

S U M M E R 2 0 1 9

FIELD BOTANISTS OF ONTARIO *NEWSLETTER*

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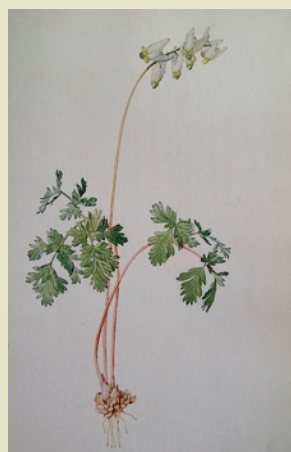
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President's Message

Spring is here and FBO field trips are well underway. We are offering 20 trips this year throughout Ontario. You can read about them on our new website: <https://www.fieldbotanistsofmontario.com/> where, for the first time, you can register for them on-line. Trips are filling quickly so register soon.

Memberships can also be purchased or renewed on our website. There has been an increase in memberships this year, which is undoubtedly due to our new on-line presence.

The 2019 FBO AGM is now confirmed. It will be on September 21-22 at the Grey Roots Museum and Archives in Owen Sound. As in previous years, there will be field trips on both days. On Saturday evening, there will be a speaker, dinner, awards, and AGM business. Specific details will be mailed out in the summer. We hope to see you there.

Details of the FBO Student Award are provided in this newsletter. Please forward them onto students doing research that are making a contribution to botany in Ontario. The award will be presented at the AGM.

The FBO is a volunteer run organisation. I gratefully acknowledge the time, expertise, and enthusiasm generously given by so many that make field botany accessible in Ontario and bring together a community of people with similar interests.

See you on the trails,

Troy

On the cover: Top: Lunching at Ragged Rapids (Ron Reid Nature Reserve trip). Photo: Dave Hawke. Bottom: Spring Corydalis (*Corydalis solida*), an Old World garden escape in a Guelph location. Photo: Charles Cecile.

Sidebar artwork: Dutchman's Breeches (*Dicentra cucullaria*)

Trip location maps generated using NatGeo Mapmaker software.

The suggested standard source for scientific and common names is the Database of Vascular Plants of Canada (VASCAN): (<http://data.canadensys.net/vscan/search>).

Field Botanists of Ontario website: www.trentu.ca/fbo

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Annual memberships are \$20.00 for individuals and \$25.00 for families. Membership forms can be found on the FBO website above.

Field Botanists of Ontario

(FBO) is a non-profit organization founded in 1984 for those interested in botany and conservation in Ontario.

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Editor's Note

There is diversity of the native flora, and there is diversity of the non-native flora. The first is considered to be "good", the second "bad". To the plants, whether native or not, these human labels do not matter, really, as they simply go on competing with each other for space, resources and reproductive success.

Seldom do we report specifically on exotic flora, preferring the native species, and for all sorts of valid reasons.

Last year's AGM and associated trips carried the FBO members to several high value, high native plant diversity locations. Detailed reports by Mike McMurtry and Mike Francis document the many species found there, and it's a joy to scan the long lists of our indigenous flora, including several rare or interesting plants. But our flora also contains a large contingent of non-native elements that owe their continued presence to human actions. Hundreds, if not thousands, found their way here in centuries past, and more are still coming. Some grow literally next door, as Charles Cecile reports in his most interesting article on new Eurasian arrivals in the Guelph area.

Enjoy the issue.

