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FIELD BOTANISTS OF ONTARIO NEWSLETTER

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President's Message

Being a good botanist means taking care of details. It's something that I remind myself of as I work on updating a list of plant observations for Hastings County (see article in Vol. 25, Number 1 on Hastings County Flora). The list of details is long, but use of the correct scientific name is at the top. Scientific names are constantly changing and not all experts agree on the most valid scientific name for a species. Take the familiar Poison Ivy for example. The Flora of North America editorial committee (the volume including Anacardiaceae is not yet published) and VASCAN (Vascular Plants of Canada, <http://data.canadensys.net/vascan/search>) recognize two varieties in Ontario: the non-climbing *Toxicodendron radicans* var. *rydbergii* (Western Poison Ivy), and the climbing *Toxicodendron radicans* var. *radicans* (Eastern Poison Ivy). Some respected authors, e.g. Voss and Reznicek (2012; *Field Manual of Michigan Flora*), choose to recognize these types of Poison Ivy at the species level as *Toxicodendron rydbergii* and *T. radicans*. Never mind the former names *Rhus radicans* subsp. *rydbergii* and *Rhus radicans* subsp. *radicans*. I have not listed them in this note, but including the authorities associated with each of the names, i.e., the authors who first published the name, definitively documents the taxonomic entity in question. Providing the authority is important for enduring publications, such as floras, life science inventories and academic publications. We no longer require authorities for plant names in articles submitted to our newsletter, in order to improve readability. Use of the most up-to-date resources for identification of specimens in the field, lab or home is strongly recommended. It is easy to keep on using a familiar reference even when much of the information in it is out of date. Other detailed information requires a botanist's attention too: the location of an observation, habitat, presence of flowers or fruit, observer, location, accuracy of location and collection number if a specimen is taken. Taking care of details also means noticing the differences between closely related species and taking the time to resolve those differences.

You will notice that the information provided on our inside cover page conveying the FBO recommendation for the best resource to use for plant names has changed. The Ontario Plant List (Newmaster et al. 1998) was recommended for years as the authoritative source for plant names in Ontario, but it is now out-of-date. We are now recommending the VASCAN website for the most current information on names. For the conservation status of Ontario species, go to the Natural Heritage Information Centre website (<http://www.mnr.gov.on.ca/en/Business/NHIC/>).

The Field Botanists of Ontario are pleased to initiate a new student award. The award was proposed by Troy McMullin. Nancy Falkenberg, Julia Marko Dunn and Troy have taken the initiative to draw up a description of the award, including eligibility requirements, and this notice appears in this issue. We think the award will foster the interest of students in field botany, add a new dimension to our annual general meeting where the winning and runner-up posters will be on display, and strengthen our ties with Ontario universities and colleges.

Mike McMurtry

On the cover: Purple Flowering Raspberry (*Rubus odoratus*). Photo by Bill McIlveen.

Sidebar artwork: Lizard's-tail (*Saururus cernuus*).

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

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

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

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Editor's Note

When - finally - you, intrepid field botanist of Ontario, cold and miserable, emerge from hibernation and peek outside in search of green hope, but disappointed hurry back indoors, console yourself by looking at the photos in this issue: this is what Spring looks like - colourful, vibrant and inviting. And happy, like in the Happy Valley where folks were exploring its uplands and lowlands June last, as reported by Andrew Dean. About a year earlier, the FBO representatives traversed the Niagara River, at a place just above where the current seriously picks up before plunging into the falls, to reach Navy Island. It was the best of times - no mosquitoes and plenty of wildflowers, many rare and of southern distribution. James (Jim) Leslie provides a detailed account of a great day of botanizing.

Although Wellington County is not as famous as Niagara for its flora, interesting plants can still be discovered, or re-discovered, there; Charles Cecile reports on three such species. But if you really want to experience taxonomic convolutions, the genus *Rubus* is a good one, as attested by Bill McIlveen's mini-monograph.

Also, we finally pay full tribute to last year's Goldie Award recipient, Adele Crowder. Due to production timelines we could not post it the previous issue, however, on a bright side, this in a way extends the applause. Deb Metsger, in her piece, provides an extensive account of Adele's accomplishments.

Then, we give you a head's-up of two events: our own Annual General Meeting, which will be held in September in Windsor, and a BioBlitz at Big Sandy Conservation Area for which the Kingston Field Naturalists invite us in June. It is a careful bet that there will be no snow on the ground by that date.

As always, your editor awaits (and expects!) your field trip reports to arrive promptly. We still have not received many promised contributions, you see. And it is only through your participation that the Newsletter can exist. In return, we promise writers earthly glory and digital immortality...

