

# Sarracenia

Newsletter of the Wildflower Society of Newfoundland and Labrador

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## Special Issue:

### “Weeds” and “Non-native” species

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Observing Common Sowthistle (*Sonchus oleraceus*). Water St., St. John's. Aug. 19, 2023. Photo: Karen Herzberg.

## Editor's Column

This "Special Issue" shines a light on two, frequently overlapping, vascular plant categories—"weeds" and "non-native species". Neither gets much respect!

But, without their presence, the total floras of our towns, villages, roadsides, and other "disturbed areas", would be far less diverse, and much less interesting.

"Heresy", you say? Perhaps so. But, how much do most people really know about such plants? Not very much, I would wager. **Read on ...**

**The Sarracenia needs content! Below is an ongoing appeal for articles & other contributions from members:**

The production of a newsletter like the Sarracenia requires a continuous flow of good quality "content".

While many *past* Sarracenia contributions have tended a little toward "the scientific side" — probably discouraging the submission of more "popular" pieces by at least some "general members" — there doesn't seem to be any good reason why a healthy portion of future contributions can't be a wee bit more easy-going and "grass-roots" in the interest of satisfying the full range of interests and aesthetic sensibilities of our greater membership. Ideally, of course, there should be some sort of balance between the two.

Suggested contributions might include, at least in part, a number of *short* (even just "half-page") pieces on:

- general news and information/notes/comments
- special botanical places/secret spots
- field trip reports — both new and historical
- new discoveries/new distributions
- associated flora and fauna (eg. pollinators)
- philosophical musings/artistic offerings
- edible plants/recipes

Contributions of interesting photographs, with explanatory captions, will also be much welcomed. The possibilities are endless. Don't be shy! It's *your* newsletter! "Everyone has skills"!

John Maunder: Editor

Please send all contributions to: [jem@nl.rogers.com](mailto:jem@nl.rogers.com)

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## Basic Web Links

**The Digital Flora of Newfoundland and Labrador**

<https://www.digitalnaturalhistory.com/flora.htm> (This website is presently undergoing a complete upgrade!)

**Flora of Newfoundland and Labrador** by Susan and Bill Meades <https://newfoundland-labradorflora.ca/>.

Includes the most authoritative checklist of the Province's vascular plants <https://newfoundland-labradorflora.ca/checklist/>

**"Limestone Barrens ... Ours to Protect"**

<https://limestonebarrens.ca/> A Newfoundland website that is a multi-layered goldmine of information. Includes many excellent links, particularly on the pages <https://limestonebarrens.ca/Resources.htm> and <https://limestonebarrens.ca/EarlyStudies.htm>

**Nova Scotia Wild Flora Society** <http://nswildflora.ca/>

Our sister group "next door". Of particular interest is their archive of PowerPoint and Zoom presentations available at: <http://nswildflora.ca/programme/videos-of-presentations/> and also at: <http://nswildflora.ca/programme/videos-of-presentations/powerpoints-of-presentations/> [click the *titles* to launch].



## What's a "Weed"? – John Maunder

There are many definitions, I suppose.

One of them might be: "A weed is a plant that grows *too well*, and becomes a nuisance, or worse, to gardeners who pride themselves on their ability to grow far-less-talented species which require, of them, much hard work and struggle!"

Clearly, volumes have been written on "weeds". So, instead of trying to re-invent the wheel in a few short pages, I recommend a glance at the following "Wikipedia" page: <https://en.wikipedia.org/wiki/Weed>



Hairy Bittercress (*Cardamine hirsuta*) [a fairly young specimen]. My Pouch Cove garden. The plant is tiny, but tenacious. Once in a flower bed, it's nearly impossible to get rid of completely. Very fast-growing, profusely-fruited, many, many very small seeds, and multiple generations per year. Active even under the snow in winter! Photos: John Maunder.

## What's just a "Non-native Species"? – John Maunder

A much simpler question, and quite self-explanatory.

A "non-native species" is one that has most likely been introduced to a region *by humans*.