Chris Zoladeski

A visit to the Ron Reid Nature Reserve

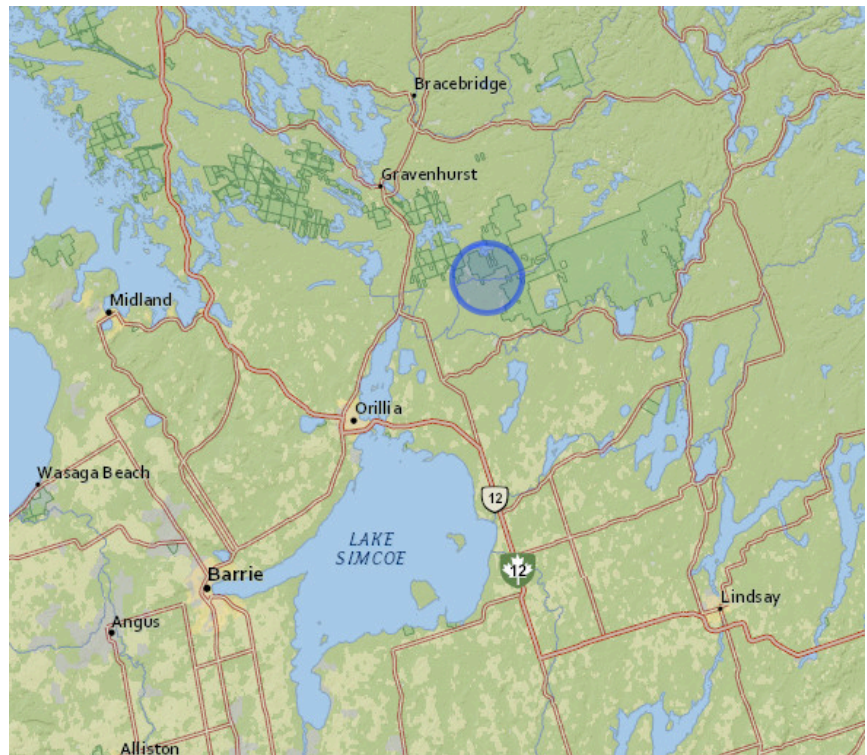
9 September, 2018

By Mike McMurtry

A group of FBO members, fresh from our Annual General Meeting in Orillia, met at the newly designated Ron Reid Nature Reserve, a property recently acquired by the Couchiching Conservancy. It is northeast of Orillia on the Black River. The name of the Nature Reserve honours Ron Reid, who helped establish the Conservancy and has worked for many years towards the conservation and stewardship of natural areas in Ontario. The outing was led by Dale Leadbeater, biologist and long-time member of FBO. She began by acknowledging that the land we were standing on is the traditional territory of the Chipewas of Rama. Dale and Anne Barbour, who also attended our AGM, are nearing completion of a flora of The City of Kawartha Lakes (CKL). This

region has not been as well documented by earlier botanists as others. For example, the noted botanist John Macoun describes travelling up the nearby Gull River, but he didn't collect in what is now the CKL. Dale shared with us a checklist of the plants that she and Anne had documented for the former Carden Township, now part of CKL. We were also joined by Dave Hawke, lead steward for the Couchiching Conservancy, who filled us in on some of the human history of the property. Its previous owners include the Chippewas of Rama and the Hack family. A basic principle that the Conservancy operates on is that it can only be effective in conserving land after developing a "social license to operate" through consultation with local landowners. In addition to conserving the biodiversity of the land, the Conservancy want to enable access so the public can experience it while keeping a small footprint.

Dale provided an overview of the landscape context of the site. It is in an area coined "The Land Between" by Peter Alley. This is an area of transition between the sedimentary limestone bedrock of southern Ontario and the metamorphic, largely granitic, bedrock of the Canadian Shield. The Land Between is convoluted in shape and is characterized by



rocky ridges and plateaus, and wetlands, lakes and rivers in the low-lying areas between rocky uplands. The varied physical environment leads to diversity in the plants and animals that use it as their habitat. The Ron Reid Reserve lies along the Black River, a river with its headwaters on the Shield and flowing into Lake Couchiching after joining with the Head River. The Black River provided drainage for



Solidago squarrosa. Photo: D. Hawke.

glacial meltwater during the last period of glaciation and sand and gravel were deposited along the river and adjacent low-lying areas in a “valley train”. Dale showed us a soil map for the region. It was at a relatively coarse scale, and while it showed the broad types of soil present across the region, it didn’t reflect the sandy nature of our site.

The Ron Reid Nature Reserve is well-situated to complement other protected areas in the region. Queen Elizabeth II Wildlands Provincial Park surrounds the reserve and extends to the east; the Kashe Barrens Provincial Conservation Reserve lies on the west side; and the Altberg Wildlife Sanctuary Nature Reserve is to the southeast. Protected areas of the Carden Plain are just to the south.

We walked along the road to the start of a footpath that the Conservancy has recently created to allow public access to the property. We were fortunate to meet Ron Reid himself and his wife Janet, who were driving along the road. Portions of the property near the road were used as a pasture for cattle until the early 1960s and the mixture of native and non-native plants along the road and in the



Symphyotrichum firmum. Photo: D. Hawke.

fields reflects this past use. These plants included Timothy (*Phleum pratense*), Common Milkweed (*Asclepias syriaca*), goldenrods and Red Clover (*Trifolium pratense*). In wetter areas, we saw White Elm (*Ulmus americana*), Pussy Willow (*Salix discolor*), Speckled Alder (*Alnus incana* subsp. *rugosa*), and Bluejoint Reedgrass (*Calamagrostis canadensis*). Along the roadside and trail, Tall Goldenrod (*Solidago altissima*) was abundant; it is the most common floodplain goldenrod in this region, explained Dale. A lovely blue aster was also seen; debate ensued as to whether it was Glossy-leaved Aster (*Symphyotrichum firmum*) (formerly *S. puniceum* var. *firmum*), or Purple-stemmed Aster (*S. puniceum*). The consensus was towards *S. firmum*, based on the multi-stemmed nature of the plant, its light

blue colour and the glabrous lower surface of the leaves. Dale believes that *S. firmum* is almost as common in our region as *S. puniceum*. Her approach to naming these two species follows the Field Manual of Michigan Flora (Voss and Reznicek 2012). Like the Michigan Flora, the CKL flora will generally not take names lower than the species level.