Field Trip Reports

Down in the Happy Valley

9 June, 2013

By Andrew Dean

A full group of keen field botanists were in attendance on a hot and humid early June morning, ready to explore the habitats at the Happy Valley Forest, next to the hamlet of New Scotland, in York Region, north of Toronto. The hike was led by Steve Varga of the Aurora District MNR, who was accompanied by Rhonda Donley from the Nature Conservancy of Canada (NCC). The Happy Valley Forest, at roughly 630 hectares, is perhaps the finest and most significant remaining upland forest on the Oak Ridges Moraine (credit: NCC). Habitats are characterized by mid-aged to mature stands of sugar maple-beech forest, interspersed with naturalizing upland meadows, and kettle ponds formed by large pieces of ice broken from glaciers during the recent Wisconsin glaciation. The NCC owns and stewards portions of the property, and works with local landowners under conservation easement agreements.

We began botanizing at a roadside kettle pond, with edge communities of graminoid shallow marsh. Dominant species observed were Broad-leaved Cattail (*Typha latifolia*), Lake Bank Sedge (*Carex lacustris*), and Reed Canary Grass (*Phalaris arundinacea*). Interestingly, Steve made reference to a native *Phalaris* species in the historical botanical records of Ontario, and noted the origin of *P. arundinacea* is unknown. [Editor's comment: *Phalaris arundinacea* is considered native to Ontario though many southern Ontario populations are likely introduced.] In studying the floating aquatic species of Greater Duckweed (*Spirodela polyrrhiza*), the group was informed of a newly recognized species, Red Duckweed (*Lemma turionifera*), which is almost identical in appearance to

common Lesser Duckweed (*Lemma minor*), and found in similar habitats. Readers are encouraged to review the species information on the *Lemma* genus in the Field Manual of Michigan Flora, or through online resources for more detailed descriptions. Some of the attendees soon realized the presence of European Fire Ants (*Myrmica rubra*), having invaded not only many of the natural habitats within the GTA, but also the author's underwear.

Roadside habitats were examined next in order to identify the more common species, specifically of the *Poa* genus. The group identified and studied, among



Carex cephalophora inflorescence. Photo: A. Dean.

others, Fowl Meadow Grass (*Poa palustris*), characterized by long ligules; Canada Bluegrass (*Poa compressa*), with flat stems; and Kentucky Bluegrass (*Poa pratensis*), with keeled glumes, more commonly found in mesic meadows.

The afternoon leg of the hike was within a portion of the extensive intact upland forests, which characterizes the majority of the property. Both common and uncommon vascular plants were examined and recorded. Of initial interest was the very common Dewey's



Kettle pond with upland forest. Photo: A. Dean.

Sedge (*Carex deweyana*), characterized by narrow leaves, and white culm bases. A good variety of other woodland sedges were identified, such as Loose-flowered Sedge (*Carex laxiflora*), Bladder Sedge (*C. intumescens*), Long-stalked Sedge (*C.*

pedunculata), Oval-headed Sedge (*C. cephalophora*), Spreading Sedge (*C. laxiculmis*), and Broad-leaved Sedge (*C. platyphylla*). The group appeared especially interested in Peck's Sedge (*C. peckii*), described by Steve as having very short staminate spikes (usually 5-9mm long, credit: Michigan Flora), or rather, a very wee willy!

Other species observed included: Rose Twisted-stalk (*Streptopus lanceolatus*), Woodland Bluegrass (*Poa nemoralis*), False Melic Grass (*Schizachne purpurascens*), White-grained Mountain-rice (*Oryzopsis asperifolia*), Marginal Wood Fern (*Dryopteris marginalis*), American Fly-honeysuckle (*Lonicera canadensis*), American Witch-hazel (*Hamamelis virginiana*), Shinleaf (*Pyrola elliptica*), Lady Fern (*Athyrium filix-femina*), Beaked Hazelnut (*Corylus cornuta*), Mountain Honeysuckle (*Lonicera dioica*) [Hairy Honeysuckle (*L. hirsuta*) is known from the area but not observed], Naked Miterwort (*Mitella nuda*), and Barren Strawberry (*Waldsteinia fragarioides*), now *Geum fragarioides*.

Another kettle pond was discovered within the sugar maple-beech forest. It was covered almost entirely with Lesser Duckweed, and was known to support pond-breeding salamanders, such as Yellow-spotted (*Ambystoma maculatum*), and members of the Jefferson complex (*Ambystoma* hybrid population), as well as a variety of frog species. Areas surrounding the pond were combed for any botanical goodies, revealing several Indian Cucumber-root (*Medeola virginiana*), and

Broad-leaved Panic Grass (*Dichanthelium latifolium*, R4 in York Region).