Some "non-native species" may be, or may become, "weeds" or even "invasive species" if they turn out to be particularly successful in their new "home region".

Others will just fit quietly into "underutilized niches" and enrich the local flora.



Purple Loosestrife (*Lythrum salicaria*). [Top] Foxtrap Marina marsh. An impressive expanse of the non-native purple loosestrife, thriving in an apparently "underutilized niche". Interestingly, in many areas of Newfoundland, such as Pouch Cove, *very small patches* of the species have been stable for years. [Bottom] A closeup of flowers. Photos: John Maunder.



[In contrast to “non-native species”, “native species” are ones that have evolved in a particular region, or have reached that region, over time, through their own devices or via some “natural” dispersal agent such as birds.]



Barrens Willow (*Salix jejuna*). Cape Norman. A “native species” that is unique (i.e., “endemic”) to the Island of Newfoundland. [Very rare. A “species-at-risk”.] Photo: John Maunder.

“Disturbed ground” is typically well-utilized by “non-native species”, particularly in urban areas. However, some “native” plants are also adapted to live in disturbed soils.



Botanizing “disturbed ground” on the margins of a parking lot just east of Prescott St., on Duckworth Street, St. John’s[\*]. WFS walk – Aug. 19, 2023. Photo: Karen Herzberg.

[\*Remarkably, at this very site, and its immediate vicinity, in about 1872, the first ever discovery of Pre-Cambrian [Ediacaran] “body fossils” was made by Elkanah E. Billings. See an excellent account of all of this in: <https://www.gov.nl.ca/jet/files/mines-geoscience-publications-currentresearch-2008-boyce.pdf>]

Along the much-disturbed margins of newly-constructed highways and secondary roads, our two native alders (*Alnus* spp.) help to enrich the impoverished soils present there, through the amazing process of “nitrogen fixation” (molecular nitrogen from the air is converted into ammonia or related nitrogenous compounds by a symbiotic bacteria *Frankia alni* which resides in small “nodules” on the alders’ roots). Soil fertility increases after the alders lose their leaves and other parts, in the Fall.

In recent years, the extensive employment of “hydro-seeding” has greatly accelerated such recovery processes, albeit while adding many non-native species to our flora!



Birdsfoot Trefoil (*Lotus corniculatus*). Near St. John’s. One of the primary “hydro-seed species”. This particular plant forms a symbiotic relationship with *Rhizobium leguminosarum biovar viciae*, a bacterium that “fixes nitrogen” in “nodules” formed on the *Lotus* plant’s roots. When a *Lotus* plant dies, the “fixed nitrogen” it contains is released into the soil, making it available to other plants. Photo: John Maunder.

### What’s an “Invasive Species”? – John Maunder

A particular type of “non-native species” which grows and disperses prolifically, and undesirably or harmfully, usually to the significant detriment of native species, and ecosystems, and to the great displeasure of humans.

But, note that “invasive” is probably an over-applied label, since not every “non-native species” is “invasive”!

Moreover, “invasiveness” can be a matter of individual appraisal! Is the “non-native” Dandelion (*Taraxacum officinale*), for instance, an “invasive species”? Those who hate the plant for spoiling their “perfect green lawns” would almost certainly say so— especially at the time of



year when the fast-growing, “headless”, flower stalks usually take two or three “mows” to finally subdue!

However, many others would argue that [1] the showy yellow “flowers” make lawns (and other places) look beautiful; [2] the pollen is supposedly[!] critically important for bees; and [3] the leaves are very good to eat!



Dandelion (*Taraxacum officinale*). Duckworth Street, St. John’s. Photo: John Maunder.

What about the “large knotweeds” (*Reynoutria* spp.)?

Most would say that they are *definitely* “invasive species, to be destroyed at all costs” —IF such were actually possible! [It probably isn’t!]

But, again, not *everyone* would agree!



A roadside stand of Sakhalin Island Knotweed (*Reynoutria sachalinensis*). Cupids. Photo: John Maunder.