Continuing our walk towards the Black River, and still in an old-field community, we saw Grass-leaved Goldenrod (*Euthamia graminifolia*), Arrow-leaved Aster (*Symphyotrichum urophyllum*), Flat-top White Aster (*Doellingeria umbellata* var. *umbellata*), New England Aster (*Symphyotrichum novae-angliae*), Lindley's Aster (*Symphyotrichum ciliolatum*) and Chokecherry (*Prunus virginiana*). Spreading Dogbane, (*Apocynum androsaemifolium*), was mostly in seed, with the large sickle-shaped seed pods characteristic of the milkweed family. White Meadowsweet (*Spiraea alba*) was also common. This species used to be separated into two, based on leaf width, but is now considered one species. Bracken (*Pteridium aquilinum*) was also abundant in open areas along the trail – Dale explained that this versatile species has a broad distribution, even extending to the tropics, where it grows larger in size.

Still in semi-open habitat, we saw a grass, Southern Shorthusk (*Brachyelytrum erectum*), in several places. Tristan Knight pointed out that it can be identified even in vegetative form, by checking for cross-hatching partitions on the underside of the leaf. We saw a hawthorn, likely Fireberry Hawthorn (*Crataegus chrysocarpa*), though flowering material is normally needed to confirm hawthorn species. Dale explained that while there are about 30 hawthorn species in Ontario, only about six species occur in CKL. Hawthorn identification is complicated by their habit of forming “hybrid swarms” in which there is interbreeding between hybrids and consequently a lot of variation in the physical characteristics of the population.

We passed a meadow marsh dominated by Bluejoint Reedgrass. The source of this common name is the Database of Vascular Plants of Canada, or VASCAN, which can be accessed at <http://data.canadensys.net/vascan/search?lang=en>; most botanists in Ontario will know this plant as Canada Bluejoint. Dale and Dave talked about how early ranchers in this area used to harvest this species for feeding their livestock. Our trail then took us into woodlands where Red Oak (*Quercus rubra*) and Red Maple (*Acer rubrum*) were the dominant species in the canopy and Large-leaved Aster (*Eurybia macrophylla*) abundant in the ground layer. The leaves of the latter species get hairier as you proceed north in Ontario, apparently to conserve water.

At the edge of the meadow marsh, along a rocky ridge, we saw White Pine (*Pinus strobus*), Wild Sarsaparilla (*Aralia nudicaulis*) and White Birch (*Betula papyrifera*). We talked about how the Chaga Mushroom (*Inonotus obliquus*) grows on White Birch, and is highly sought-after for its possible health benefits. The portion harvested is a

charcoal-like material in the form of a conk and is actually a sterile mycelial mass. Along the ridge were Bare-stemmed Tick-trefoil (*Desmodium nudiflorum*), Round-leaved Dogwood (*Cornus rugosa*), Canada Mayflower (*Maianthemum canadense*), Eastern Teaberry (*Gaultheria procumbens*), Partridgeberry (*Mitchella repens*), Red Maple and Indian Cucumber-root (*Medeola virginiana*). Dale commented on the relatively high level of biodiversity in Great Lakes/St. Lawrence lowland forests and described how the huge abundance of Passenger Pigeons would have originally contributed huge amounts of guano to the forest thus adding to the nutrients available to plants. Other woodland plants characteristic of this forest type that we observed were Downy Serviceberry (*Amelanchier arborea*) (the only tree-like serviceberry in this area and with a downy underside to the leaf), Bunchberry (*Cornus canadensis*), Large False Solomon's Seal (*Maianthemum racemosum*), Yellow Clintonia (*Clintonia borealis*), American Hog Peanut (*Amphicarpaea bracteata*), Common Lady Fern (*Athyrium filix-femina*), Sensitive Fern (*Onoclea sensibilis*), Intermediate Wood Fern (*Dryopteris intermedia*), Woodland Horsetail (*Equisetum sylvaticum* – look for secondary branching), Maple-leaved Viburnum (*Viburnum acerifolium*), and Basswood (*Tilia americana*). A small rock barren held Common Juniper (*Juniperus communis*), Early Goldenrod (*Solidago juncea*), Staghorn Sumac (*Rhus typhina*), Wavy Hairgrass (*Avenella flexuosa*), Orange Hawkweed (*Pilosella aurantiaca*), Early Lowbush Blueberry (*Vaccinium angustifolium*) and lichens that drew the attention of a few of us.

