:00 pm
Weather: Pr 20 mm; RH 53%; BP 101.9 kPa; clear; W 20-50 kmh; T 3ºC
Contents: Looking for birds, taking readings and taking samples.

The ground was not entirely dry and Pat's wisdom prevailed over my urge to damn the torpedoes and drive down to the trailer. So we parked on the rise in the Upper Meadow and walked the 500 m to the camp. The west wind was bone-chilling, even on our backs, and only when we reached the Lower Meadow did it let up a little. But the sun was bright and our spirits responded with enthusiasm. We filled both bird feeders this time in the hope of attracting more birds, but once again, *none* showed up.

I carried out a limited photo survey of progress in the Regeneration Zone (RZ), noting once again that the planted trees nearest the gallery forest along the farm track were much taller than the trees we had planted in the middle of the RZ. All trees were planted with a uniform-random mix of species, spacings and within the same three-year time frame. And yet planted trees next to the gallery forest (virtually all species) were much taller than the ones out in the middle of the RZ. Steve Logan had given me the native take on this phenomenon years ago: "The trees closer to the grown-up ones will see what they're supposed to be and follow the example of the big ones."

As it turns out the effect is no accident. We have known for some time of the mycorrhizal connections at the root level, but a great new book spells out the details for the general reader. (See below for details.) As a result of reading this book I am newly conscious of trees, their lives and, yes, their feelings!

Shown to the left are two trees that were planted "too close" together (about a foot). Conventional wisdom maintains that each will be impoverished somewhat by root competition. Yet the two trees shown on the

left, one a Quaking Aspen, the other a White Ash, are both going gangbusters!

Pat kept an eye on the bird feeders while I visited Vernal Pond 'B' (now dried out) to get a sample of the bottom soil. I planned to "amplify" the sample by culturing it to see what protist species might show up. When I returned, Pat had no birds to report. If there is no sudden decline in birds over a broad part of the Great Lakes region, we must conclude that the birds have found a better area to hang out.

We walked back to the Upper Meadow where the van was parked, braving into a bone-chilling wind and placing one foot before the other. Once inside we exalted at our arrival and motored out to the gate.

Reports:

Spring Peepers
Three days after our visit Steward Darren Jacobs stopped by the property briefly, just long enough to hear Spring Peepers calling — not from the vernal pond area, but from Fleming Creek!

Trail Cam #1

Dare	Time	Animal	Day no.	light
Fb07	12:15 am	Raccoon (large, burly)	1	night
Fb07	2:16 am	Raccoon	1	night
Fb07	3:27 am	Raccoon	1	night
Fb08	2:30 am	Raccoon	2	night
Fb08	11:00 am	Eastern Grey Squirrel (black phase)	2	day
Fb09	5:51 am	Domestic Cat (feral? grey tabby)	3	night
Fb09	10:58 pm	Coyote	3	night
Fb11	5:49 pm	Virginia Deer	5	day
Fb11	9:15 pm	Raccoon	5	night
Fb14	7:01 pm	Raccoon	8	night
Fb15	12:07 am	Raccoons (2)	9	night
Fb15	12:26 am	Raccoon	9	night
Fb17	7:56 pm	Raccoon	11	night
Fb18	12:53 pm	Virginia Deer (2)	12	day
Fb18	1:54 pm	Virginia Deer	12	day
Fb20	4:43 pm	Virginia Deer	14	day
Fb20	4:53 pm	Virginia Deer	14	day
Fb20	5:36 pm	Virginia Deer (2)	14	day
Fb20	7:38 pm	Raccoon (large, burly)	14	night

Fb20	11:47 pm	Raccoon	14	night
Fb25	2:18 am	Raccoon	19	night

Clearly, the raccoons are nocturnal and the deer are diurnal. Concentrations of dates may be weather-related.

Vernal pond sample

The vernal pond sample came up pretty much a blank, even after a three-day infusion of Timothy Hay. I made five slides, with number 4 showing a single, lone flagellate. This is the most depauperate sample I have ever examined. The creatures that I was after are protists and micro-animals such as rotifers and cyclopeans. The former overwinter in cysts while the latter overwinter as eggs. Perhaps the sequestered organisms were deeper in the soil than I thought.

A great tree book

The Hidden Life of Trees: What They Feel, How They Communicate, by Peter Wohlleben, Greystone Books, 2016. Besides discussing the inter-tree communication facilitated by direct root/root contact and mycorrhizal connections, the author also describes the effect of water loss on mature trees, explaining a detail of tree life that I was certainly aware of but had no explanation for; how water loss affects a tree by rendering it unable to respond defensively to pathogens, especially borers. After a three-year dry spell we lost about 100 Bitternut trees to the Hickory Twig borer. The book provides details.

Birds: (1 - pathetic!) American Crow (TR)

Phenology:Property snow free. River 2-3' high.

Readers Write:

Andrew Henry of the Elgin Middlesex Water Board writes: "The velocity of the water will vary depending on the pumping rates and water demands, but on average it takes about 12 hours for the water to travel the nearly 50km distance from the water treatment plant near Grand Bend [to] the terminal reservoir near Arva." [Ed: That works out to an average flow rate of a little over 4 km/h, an easy walking pace.]

Henry advises readers who wish to know more about our water systems to visit the main website at www.watersupply.london.ca.

IMAGES:

Is this an aerial view of a clearcut zone in British Columbia or is it a miniature moss forest growing on a log? Each tiny moss plant comprising our forest sports a seta (a kind of stem) which may (ur may not) develop a spore capsule at its tip as the plant matures into the spring. Not being at all a moss person. I sent the image to botanist Will Van Hemessen, who found the image hard to work with and could only guess, taking the seeming absence of capsules as a diagnostic feature: "I know that some species in the genus *Plagiomnium* [Mniaceae] can have capsules which appear to be a continuation of the setae."

A deer runs up the trail past Cam #1 and into the Lower Meadow. Action shots like these are rare in trail cams. In fact this is our first running deer.