On the Port au Port Peninsula (somewhere near the tiny communities of Felix Cove and Campbell’s Creek), I clearly recall once seeing straight planted rows of the above-illustrated, huge, Sakhalin Island Knotweed (*Reynoutria sachalinensis*) serving as summer windbreaks on open semi-agricultural land!

Perhaps serving a similar, intended-or-unintended purpose in the nearly tree-less, windswept town of St. Bride’s, Newfoundland, the Sakhalin Island Knotweed is very common, often *very near the houses*.

In conclusion, the slightly smaller Japanese Knotweed (*Reynoutria japonica*), despite its almost universal vilification, is quite an attractive plant (at least during the growing season)!

“To each their own!”



Japanese Knotweed (*Reynoutria japonica*). Mt. Cashel area, St. John’s. Photo: John Maunder.



## What's in a Name? "Doorweed"

Howard Clase



Have you ever seen Doorweed? What about Common, Prostrate or Dooryard Knotweed? Or the plant known to botanists as *Polygonum aviculare* L. Aha! I think you've sussed it out: these are all one and the same thing.

The words 'door', 'yard', and 'common' suggest that there's a lot of it around close to home, and 'prostrate' suggests that it's not very tall. But still, you may think that you've never seen it.

In fact, you almost certainly *have*, and have often walked on it. You've just not noticed it. It's one of the commonest plants growing in roadside cracks and waste ground around most Newfoundland communities. In the UK it's known as Knotgrass rather than Knotweed, although it's clearly not grass!

What about its Linnean name, *Polygonum aviculare*? What does *that* actually mean? Note that I do not say "its Latin name" because [1] it's not what the Romans called it, and [2] it's not proper Latin. The first word comes from two Greek words, 'poly', meaning many, and 'gonu', meaning knee, = "many knees".

If you are thinking, "Plants don't have legs so how can they have knees?" Well, they don't actually have *real* knees, of course, but plants of this family do have little knobbls at the internodes on the stem where leaves or side branches sprout from – sort of like knees - and taxonomists had to call them *something*. So, these two Greek words describe a common feature of the genus. An "m" is added to the genus name to make it look like a Latin neuter noun. The 'knot' in Knotweed/Knotgrass refers to the same feature.

As I'm sure you know, in the 18th century the Swedish naturalist Carolus Linnaeus (or "Charlie Limetree"! ) proposed a system for naming all living things using just two words - "genus", a noun, and "species", an adjective characterising the noun. At the time, the *lingua franca* (or common language) of scientists and other academics was Latin so the names had to have Latin forms, and we are stuck with it.

Even if you are naming a plant after your Japanese girlfriend you have to stick a few letters onto the end of the words to make them *look* like Latin. So that's why I call them 'Linnean' and not 'Latin' names. Linnaeus' system has long been adopted by all biological scientists, in one form or another.

OK, that's dealt with the *Polygonum* bit. What about *aviculare*? This is real Latin, in part: it's derived from *avis*, "bird", and another bit meaning "pertaining to". But what on earth have birds got to do with this plant? That was something I had wondered about for years until I started going to visit my family in Hamilton [Ontario] where they still have fairly large numbers of House Sparrows. When I went for neighbourhood walks in the summer, I noticed that there were, frequently, House Sparrows feeding on this plant where it grew up in cracks in the sidewalk concrete; if you were to look carefully you would see that the plant has fairly large seeds.

Fernald says that such birds also eat the young leaves. We just don't have very many House Sparrows around Newfoundland any more and the Juncos don't seem to have discovered this food source yet.

[By the way, Fernald's 8th edition of Gray's "Manual of Botany" is the only botany book I own that gives the etymology of the Linnean names, so I refer to it a lot.) The "L." after the name tells us that this is the original name that Linnaeus gave to the plant, and no-one has found any reason to change it – yet! [Popular field guides generally don't bother with giving the "Authority" for the name.]

