Shaw Wilderness Park

- Write-up and photos by Brian Bartlett

Date: Sunday, June 8, 2025

Weather: 13C

Leader: Dr. Sean Haughian

Attendance: 23

During the past year Sean Haughian, Curator of Botany at the Nova Scotia Museum of Natural History, has led several plant-centred Halifax Field Naturalist field trips. Besides the breadth and details of his knowledge, he has an enthusiastic, supportive manner. Along trails he waits for participants to gather before he shares information and fields questions, so everyone has a chance to hear; and he offers a helping hand when footing is tricky due to water, worn boards and uneven stepping-stones. Sean speaks with well-paced clarity—like an American Robin with its precisely modulated singing rather than a Winter Wren letting loose its hyper-speedy tumbles of notes.

Our Sunday afternoon field trip was in 380-acre Shaw Wilderness Park, off Purcell's Cove Road and five kilometres from downtown Halifax. The park only received official status five years ago, overseen by the Nature Conservancy of Canada, Halifax Regional Municipality and the Shaw Group. The temperature during our late-spring visit was moderate, suitable for short sleeves and short pants—though worries about tics had prompted 90% of our group to keep their arms and

legs covered. We began along a road-wide path as far as the eastern end of Williams Lake (Etu'panuek), past Red Clover, White Clover, a buttercup species, Bunchberries past their prime, and a few Lady's Slippers (Moccasin Flowers). Then we made a sharp turn into much narrower Etu'qamikejk Trail, its name translated into English as "the place where two sides meet," referring to rocks of the Meguma Terrain dating back 500 million years meeting granite of the South Mountain Batholith from 120 million years later, the latter glacially reshaped until as recently as 1,200 years ago (for more information, http://backlandscoalition.ca/?page_id=7331). Our gradual climb, a kilometre and a half long, took us through varied kinds of terrain from mixed-wood forest to bog and fen to pine barrens, and underwent a fifty-metre change in elevation before we reached our destination. The trail presented challenges to balance with its many surfaced tree-roots and unpredictable terrain, but the natural phenomena surrounding us were mood-lifting. The weight of the world can lessen in the woods.

The afternoon felt lightened by unseen songbirds. Early on, we heard a Common Yellowthroat, typically near running water, with its *witchery-witchery-witch*; Black-throated Green Warbler, with its *zee-zee-zee-zoo-zee* (would that all warbler songs were as distinctive as those two); and a distant Northern Parula with its up-the-scale buzzy trill pinched off at the end. Later, we weren't far from an American Redstart, whose high-pitched song ended abruptly, like the parula's; and a faraway Hermit or Swainson's Thrush, singing for only a few seconds. If we'd been walking hours earlier, at dawn, would we have heard four or five times as many songbird individuals, and twice as many species? (When walking, I often find the experience enhanced by imagining the same trail at other times of the day.)

Sean and others among us directed attention to several more flower species: Goldthreads, named after the colour of their thready roots; Starflowers, with their leaves' spread as well as their petals star-shaped ; Wild Lilies of the Valley (with our country cited in both its other common name, Canada Mayflower, and its Latin name, *Maianthemum Canadensis*—as well as in the day's *Tsuga Canadensis*, Eastern Hemlock); and the purple-stemmed orchid Southern Twayblade (notice the two leaves observed in its Latin name, *Neottia bifolia*). Once we ventured into a bog, it wasn't long before we got close to familiar carnivorous plants: Round-leaved Sundews (among 194 sundew species around the world), and Northern [Purple) Pitcher Plants (the only Canadian species

Northern (Purple) Pitcher Plant - *Sarracenia purpurea*

among over 100 identified). Among fern species were familiar Cinnamon Ferns and bracken (the latter, a genus rather than species); Royal Ferns in great profusion in damp soil, their leaves vividly veined; Eastern Hay-scented Fern, with leaf-blades divided into leaflets, which in turn have smaller leaflets;

Ferns, mostly Eastern Hay-scented Fern - *Dennstaedtia punctilobula*

and, in a shaded gully, Rock Polypody, with thick leaf blades and adaptability to growing in thin earth, even in soil adhering to rock.