Attendees were most delighted to find Squaw-root (*Conopholis americana*), and Poke Milkweed (*Asclepias exaltata*), both rare in York Region, before the group departed the forest.

Many thanks to the field trip organizers, Steve Varga for leading the outing and sharing his expertise, and the NCC. 🌱

On Navy Island, with Captain Cliff, First Mate Garofalo, and Dog Ruban

12 May, 2012

By James Leslie

On May 12, 2012, the well-respected Albert Garofalo was kind enough to lead a group of eager botanists around Navy Island, in Niagara Falls. We we joined by Amy Brunning, skipper Cliff (who ferried us safely across the fast-flowing Niagara River), and his friendly dog Ruban. Navy Island, some 130 hectare in size, lies approximately 4.5 km upstream of Horseshoe Falls and is a designated National Historic Site. As the name implies, this island was historically used as a shipyard



Ruban, the non-paying member of the FBO, guards his pack. (Little Basil's padre in the white cap.)
 Photo: C. Zoladeski.

for the navy in the early 1800s. A century later, the area was used, with limited success, for agricultural purposes. Today, White-tailed Deer are the rulers of the island, with periodic visits from researchers and botanists.

Much of Navy Island is composed of slough wetland, with an intricate maze of upland conditions throughout. With very strategic planning and tactics, some botanists were able to meander through this linear upland labyrinth without encountering dead-ends or losing sight of the group. It was an impressive feat. Pin Oak (*Quercus palustris*) and Swamp White Oak (*Q. bicolor*) were commonly observed in the swamp communities, while Red Oak (*Q. rubra*) and Black Oak (*Q. velutina*) were abundant in the upland conditions.

Shumard Oak (*Q. shumardii*) has also been reported from the island, although none were positively identified during this field trip. Shellbark Hickory (*Carya laciniosa*) were infrequently observed, often in transitional areas. Albert indicated that these hickories can be identified by looking for

past years' bud scales and petioles, which sometimes remain along the length of the twigs for up to 7 years.

Noting the presence of maple, Albert briefly discussed differences between Silver Maple (*Acer saccharinum*), Red Maple (*A. rubrum*), and Freeman's Maple (*A. x freemanii*). He indicated that the samaras of *A. saccharinum* are likely to be 6-7 cm long, while those of *A.*



rubrum are ~ 2-3 cm long. In true hybrid fashion, the samaras of *A. x freemanii* tend to be somewhere between.

Both Pawpaw (*Asimina triloba*, above) and Ohio Buckeye (*Aesculus glabra*) were observed and as luck would have it, both were in flower. The group was quick to notice these flowers, as earlier



Following the leader. Photo: C. Zoladeski.

during the trip, almost everyone walked passed a flowering specimen of Eastern Flowering Dogwood (*Cornus florida*) without noticing it... almost...!

Large specimens of Spicebush (*Lindera benzoin*) were often observed in the slough understory and almost appeared tree-like. This tree-like form was the result of significant deer browse on the lower halves of the shrubs. Disappointingly, both Common Buckthorn (*Rhamnus cathartica*) and Glossy Buckthorn (*Frangula alnus*, a.k.a. *Rhamnus frangula*) were present on the island, as were Multiflora Rose (*Rosa multiflora*) and Japanese Barberry (*Berberis thunbergii*). Interestingly, the deer showed no interest in browsing on *B. thunbergii*!

Various hawthorn species were observed, although not all could be confidently identified as they can be a tricky genus for a one-time survey. Nonetheless, Cockspur Thorn (*Crataegus crus-galli*) was the most common. The group also observed (or experienced) American Prickly-ash (*Zanthoxylum americanum*) and Swamp Rose (*Rosa palustris*).

Albert also pointed out some 'old growth' Climbing Poison Ivy (*Toxicodendron radicans*), which had climbed its way up into the canopy and had a stem diameter of 10 cm!



Classic tussocks of *Carex bromoides*. Photo: C. Zoladeski.

Some of the herbaceous plants observed included Virginia Spring Beauty (*Claytonia virginica*), Golden Alexanders (*Zizia aurea*), Wild Crane's-bill (*Geranium maculatum*), the parasitic Squaw-root (*Conopholis americana*), False Nettle (*Boehmeria cylindrica*), Cuckoo Flower (*Cardamine pratensis*), Moneywort (*Lysimachia nummularia*), Straw Sedge (*Carex tenera*), Bromelike Sedge (*C. bromoides*), Meadow Sedge (*C. granularis*), and early indications of Fowl Meadow Grass (*Glyceria striata*). We were told that Tall Cord Grass (*Spartina pectinata*), Floating Manna Grass (*Glyceria septentrionalis*), and White Cut Grass (*Leersia virginica*) are known to occur in the fall.