Taxonomists in their herbaria with their microscopes have identified, from our Province, *three* species of doorweed [including *P. aviculare*] (containing, in total, nine subspecies). Two of these subspecies are considered to be native to both Newfoundland and Labrador, one is considered to be native to Newfoundland only, two are considered to be native in Labrador only, one is considered to be introduced to both Newfoundland and Labrador, and three are considered to be introduced to Newfoundland only [ref. "Meades' checklist"].

In Newfoundland, an attractive native subspecies with largish leaves— Fowler's Knotweed (*Polygonum fowleri fowleri*)—is fairly common around the coast. (I've been seeing but not noticing this species – I shall look for it, next summer.)

I can find no indications that Doorweed has ever been deliberately planted for food even though it's a relative of Buckwheat, but its seeds probably contaminated crop seeds in the past when seed screening was not as good as it is today.

(Wheat fields used to be much more interesting to botanists a hundred years ago! Even the poppies have gone now, as well as other attractive species like corn cockle.)

Richard Mabey, in his book "Weeds", reports that the 2000-year-old "Bog-Man" dug up in a Danish peat bog in 1950 had some Doorweed seeds in a mixture of grains found in the remains of his last meal. Professor P. V. Glob, in his book "The Bog People" suggests that this was a ritual meal as part of a mid-winter sacrifice to bring on the advent of Spring, so it may not have been his normal fare. Mabey also says that Doorweed has the reputation of having a very extensive root system; an obvious requirement for a plant that manages to gather enough nutrients and moisture to grow in small cracks in concrete or other very poor soils.

My picture, above, which was taken in Churchill Square, in St. John's, in mid-September 2022, shows the typical habitat and habit of Doorweed. It's an annual so you can find it from mid-summer onwards. It has many wavy, branched stems forming a tangled mat a foot (30 cm) or more across. The blueish-green leaves are quite variable. Those on the main stem are from 1-2 cm long and up to 5 mm wide, the tips may be pointed or roundish. Leaves on side branches are generally smaller. The white or pink flowers are in the leaf axils and tiny, with petals only about 3 mm long. When the seeds form, they are also about 3 mm long, and roundish.

Now that you know what it looks like, and where to find it, I hope you will look out for Doorweed when you are out and about next summer. You can't miss it.

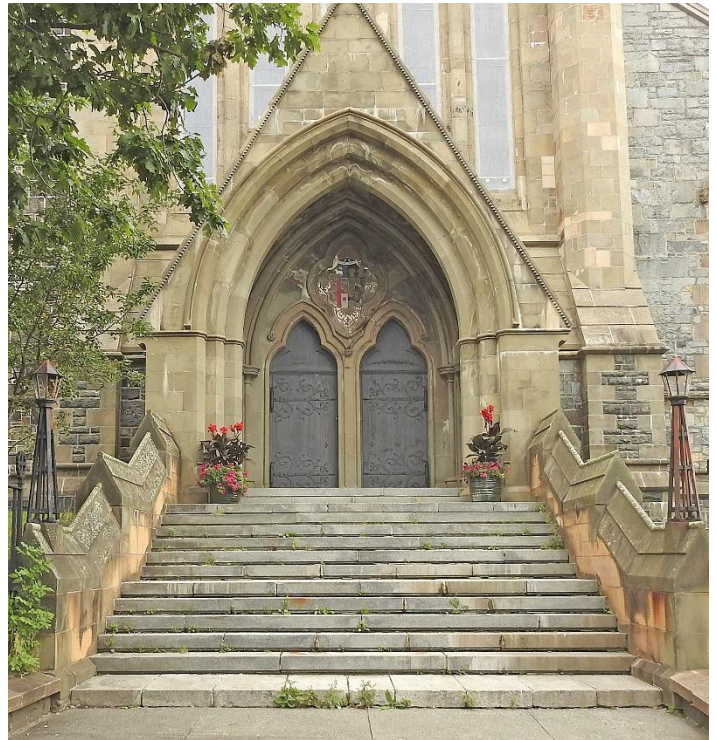
**How many types of "downtown plant" might you find on a single flight of stone steps?** – John Maunder

Quite a few it seems!