Rock Polypody - *Polypodium virginianum*

We also gazed at an unusually impressive gathering of pale green or pale yellow fungi growing up a snag: dozens of a toothed bracket fungus, of a species in the *Trichaptum* genus.

A toothed bracket fungus, unidentified species in the *Trichaptum* genus.

Sean offered handy descriptions separating *bogs* (mostly water and peat mosses) from *swamps* (wetlands including scattered trees) and *fens* (wetlands dominated by mosses and sedges). Are bogs arguably less biodiverse than the other two sorts of wetlands? Yes, answered Sean, but they're also the ideal habitats for the carnivorous plants we'd admired, which don't thrive in swamps and fens to the same degree.

Many on the hike benefited from the keen help of Sean's seven-year-old daughter, Sylvie. At the beginning of the field trip, in the parking lot, she'd enthused about a pair of fireflies on flat-topped boulder. I think of fireflies so much as night creatures that it felt unusual to gaze at the insects in sunlight. While their flashes in the dark attract females to males and vice versa, we learned the insects don't only mate at night. Sylvie pulled out a magnifying glass, announced, "They're mating," and helped us get closer views of the dark brown insects in action. We didn't discuss what species they were. Fireflies or lightning bugs (with humans' imperfect naming habits, neither flies nor bugs, but beetles) include 2,400 species, so narrowing down exactly what kind of firefly we were standing over might've been a colossal project. Soon, either at Sean's bidding or on her own initiative, Sylvie walked around showing needles of different conifers. Still later, while she highlighted Sundews with her magnifying glass and I referred to the plants' reddish glistening "blades," she politely corrected me: "I don't think we call them 'blades'—they're *hairs*." Thus was a seventy-one-year-old happily educated by a seven-year-old.

One ongoing theme in Sean's commentary was about trees' varying abilities to cope with fires. Early on he asked us to look up into the forest canopy and


White Pine - *Pinus strobus,* with damage from fire

appreciate how *fire-resistant* White Pines have their densest growth of branches far off the ground, with relatively bare lower trunks, so some fires can't reach most of the branches; and their thick bark protects their cork cambium. In contrast, trees such as Aspen, White Birch, Red Maple and Red Oak are *fire-resilient*; though fires easily burn their exposed branches, their root systems stay alive and, in Sean's words, "resprout very quickly after the fire has come through."

Another category, the *fire-avoiding*—including Yellow Birch, Red Spruce and Eastern Hemlock—usually don't survive fires of any magnitude, but in ecosystems like shady ravines they can live for centuries.

Ninety minutes after starting we reached the highest altitude, in pine barrens, which in fact are far from "barren." The rock surfaces at our feet were populated with several kinds of lichen —such as Concentric Ring, Map, Reindeer —, a small patch of Three-toothed Cinquefoil growing by a boulder, bright-petalled Golden Heather shrubs (an uncommon species that does well in dry sandy soil), and a healthy abundance of Broom Crowberry shrubs and Jack Pines. Many of us had a

close look at an oak apple (a.k.a. oak gall), an globular growth about two inches in diameter, made from chemicals injected by gall-wasp larva and encircling buds, protecting the wasps-to-be . Oak galls, I later learned, can be brown, yellow, pink or red, but the one we passed around was apple-green.

The Jack Pines gave Sean a chance to introduce a final category of trees grouped in terms of their relationships with fire: *fire-embracers*. Jack Pines are the most famous examples in our region, very flammable, but with cones whose resin melts at high heat, releasing seeds onto the blackened ground. (Sean corrected the misconception that the pine *requires* fires for its seeds to spread; days of unusually high temperatures are sufficient.) Broom Crowberries have a very different method of germination: ants carry the shrubs' fruit underground, where new crowberries will start their lives after a fire. Sundews and pitcher plants aside, in a year of unusually violent human conflicts and destructive nationalisms, that ant-and-crowberry process offered us an intriguing (even inspiring) demonstration of inter-species aid.

Jack Pine - *Pinus banksiana,* cones sealed

Jack Pine - *Pinus banksiana,* cones opened