We descended the path to a nice scenic spot at Ragged Rapids and had lunch. As we ate and talked, we watched a beaver swim away with some of the vegetation we had been studying. I had a conversation with Dave about how the Couchiching Conservancy manages its many properties with the help of volunteers. Volunteers are encouraged to monitor the plants and animals on Conservancy properties under various structured “citizen science” programs.

Back on our walk, Royal Fern (*Osmunda regalis*) dominated the small rocky islands at Ragged Rapids. Along the sandy bank was Interrupted Fern (*Osmunda claytoniana*). While many of the fronds of this species can be sterile, the fertile, dark brown, contracted pinnae that interrupt the middle of the frond of fertile plants give this species its name. Big Bluestem (*Andropogon gerardi*), Common Milkweed, Red Maple, Flat-top White Aster, Low Cudweed (*Gnaphalium uliginosum*), American Groundnut (*Apios americana*), White Meadowsweet (*Spiraea alba*), Common Panicgrass (*Panicum capillare*), Fraser's St. John's-wort (*Triadenum fraseri*), Fowl Mannagrass (*Glyceria striata*), Bluejoint Reedgrass, Swamp Thistle (*Cirsium muticum*) and Nodding Beggarticks (*Bidens cernua*) were present along the sandy banks of the river. In the shallows of the river were Ribbon-leaved Pondweed (*Potamogeton epihydrys*) and Flat-stemmed Pondweed (*P. zosteriformis*). Dale was excited to find Leafy Muhly (*Muhlenbergia frondosa*) on the bank, which is apparently near its western limit here. We also saw American Groundnut and Fringed

Sedge (*Carex crinita*). As we headed back on the trail we saw Sugar Maple (*Acer saccharum*), Hobblebush (*Viburnum lantanoides*) and, in a kettle depression, New York Fern (*Thelypteris noveboracensis*). Nearby was a grapefern; it was sterile and appeared to be either Cut-leaved Grapefern (*Sceptridium dissectum*) or Oneida Grapefern (*Sceptridium oneidense*). After more recent study, Dale feels that it is the latter, a species that is provincially tracked by the Natural Heritage Information Centre. Eastern Hemlock (*Tsuga canadensis*), Round-lobed Hepatica (*Hepatica americana*) and Heart-leaved Foamflower (*Tiarella cordifolia*) were present further along the trail.

Another exciting find was Squarrose Goldenrod (*Solidago squarrosa*) in flower, an uncommon goldenrod with very large basal leaves. Some individuals were in flower, and some, perhaps younger plants, only had basal leaves. We saw Black Cherry (*Prunus serotina*) in a shrub-like form, but were able to distinguish it from Pin Cherry because it has rusty hairs along the base of the central vein of the leaf.

On the road back to our vehicles we picked up Cottony Willow (*Salix eriocephala*). Bill Crowley thanked our guide for sharing her expertise with us, providing us not only with an enumeration of species but also explaining their ecology and landscape context. After this, some of our group departed for home and some car-pooled to Victoria Falls, a beautiful spot about 7 km further up the river. The last time I had been to that spot (about 20 years ago) it was littered with trash and broken glass. I was very pleased to see that it has since been cleaned up and is once again a beautiful place. ✱

A walk through Copeland Forest

9 September, 2018

By Mike Francis

On Sept 9th, 2018, a group of approximately 12 field botanists met in the hills of Oro-Medonte, north of Barrie, to explore the depths of one of Southern Ontario's largest blocks of contiguous forest. Located in Simcoe County, Copeland Forest is situated along the northern slopes of the 'Oro Moraine', north of Lake Simcoe. Copeland Forest provides diverse recreational opportunities for many local user groups, including nature enthusiasts. With its large size and diversity of habitat types, the forest represents an excellent opportunity to study and practice botany throughout the seasons.

The group met in a commonly-used parking area along the northern boundary of the forest complex and congregated for an introductory talk by hike leader, Kyra Howes. Kyra is a local naturalist and resident near Copeland Forest. She provided the group with some historical notes on the provincially-owned forest which, as Kyra explained, is not Crown land because it was once held in private



Cut-leaved Grape Fern (*Sceptridium dissectum*). Photo: M. Francis.

ownership. The lands within Copeland Forest were actually once host to the small village of Martinville, where a local business once thrived making cedar shingles. Interestingly, employees of the village were paid in 'chits', which were only redeemable at the Martinville store.