Shallow marsh communities along the shoreline included specimens of American Sweetflag (*Acorus americanus*), Hard-stem Bulrush (*Schoenoplectus acutus*), Narrow-leaved Cattail (*Typha angustifolia*) and Broad-leaved Cattail (*T. latifolia*) [Garofalo memorization tip: the "l" in *latifolia* stands for "love" and is

demonstrated by the joining of male and female parts of fruiting heads, while "a" stands for "angry" – hence the separation].

Overall, many interesting plant species were observed and much was learned from Albert; the boat ride and sunny weather were just a bonus. 🌱

Botanical roots

Hydrastis canadensis, Carex careyana and Polymnia canadensis: new and re-discovered species in Wellington County, Ontario

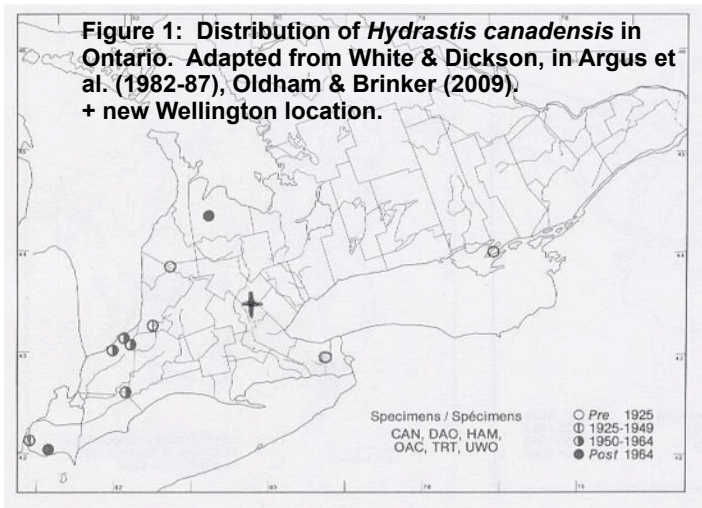
By Charles Cecile

While working on an update of the Wellington County plant list, several interesting discoveries were made in this past year or two.

Goldenseal (*Hydrastis canadensis*) was discovered in a somewhat disturbed, moist to mesic maple woodlot north of Guelph in Guelph-Eramosa Township. This substantial colony was found growing under a partially open canopy of Sugar Maple (*Acer saccharum*) and Ironwood (*Ostrya virginiana*) with an understory of Chokecherry (*Prunus virginiana*), Common Buckthorn (*Rhamnus cathartica*), White Ash saplings (*Fraxinus americana*), Inserted Virginia Creeper (*Parthenocissus inserta*) and Prickly Gooseberry (*Ribes cynosbati*). Many of the plants had bloomed and showed maturing fruits. Some associates included Wild Leek (*Allium tricoccum*), Zig-zag Goldenrod (*Solidago flexicaulis*), Giant Goldenrod (*S. gigantea*), Early Meadow-rue



Hydrastis canadensis. Photo: C. Cecile.



(*Thalictrum dioicum*), several sedges (*Carex rosea*, *C. hitchcockiana*, *C. hirtifolia*, *C. woodii*, *C. gracillima*), Red and White Baneberry (*Actaea rubra*, *A. pachypoda*), White Trillium (*Trillium grandiflorum*), False Solomon's-seal (*Maianthemum racemosum*) and Large-flowered Bellwort (*Uvularia grandiflora*).

Goldenseal is a new species for Wellington County. It is nationally and provincially rare as noted by Argus et al. (1982-87). It is ranked S2 by the Ontario Natural Heritage Information Centre (NHIC) and listed as "Threatened" by the Ontario Ministry of Natural Resources and the Committee on the Status of Endangered Wildlife in Canada (Oldham & Brinker, 2009). Goldenseal is a Species At Risk and protected under the Endangered Species Act in Ontario. It is listed as threatened or endangered throughout much of the eastern United States extending south to Alabama and Georgia (Argus et al., 1982-87). In Ontario, populations are reported from the counties of Essex, Chatham-Kent, Lambton, Huron and Niagara (Oldham & Brinker, 2009). A site in Grey County is believed to be an introduction (Sinclair & Catling, 2000). Historic records of Goldenseal in eastern Ontario are considered to be invalid (Sinclair & Catling, 2000). The Wellington County record may be the most easterly extant population of Goldenseal in Ontario (see Figure 1) although the possibility remains that this too is an introduction.