In mid-August, I was walking past the "west" end of the Anglican Cathedral of St. John the Baptist, in St. John's, Newfoundland. Having just climbed all the way up from Water Street, I was in need of a short sit-down. What better place to sit than on the cathedral steps!

Instantly, I realized that the steps were a botanical "oasis"! Almost every joint or crack hosted multiple plant species!

Nothing pejorative is intended here! I'm a botanist, after all!



In total, I managed to tally 19 species on just 12 steps!

#### The List:

Annual Bluegrass (*Poa annua*)  
a bentgrass (*Agrostis* sp.)

Bull Thistle (*Cirsium vulgare*)  
Low Cudweed (*Gnaphalium uliginosum*)  
Tansy Ragwort (*Jacobaea vulgaris*)  
Woodland Ragwort (*Senecio sylvaticus*)  
Sticky Ragwort (*Senecio viscosus*)  
Rough Goldenrod (*Solidago rugosa*)  
Common Sowthistle (*Sonchus oleraceus*)

Common Plantain (*Plantago major*)

Golden Chain (*Laburnum* cf. *xwateri*)  
White Clover (*Trifolium repens*)  
Cow Vetch (*Vicia cracca*)

Procumbent Pearlwort (*Sagina procumbens*)

Broadleaf Willowherb (*Epilobium montanum*)  
Glandular Willowherb (*Epilobium ciliatum* subsp. *glandulosum*)

Garden Black Currant (*Ribes* cf. *nigrum*)

Sycamore Maple (*Acer pseudoplatanus*)  
Showy Mountain Ash (*Sorbus decora*)



## Two Recent Pasadena “Ephemerals”

Henry Mann

Botanically speaking, the term “**ephemeral**” can have several shades of meaning.

Most commonly it refers to plants that spend a very brief period of time in their vegetative and reproductive life cycle, and then become dormant, or at least unnoticed, for most of the year. We are all familiar with perennials like the spring bloomers, tulips, daffodils, scillas, etc. which provide eye catching displays for a few short weeks and then spend much of the rest of the year as underground bulbs, tubers, or corms.

On the other hand, many “**weedy annuals**” grow rapidly from seed each year, quickly mature, and then spend a lengthy time in the dormant seed stage until conditions are again favorable for germination. We sometimes say they have ephemeral life cycles. Several other ephemeral variations relating to plant life cycles and environmental conditions occur.

However, the usage of the term “**ephemeral**” when considering a plant’s relationship to the overall flora of a region is slightly different. It means that a plant may be repeatedly introduced, and reported, but is not able to successfully reproduce or compete with the local flora for any length of time - thus never becoming a permanent resident of the flora. Its presence is fleeting.

Such is the meaning of the word in relation to the two species featured in this essay.

Determining when a reported species should be considered an “**ephemeral**” versus a permanent component of the flora is a somewhat murky consideration. As with humans, the process of becoming a permanent resident is a dynamic one, vacillating one way or the other with changing circumstances. For plants, vagaries of weather, climate, disturbances, and happenstance make such a definition arbitrary at best.

In the face of human disturbance of natural habitats, many “**non-native**” plant species have persisted, and will continue to persist, as permanent residents. Some probably would not have been able to do so in natural undisturbed habitats.

On the other hand, some permanent, long-term, residents that have been here since the last glaciation, like Long’s Braya, Woolly Arnica, and Low Northern Rockcress, are currently hanging on “by their fingernails” and could disappear in an eye-blink if favorable conditions change.

Two annual species which I have not seen before in Newfoundland popped up in Pasadena gardens in 2022.

Seeds somehow arrived, probably as hitch-hikers in seed packets, in purchased compost or potting soil, or as part of some other human activity. It would be interesting to note if readers of the Sarracenia are familiar with either of these two, in our province or elsewhere. Could either of them ever become permanent residents? No doubt Nature will decide, as She always has.