Daisy-leaved Grape Fern (*Botrychium matricariifolium*). Photo: M. Francis.

Hitting the trails, the morning portion of the hike focused largely on the upland hardwood portions of the forest, with some considerable walking required to reach sections representing ‘interior’ type forests. Hikers remarked on the unusual amount of walking, something not typical for field botanists who can easily spend a whole day in the stretch of <1km of trail! However, the amount of required hiking is representative of the scale of Copeland Forest, which spans ~1760 ha in area, and contains a large area of core interior habitat. In addition to size, Copeland boasts an impressive age class of forest, and hikers were treated to vast sections of ‘young old-growth’ Sugar Maple/Beech (*Acer saccharum*/*Fagus grandifolia*) woodlands. Steep slopes and lower-lying sections of woods were covered in mature Eastern Hemlock (*Tsuga canadensis*) and Yellow Birch (*Betula alleghaniensis*). The hike passed a number of seeps which are a significant ecological feature of the region. These forests also display an impressive and diverse carpeting of spring ephemeral wildflowers; however, our late-summer hike focused on other lesser-known botanical features of the forest.

Being located in the ‘land between’ and due to the diverse topography associated with the Oro Moraine, Copeland Forest contains a mix of species with both northern and southern affinities. One of the interesting southern species observed during the hike was Pokeweed (*Phytolacca americana*), a large and showy Carolinian herb. This species is considered very uncommon elsewhere in Simcoe County; however, the population in Copeland

is thriving in certain sections of upland forest. American Spikenard (*Aralia racemosa*), another showy species of Copeland Forest, was observed along the trail in higher-quality habitats, and in some locations formed a dense thicket of fruiting plants.

Of course, no botanizing trip would be complete with some list-taking. In this case, the group focused heavily on inventorying fern diversity within the forest. Kyra toured the group through a ‘fern alley’, where a mix of wood ferns (*Dryopteris* spp.) and other species dominated the ground cover beneath a tall hardwood canopy. In total, ~25 species of ferns were recorded throughout the day, with highlights including:

- **Hay-scented Fern** (*Dennstaedtia punctilobula*): an interesting and unusual find, due its more typically eastern distribution. Although the species was observed in



Downy Rattlesnake Plantain (*Goodyera pubescens*). Photo: M. Francis.

multiple trail-side locations throughout Copeland, observations of this species in Simcoe County are generally quite rare. Similar in appearance to the common Lady Fern (*Athyrium filix-femina*), Hay-scented Fern has a narrower overall leaf shape, with a longer taper to the tip of the frond. The drying leaves have a smell comparable to hay, a feature which would only be identifiable in the fall.

- **Cut-leaved Grape Fern** (*Sceptridium dissectum*): Cut-leaved Grape Fern provided a rather impressive display during the hike, as abundant plants were observed, and many with reproductive fronds. This fern produces a single sterile frond that lies perpendicular to the ground, and a single fertile frond in the late summer season.
- **Daisy-leaved Grape Fern** (*Botrychium matricariifolium*): this tiny fern (~10 cm in height) was observed in one location along the trail. This species is easily overlooked, but can be found locally as scattered individuals in hardwood forests throughout Simcoe County. Interestingly, some species in the *Botrychium* genus rely on mycorrhizal fungi associations for nourishment.

At around lunchtime, the group headed back to the cars, but not before Kyra led us to a small patch of Downy Rattlesnake Plantain (*Goodyera pubescens*) along the trail. This species of woodland orchid is relatively easy to identify as its leaves remain green throughout the year.

After a brief break for lunch, a shorter afternoon hike meandered towards a low-lying mixed swamp community in the heart of the forest. Here, a variety of noteworthy species were identified, including Golden Saxifrage (*Chrysosplenium americanum*), Smooth-sheathed Sedge (*Carex laevivaginata*), and Northern Green Orchid (*Platanthera aquilonis*). Hike participants were encouraged to re-visit Copeland in the spring, where an array of ephemeral wildflowers carpet the forested hills throughout the month of May. Copeland Forest is a true local gem; however, it's certainly worth a special trip for botanists from out of town. If you do visit Copeland, remember to bring a trail map, and leave yourself plenty of time to explore and find your way back safely. ✱

Interesting and new species found in Guelph and along an abandoned railway

By Charles Cecile

Abandoned railways and historic sites are often locations where one can find interesting non-native and adventive native species that were perhaps introduced in historic times. Garden escapes and garden waste dumping have also been the source of introduced non-native species in the Ontario flora. Often, roadways and railways helped to distribute some of these plants.