Hydrastis canadensis, a member of the Ranunculaceae, is a perennial woodland herb that is easily identified in the field with its two cauline (stem) leaves that are five-lobed and sharply toothed. The stem is pubescent and the rhizomes are yellow. The single flower lacks petals but has numerous stamens and pistils, blooming in early spring. Past ruthless harvesting as a medicinal herb has led to Goldenseal's decline in eastern North America (Voss & Reznicek, 2012).

Carey's Sedge (*Carex careyana*) was discovered at two locations in the county, both sites in mesic maple-beech forests. Approximately a dozen plants were observed at each location with such associates as sedges (*Carex plantaginea*, *C. hitchcockiana*, *C. woodii*), Two-leaved Toothwort (*Cardamine diphylla*), Blue Cohosh (*Caulophyllum giganteum*), Sharp-lobed Hepatica (*Anemone acutiloba*), White Trillium (*Trillium grandiflorum*), Yellow

Trout-lily (*Erythronium americanum*), Wild Leek (*Allium tricoccum*) and Narrow-leaved Spring Beauty (*Claytonia virginica*). One colony was found in Puslinch Township to the east of Guelph while the other was found in Guelph-Eramosa Township north of Guelph.

A historic herbarium specimen collected by Klugh in 1905 was the first record for this species for Canada (Ball, 1978) and is deposited in the University of Guelph herbarium (OAC) with the vague location given as "Woods, Guelph". It is thought to be from the "Dairy Bush" on the Guelph campus (Ball, 1978). A recent thorough search of this woodlot for Carey's Sedge proved unsuccessful. *Carex careyana* is both nationally and provincially rare (Argus et al., 1982-87). It is ranked S2 in Ontario (NHIC) and is recorded from the counties of Chatham-Kent, Elgin, Middlesex, Oxford, Haldimand, Norfolk, Brant and Perth as well as Waterloo, Halton and York Regions (Oldham & Brinker, 2009).

Carey's Sedge is in the Cyperaceae, section Careyanae which also includes *C. platyphylla*, *C. plantaginea*, *C. laxiculmis* and *C. digitalis*. Carey's Sedge is most similar to *C. plantaginea* except the former has sheaths of stem bracts and leaves with flat green blades and larger perigynia. Both have relatively wide, evergreen leaves (>10 mm) with reddish bases. Voucher specimens have been deposited at OAC.

A large colony of **Small-flowered Leaf-cup (*Polymnia canadensis*)** was observed in a moist to wet mixed wooded area along the Eramosa River in Puslinch Township. The closed canopy consisted of White Cedar (*Thuja occidentalis*), Trembling Aspen (*Populus tremuloides*), Yellow Birch (*Betula alleghaniensis*), Green Ash (*Fraxinus pennsylvanica*) and Black Cherry (*Prunus serotina*). Associate species observed included Wild Sarsaparilla (*Aralia nudicaulis*), Bulblet Fern (*Cystopteris bulbifera*), Lady Fern (*Athyrium filix-femina*), Sensitive Fern (*Onoclea sensibilis*), Zig-zag Goldenrod (*Solidago flexicaulis*), Wild Ginger (*Asarum canadense*) and Field Horsetail (*Equisetum arvense*).

Klugh (1905) noted Small-flowered Leaf-cup as being "in two localities near Guelph". The only Wellington herbarium specimen at OAC, dated 1935, has the non-specific location given as "Arkell". (A Stantec EIS report on the City of Guelph's Arkell Springs aquaduct written in early 2000, also recorded this species at this location.) Small-flowered Leaf-cup is presently known only from this one location in Wellington County. It is ranked S4 in Ontario (NHIC) and is listed as "rare" in the Greater Toronto Area and in the OMNR Site District 6E7 (Varga et al., 2000). It is also included on the Region of Waterloo's Significant Species List (1999). A voucher specimen has been placed at OAC.

Polymnia canadensis, a member of the Asteraceae, has flowers with no or very few white to pale yellow minute rays. The large leaves are opposite and deeply pinnately-lobed. It blooms in mid to late summer and is found throughout the eastern United States, occurring in Canada only in southern Ontario. Soper (1962) notes Leaf-cup is "essentially restricted to the Carolinian Region" in Ontario. ❁

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A Liberty Hyde Bailey and the Genus Rubus

By Bill McIlveen

Liberty Hyde Bailey (1858 – 1954) was a famous American botanist and horticulturalist. His work has had implications for botanical investigators across not only the United States but Canada and other places around the world, with his most significant and lasting contributions occurring in the botanical study of cultivated plants.