For this article, adventive species are generally considered to be not native to Wellington County but are native elsewhere in Ontario or Canada. They were likely not part of the original county flora although one can't say for certain. Non-native species are those that are not native to North America, such as European or Asian species.

While working on updating the Wellington County vascular plant list, four non-native species were recently found along the wooded west bank of the Speed River in the Goldie's Mill ruins area in Guelph as well as along a section of the nearby historic Guelph Junction Railway. These species had not been previously documented for Wellington County or Ontario in the case of two of them. One of these is new for Canada. Voucher specimens were collected for the University of Guelph BIO Herbarium (OAC). All photos were taken in the field by the author.

Corydalis solida, **Spring Corydalis**, a native of Europe, is growing abundantly throughout a large area at the location. The size and extent of this population suggests it has persisted there for some time. It likely originated as a garden escape or from garden waste dumping. In Ontario, Spring Corydalis has also been found growing in Middlesex, Elgin and Bruce counties (Natural Heritage Information Centre, 2018). Photo (see cover page) was taken April 30, 2017.

Corydalis nobilis, **Siberian Corydalis**, is a native of Asia-Siberia. A small population was documented in this same area on the wooded



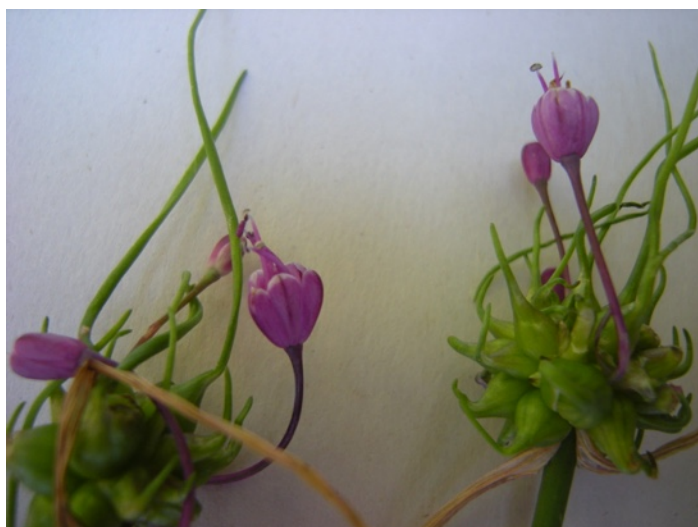
bank of the Speed River. This occurrence is probably a garden escape. The only other Ontario location where Siberian Corydalis has been found growing without cultivation is at the Royal Botanical Gardens' Woodland Garden in Halton Region where it is abundant. (Chapman & Pringle, 2018). Photo was taken April 30, 2017.

Anemone ranunculoides, **Yellow Woodland Anemone**, is a native of Europe. Several large populations were located along the wooded



bank of the Speed River not far from the old mill site. This species is also likely a garden escape or the result of dumped garden waste. Yellow Woodland Anemone has not been found growing without cultivation elsewhere in Ontario. It is reported from Quebec but nowhere else in North America (Natural Heritage Information Centre, 2018; VASCAN). Photo was taken April 30, 2017.

Allium carinatum subsp. *carinatum*, **Keeled Garlic**, is a native of Europe and adjacent Asia. A large population occurs near the old



mill site as well as along the Guelph Junction Railway line. Whether this occurrence is the result of an inadvertent introduction via the old mill, the railway or originated from a nearby garden is uncertain. Its very large population size suggests

that Keeled Garlic has been growing in this area for a long time. This occurrence is new for Canada (VASCAN) and in the United States is found only in Michigan (Flora North America, 1993+; Reznicek, A.A., E.G. Voss, and B.S. Walters. 2011). Photos were taken July 19, 2018.

The Wellington, Grey & Bruce Railway ran north from Guelph to Southampton on Lake Huron and is now abandoned. The first section ran from Guelph to Elora



& Fergus and was built in 1870. It was abandoned in 1988. It is basically a

footpath now although ATVs also occasionally use it. A mix of adventive native and non-native species were found along this line in 2016 and 2017, two of which are not known to occur elsewhere in Wellington County while the rest are uncommon occurrences. Documenting specimens were collected for the University of Guelph BIO Herbarium (OAC).



Andropogon gerardii, **Big Bluestem Grass**, was found growing abundantly in several large patches. In Ontario, it is a native species of dry open prairies and dry sand plains as well as lakeshores and along railways (Dore & McNeill, 1980; Natural Heritage Information Centre, 2018). This is the second location for this grass in Wellington County and the species is likely adventive here. Photo was taken in the field September 27, 2017.



Arrhenatherum elatius, **Tall Oat Grass**, is native to Europe and was once cultivated as a forage grass in North America (Voss & Reznicek, 2012). It is a grass of roadsides, railways, and open disturbed areas (Natural Heritage Information Centre, 2018). This grass occurs in several locations in the county. This occurrence was found July 4, 2018.

Artemisia ludoviciana, **Silver Wormwood**, is a species that is native farther west on the prairies and generally considered adventive in southern Ontario though possibly native at one or a few sites in northwestern Ontario (Natural Heritage Information Centre, 2018). Here, it is generally found on roadsides, railways, fields and disturbed places (Voss & Reznicek, 2012). This second documented site in Wellington County was found on September 27, 2017.

Eragrostis frankii, **Frank's Lovegrass**, is considered native in Ontario (Natural Heritage Information Centre, 2018) although more common farther east (Dore & McNeill, 1980). It grows along roadsides, fields, river banks and muddy places (Voss & Reznicek, 2012). This is the third documented occurrence in Wellington County, two others being in disturbed habitats. It was found October 5, 2016.

Silphium perfoliatum, **Cup Plant**, is considered a native species in floodplain woods along the Thames River in southwestern Ontario and adventive elsewhere in the province (Natural Heritage Information Centre, 2018). This is the only documented occurrence of Cup Plant in the county, found in 2014.

Sorghastrum nutans, **Yellow Indiangrass**, is characteristic of tall-grass prairie in the west but found on open sandy sites and rocky places along the shores of the lower Great Lakes, a section of the St. Lawrence River and along the Ottawa River as well as the Trent River system (Dore & McNeill, 1980). It is known to spread along roadsides and railways (Voss & Reznicek, 2012). This is the only documented county occurrence for Yellow Indiangrass. It was found September 27, 2017.

Sporobolus cryptandrus, **Sand Dropseed**, is a native species of dry sandy beaches of Lakes Huron, Erie and Ontario as well as sand flats

along the Ottawa River and Lake of the Woods (Dore & McNeill, 1980). It is adventive along sandy roadsides, railways and other sandy disturbed sites (Voss & Reznicek, 2012). This is the second known occurrence for Sand Dropseed in Wellington County, the other being along the Canadian Pacific Railway in the southern part of the county. It was documented on September 27, 2017.

Historic railways and other historic sites are known to be locations supporting both adventive native and non-native species. But today's highways, roadways and railways are also locations that provide habitat for such species as exemplified by halophytic plants along major salted roadways. Natural habitats are no doubt the preference of most field botanists but exploring cultural habitats can provide some interesting finds as well.

Acknowledgements

A.A. Reznicek at the University of Michigan helped with the identification of *Allium carinatum* ssp. *carinatum* as there are no North American manuals or floras that list this Eurasian species. M.J. Oldham at the Natural Heritage Information Centre in Peterborough provided helpful comments and information on several species and abandoned railways. He also generously agreed to review this article.

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The 2019 FBO Student Award

The FBO Student Award is granted annually to students or recent graduates in recognition of their outstanding research and contribution to botany in Ontario. The award is presented at the Field Botanists of Ontario Annual General Meeting to a student whose research best supports the main objectives of the FBO (see objectives below). The winner is awarded \$500 and their research will be presented in an issue of the FBO newsletter.

Details for the award:

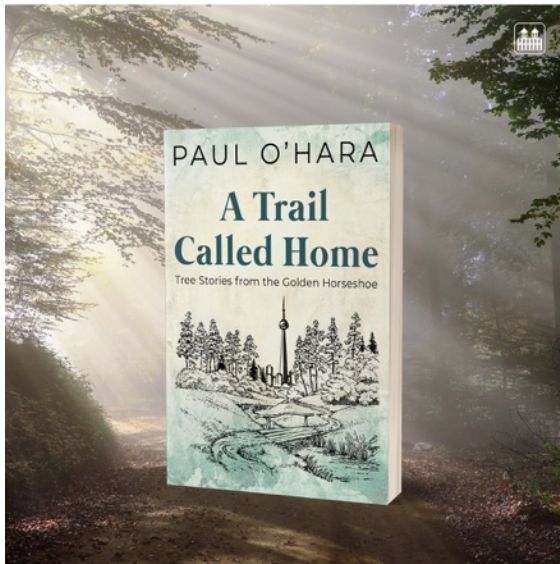
- Students must submit either a detailed two page summary of their research, or a published article, by July 31st, 2019 and send this information to Troy McMullin at: tmcmullin@nature.ca
- Each submission should include the applicant's name, contact information, school, major, year that the study was completed, research topic/title, and the name of the advisor/supervisor.
- Applicants must either be students or have graduated within the year before the Annual General Meeting (AGM).
 - Research needs to have been completed while the applicant is a student.
 - Submissions will be judged by at least three members of the FBO executive committee.
- Award recipients are required to: 1. Prepare a poster for the AGM about their research and stand by their poster, prior to the Saturday night dinner to respond to questions (costs for attending the AGM will be covered up to \$200); and/or 2. Write a one to two page article summarizing their research for the fall/winter issue of the FBO newsletter. The article will be submitted within one month following the AGM, and sent to Chris Zoladeski at: czoladeski@savanta.ca
- One submission per person each year. The award cannot be received by the same individual more than once.
- The award is presented annually as long as there is a qualified winner and funds are available.