After graduating from Michigan Agricultural College, Bailey moved

to Cornell University in Ithaca, New York in 1885. Later he went on to found the College of Agriculture at that institution. During his distinguished career, he made major contributions in the field of horticulture, notably in taxonomic studies of cultivated plants. He wrote about 65 books related to horticulture, edited 100 other books, wrote 1300 articles and 100 papers dealing with taxonomy.

Although Bailey certainly made very significant contributions to the taxonomy of cultivated plants, his legacy with respect one group of plants, that being genus *Rubus*, was notably tarnished. In his taxonomic work, he described at least 486 species, subspecies or varieties of *Rubus*. Obviously, Bailey was a `splitter` when it came to describing plants. In his defense though, he was working with a very difficult genus and tackling the problem without the technical resources at our disposal in modern times. *Rubus* is likely quite variable to start with and has the added problem of highly complex genetics owing to polyploidy, hybridization, and apomixis. The base number of chromosomes in the genus is seven but the possible ploidy number ranges to the tetradecaploid that has 98 chromosomes. The genus therefore offers an immense challenge for those that wish for tidy systematic classification.

But Bailey was undaunted in his efforts to classify the raspberries, blackberries and other types of brambles. Much of his classification, reclassification, and identification work has been rejected in the most recent taxonomy. Of the 486 *Rubus* species that he had named, a mere handful are still formally recognized. Only 53 species bearing his name have been retained for a spectacular rejection rate of nearly 90%. Of



Rubus occidentalis fruit. Photo: B. McIlveen.

those species that have been accepted, 41 are recognized as hybrids.

After making allowance for some recent taxonomic corrections [ITIS], the list of Ontario *Rubus* species per the Natural Heritage Information System [NHIC] web site stands at 20. This list includes the addition of the former *Dalibarda repens* recently reclassified as *Rubus repens*. *Rubus arundelanus* and *Rubus enslenii* listed in NHIC (both classed as SU) are synonyms of *Rubus flagellaris* and therefore are not included here. Similarly, another SU species in NHIC is *Rubus frondosus* but this is a synonym of *Rubus pensilvanicus*, also listed as SU. This leaves Purple Wild Raspberry (*Rubus x neglectus*) as the only *Rubus* species in NHIC whose status is still undetermined (SU) for Ontario. These are all that remain of 493 scientific species names that have been applied to them as indicated in the following list. The list also shows the numbers of synonyms for each that were contributed by L.H. Bailey.

Numbers of Synonyms for Ontario *Rubus* Species

Latin Binomial	Common Name	No. Synonyms	
		Total	Bailey
<i>Rubus arcticus</i> ssp. <i>acaulis</i>	Nagoonberry	8	2
<i>Rubus allegheniensis</i>	Allegheny Blackberry	37	30
<i>Rubus caesius</i>	European Dewberry	0	0
<i>Rubus canadensis</i>	Smooth Blackberry	11	10
<i>Rubus chamaemorus</i>	Cloudberry	2	0
<i>Rubus flagellaris</i>	Northern Dewberry	142	117
<i>Rubus x frondosus</i>	Leafy Raspberry	1	0
<i>Rubus hispidus</i>	Trailing Blackberry	21	17
<i>Rubus idaeus</i> ssp. <i>idaeus</i>	Red Raspberry	0	0
<i>Rubus sachalinensis</i> var. <i>sachalinensis</i>	Wild Red Raspberry	52	5
<i>Rubus illecebrosus</i>	Raspberry	0	0
<i>Rubus laciniatus</i>	Cut-leaved Blackberry	0	0
<i>Rubus occidentalis</i>	Black Raspberry	3	1
<i>Rubus odoratus</i>	Purple Flowering Raspberry	9	0
<i>Rubus parviflorus</i>	Sparse-flowered Thimbleberry	13	0
<i>Rubus pensilvanicus</i>	Pennsylvania Raspberry	119	97
<i>Rubus bifrons</i>	Himalaya-berry	3	0
<i>Rubus pubescens</i>	Dwarf Raspberry	13	1
<i>Rubus setosus</i>	Small Bristleberry	61	53
<i>Rubus x neglectus</i>	Purple Wild Raspberry	1	0
<i>Rubus x paracaulis</i>	Hybrid Raspberry	1	1
	Total	497	334

Bailey was active in studying only some of these species but he was spectacularly active with *Rubus flagellaris* (applying 117 out of 142 synonyms) and *Rubus pensilvanicus* (97 names out of 119

synonyms). The other species that took Bailey's attention were *Rubus allegheniensis*, *Rubus hispidus*, and *Rubus setosus*. Bailey did apply five different names to our common Wild Red Raspberry. It has been more commonly referred to as *Rubus idaeus* ssp. *melanolasius* and *Rubus strigosus* but the most current approved name is the somewhat unwieldy epithet *Rubus sachalinensis* var. *sachalinensis*. That species has been the subject of 52 separate descriptions of which fully one half were made by E.L. Greene. In many cases, he placed his specimens in an entirely different genus - *Batidea*. Like Bailey, none of Greene's names have been retained for this species. While we shouldn't sneer at the efforts of these two botanists, their stories do serve as a warning to those that would wish to split species when splitting is unwarranted. And add to that, the never ending debate about what constitutes a valid species. 🌱

Information Sources:

Cornell University Library - Information collections related to L.H. Bailey published by the library and other similar sources.

ITIS - Website and database of the Integrated Taxonomic Information System, operated as a partnership of U.S., Canadian, and Mexican agencies (ITIS-North America); other organizations; and taxonomic specialists and part of the Global Biodiversity Information Facility (GBIF).

NHIC - Website of Ontario OMNR Science and Information Branch, Natural Heritage Information Centre.

John Goldie Award – 2013

By Deborah Metsger

The John Goldie Award, now in its 7th year, honours John Goldie who conducted botanical surveys in Upper Canada and beyond in the early 1800s. The award is given annually by the Field Botanists of Ontario to an individual or organization whose efforts have made a significant contribution to the advancement of field botany in Ontario.

The 2013 recipient of the Goldie Award was Adele Crowder. On October 17th 2013, FBO President Mike McMurtry and Bill McIlveen travelled to Kingston to present the award to Adele during the monthly meeting of the Kingston Field Naturalists.

Adele Crowder was born in Ireland, completed her PhD on the chemistry of peat bogs at Dublin University, and worked as a research associate in Paleocology at the University of Belfast. In 1966 Adele came to Canada with her husband Christopher and three children and settled in Kingston where Chris, a medieval historian, was appointed professor in the History Department at Queen's University. Having initially turned down a full-time position in the Biology Department at Queen's in order to balance family commitments, Adele began

working part-time in the department, first as a lab coordinator in 1967, then as an assistant to Roland Beschel in the Fowler Herbarium, and eventually as a Professor of Biology. In 1970 she was named Curator of the Fowler Herbarium, a position which she held until 1995. In 1971 she helped to develop a general Ecology course – Biology 202 – which she continued to teach with Professor Raleigh Robertson for 20 years. This course took a hands-on approach to field ecology with numerous field trips in the Kingston area and to the field station at Lake Opinicon. Adele was a very involved and approachable teacher who inspired many students to pursue ecology and organismal biology as a course of study.

Adele is quick to tell you that she is not a taxonomist or field botanist – but rather a theoretical ecologist who makes observations in the field and takes them back to the lab to figure them out. Her research accomplishments are therefore cross-disciplinary in nature, and cover a broad spectrum of habitats. The subjects of her academic publications range from the paleoecology of eastern Ontario streams and lake basins – to studies of aquatic macrophytes, wetlands, sediments and fish habitat in the Bay of

Quinte – to metal uptake and toxicity in plants adjacent the Sudbury smelters – to forest succession in old fields. In addition to her academic work, Adele has conducted numerous botanical and ecological investigations and produced 45 technical reports for Parks Canada, the Ontario Ministry of Natural Resources, and the private sector. Focused on the Kingston region and eastern Ontario, these include ecosystem and species recovery plans, environmental assessments, feasibility studies and general inventories.

Over the course of her career Adele has supervised or mentored and co-published with 26 students. Among them, Don Cuddy, retired ecologist for OMNR, Dr. Gregory Taylor Dean of Science in the Office of Sustainability, and Professor in the Department of Biology, University of Alberta and the late Sam Vander Kloet who was professor of Botany at Acadia University.

As Curator of the Fowler Herbarium Adele was determined to make specimen information accessible for use. In 1996, she was senior author of the *Plants of the Kingston Region* and has continued to update that publication with new specimen records in subsequent years. In 2003, she co-authored with Vivien Taylor a catalogue for the Jordon Library exhibition: *Mrs. Traill, Mrs. Roy and Miss Boyd: Plant collectors in 19th century Upper Canada*. The publication celebrates these three women,

whose plant collections were originally deposited in the Fowler Herbarium, and places them in an historical context of Canadian botany and taxonomy at that time.