The FBO is a not-for-profit organization founded in 1983 for those interested in botany and conservation in the province of Ontario.

Our main objectives are:

- to provide opportunities for people to meet and pursue their interests in field botany
- to provide education in field botany
- to encourage the exchange of botanical information
- to increase knowledge and documentation of the flora of Ontario
- to provide botanical expertise to the naturalist community

Announcement



A new publication, by our FBO member Paul O'Hara, is now available in book stores. *A Trail Called Home* can be ordered on amazon.ca or indigo.ca, or directly from Dundurn Press at <https://www.dundurn.com/books/Trail-Called-Home>

It retails for \$24.99 (hardback and ebook pdf), or \$11.99 (ebook). The book includes 78 photos, with illustrations and maps.

"In *A Trail Called Home*, Paul O'Hara offers a vital new form of nature writing so necessary for our times. His personal story of forging a friendship with the land weaves a passion for trees and a deeply felt understanding of nature, with the settler imperative of bridging connection and building relationship with First Nations who have called this gathering place home for millennia. O'Hara is an inspiring, grounded and eloquent guide on this trail."

- Lorraine Johnson, author of *Tending the Earth: A Gardener's Manifesto*, *The New Ontario Naturalized Garden*, and *100 Easy-to-Grow Native Plants for Canadian Gardens*

"O'Hara's gonzo natural history is part memoir, part elegy, part guide. The result is informative, inspiring, entertaining, and often surprising."

- Gerry Waldron, biologist and author of *Trees of the Carolinian Forest*

"In *A Trail Called Home*, Paul O'Hara takes us on a personal walk through the memory of his home place, the wild territory he explored with young friends, and the larger landscape he studied as an adult. Reading the landscape of the Golden Horseshoe to eons past and interpreting what we see now, we see the evolution of change continuing. Through re-living his life experiences, we share the revelation of a deeper meaning to the land, a feeling of connection with the *genius loci*, and a sense of the divine in the remnants of wild places."

- John D. Ambrose, botanist and pioneer of Carolinian tree conservation

Craig Arthur Campbell, obituary

One of Ontario's finest naturalists, Craig A. Campbell of Waterloo, passed away on 27 December 2018 in his eightieth year after a long period of illness. While perhaps best known for his contribution to Ontario herpetology, Craig had diverse natural history interests and authored many journal articles and other publications on birds, mammals, butterflies, and plants, as well as herps.

Craig was a high school English and History teacher but was passionate about nature and the environment. He was honoured by a variety of awards during his lifetime including the Lieutenant Governor's Ontario Heritage Trust Lifetime Achievement Award, Ontario Nature's W.W.H. Gunn Conservation Award (2013), induction into the Waterloo Region Hall of Fame, and the establishment of the Craig Campbell Fern Walk at the Rare Charitable Research Reserve, Cambridge.

Craig was an excellent field botanist and collaborated with Larry E. Lamb in 1984 on a privately published "A Preliminary Annotated List of the Plants of the Regional Municipality of Waterloo, Ontario". One of Craig's favourite areas to explore was Pelee Island in Lake Erie where he discovered several plants new to Ontario and Canada and collaborated with Tony Reznicek on a paper on a 1977 paper on "New vascular plant records on Pelee and East Sister Islands, Essex County, Ontario" (Canadian Field-Naturalist 91(4): 384-390).

Among the plant groups Craig was particularly interested in was ferns and he and Dr. Donald M. Britton (University of Guelph; now deceased) co-authored on a 1977 publication on "Pteridophytes of the Regional Municipality of Waterloo, Ontario" (Canadian Field-Naturalist 91(3): 262-268). He also had a keen interest in violets and was preparing a manuscript on Ontario violets at the time of his death.

Craig Campbell was a mentor to many Ontario naturalists and biologists, including myself, and he made a very significant contribution to natural history and conservation in Ontario and Canada.

Michael J. Oldham