Adele has been, throughout her career, actively associated with the Queen's University Biological Station (QUBS) at Lake Opinicon and has documented its flora. In 1976 she was instrumental in securing of the Hughson Tract, a significant expansion of land holdings of the station, which enabled long-term field studies and started the series of acquisitions which has provided a significant amount of working property and a substantive conservation presence in the Rideau Lakes area (now in excess of 3,232 ha).

In 1979, Adele introduced the idea of and co-developed and taught the

Naturalists Workshops which were offered by the QUBS for 19 years. These week-long events were designed to provide interpreters, professional field biologists and dedicated naturalists with a broad knowledge of natural history, ecology and animal behaviour, and to assist with identification skills. She also convened one- or two-day workshops on wetlands, species at risk, and other topical subjects to train and enhance communication amongst biologists working in the field. Adele continues to lend her scientific expertise to, and speak out on, local environmental issues.

The 2013 Goldie award celebrated Adele Crowder's many contributions to our understanding of the ecology of Ontario plants and the impacts of human activity on them. She has provided us a model for the modern ecologist who increasingly needs to step outside of disciplinary boundaries and be willing to look at the interactions between plants, animals, fungi and their environments. Thank you Adele. 🌱



Adele Crowder receives the 2013 Goldie Award. Photo: D. Metsger.

The 2014 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 \$300 (three hundred dollars) 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, 2014 and send this information to Troy McMullin at: troy McMullin@hotmail.com
- Each submission should include the applicant's name, contact information, school, major, year the study was completed, research topic/title, and the name of advisor/supervisor.
- Applicants must either be students or have graduated within the year before the Annual General Meeting (AGM).
 - Research submitted 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; and, 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: chriszoladeski@savanta.ca
- One submission per person each year. The award cannot be received by the same individual more than once.
- An honourable mention is given for second place. Second place finishers are invited to prepare a poster for the AGM and write an article for the newsletter as well.
 - 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

BioBlitz Announcement

The Field Botanists of Ontario are invited to the annual BioBlitz of the Kingston Field Naturalists.

The Kingston Field Naturalists 2014 BioBlitz will be held at Big Sandy Bay Conservation Area at the south west end of Wolfe Island, near Kingston, from 3:00pm Friday 13 June to 3:00pm Saturday 14th June, 2014. Everyone is invited for all or part of the time.

A BioBlitz is a recording of biodiversity and has educational value through the guided walks to be held. A BBQ will take place at the end of the event.

24 hours of species listing (yes moths are a big attraction at night) usually brings in well over 500 species and plants of all kinds make up more than 1/3 of these species.

Big Sandy Bay is a special place. This is a bay-mouth bar area with a good variety of habitats including dunes behind the sand beach (coastal ecology), wetlands (including a wetland behind the bar that reputedly has acid loving species) and possibly a bit of oak savannah on Bear Point. In addition, there is meadow and hedgerow at the trailhead. Well worth investigating! The contribution of your species list would be appreciated.

Details including maps, accommodation and program will be available in March.

Please contact Janis Grant (janis.grant@kos.net) or Anne Robertson (n8ture.anne@sympatico.ca) for Volunteer Information and Program.

We do hope you will be able to join us for this event.

2014 John Goldie Award Call for Nominations

In 2007, the Field Botanists of Ontario initiated an award that recognizes an individual who has made a significant contribution to the advancement of field botany in Ontario. That award is named the John Goldie Award for Field Botany in honor of his early pioneering surveys of vegetation in the Province. In order to continue the recognition process, FBO is seeking suggestions from the general membership for the names of suitable recipients to be given the award. Nominations for the 2014 award should be submitted to the President of FBO no later than July 1, 2014.

Critical information to be provided includes:

- Name of recipient (and contact information)
- Name of nominator (to be kept confidential) and contact information
- A statement by the nominator indicating the nominee's contributions to field botany in Ontario
- Supporting letters or other documentation whenever possible

Further information and a nomination form are available from the FBO website.

MARK THESE DAYS!

This year's AGM will be held in Windsor, at the Ojibway Prairie Nature Centre, on September 6-7.



Squaw-root (*Conopholis americana*) on Navy Island. Photo: C. Zoladeski.

Erratum: The photo of a lichen on page 7 of our last issue (Volume 25, Number 4) was incorrectly labelled as Hooded Rosette Lichen, *Physcia adscendens*. The name should have been Common Greenshield Lichen, *Flavoparmelia caperata*.