### Hairy Nightshade (*Solanum nitidibaccatum* Bitter)



Hairy Nightshade. Entire plant in bloom with some immature fruit, August 15, 2022.



Hairy Nightshade. Flower cluster with two blossoms fully open.





Hairy Nightshade. Two mature greenish fruits with some yellow-brown darkening, and pale “vein-like” markings.



Hairy Nightshade. Magnified stem showing glandular-tipped hairs.

Weeding the vegetable patch is one of those common chores of gardeners, sometimes considered tedious. Yet it can be a pleasurable learning experience when approached with an inquiring mind and sharpened observational intentions.

Seedlings of our common garden weeds are readily recognizable (chickweeds, lamb’s-quarters, dandelions, forget-me-nots, etc.), but occasionally something different appears. In such a situation I tend to allow the seedling to grow until it can be positively identified. The seedling in question grew and soon became a recognizable member of the Nightshade Family (Solanaceae) which includes tomatoes, potatoes and peppers. I assumed it was probably Black Nightshade (*Solanum nigrum*) for which there are several reports from the Island. But just in case I let it grow in my onion patch to maturity. The vigorous low-growing

spreading plant eventually produced typical white *Solanum* star-shaped blossoms and then copious berry-like fruits.

However, instead of turning black as I had assumed they would, the fruits remained green with only a slight darkening and with distinctive paler “veins”. Upon examination with a hand lens, the plant was quite hairy (pubescent) with glandular tipped hairs, something not that obvious with the naked eye. Black Nightshade is not glandular hairy. Consulting some of the *Solanum* literature, I discovered that the genus had recently seen a revision (Neudorf and Salzl 2021) and my specimen turned out to be *Solanum nitidibaccatum*, the Hairy Nightshade. With the revised reshuffling of names, it became apparent that the common name “Hairy Nightshade” had actually been applied to two different species, *S. sarrachoides* and *S. nitidibaccatum*, the former not known from Canada and the latter an introduced species present in all provinces, but listed as an ephemeral for Insular Newfoundland. It is not known from Labrador. Probably specimens of *Solanum* in NL herbaria should be re-examined in light of this modern revision. Perhaps this may have already been done? My specimen now resides in the Grenfell Campus, M.U.N. Herbarium (SWGK).

Wild Cucumber (*Echinocystis lobata* (Michx.) T. & G.



Wild Cucumber. A single plant on a garden pea trellis, August 23, 2022.

Wild Cucumber, also known as Balsam Apple or Lace Plant, is a member of the Gourd Family (Cucurbitaceae) which can be considered a desirable attractive ornamental by some, or an invasive weed by others. It occurs along the southern border regions of all Canadian provinces and most USA states, but is not yet listed for NL. In August 2022 I received a request from a Pasadena resident about a strange plant in his backyard garden.





Wild Cucumber. Flower clusters, leaves and tendrils.



Wild Cucumber. Male flower cluster.

A row of peas was planted in early spring and the first seedling to appear did not look pea-like, but being a curious gardener, he decided to allow it to grow and see what it would produce. And produce it did! By mid-August the highly branching plant had grown vertically by about two meters and laterally by over three meters on his pea trellis. A profusion of white blossoms produced an awe-inspiring neighbourhood site! Leaf shape, tendrils and separate male and female flowers proved an easy identification. On this date female flower petals were just beginning to wither, exhibiting their tiny immature prickly inferior ovaries. Mature

fruits consist of prickly non-fleshy papery husks about 5 cm long with four chambers and a single seed in each.

The vigor and rapidity of growth was truly awesome, at least in a warm sheltered fertile garden setting, possibly its vitality may be somewhat subdued in a more natural environment. However, Prince Edward Island has listed it as an invasive weed for its ability to rapidly overcome and smother desirable shrubs and crop plants. Could it ever become a problem in NL? In a natural setting competing with native vegetation and on poor soils it is doubtful that in our short harsh growing conditions it could regularly produce mature viable seed, but perhaps possible in some years. Even so, there is much to admire about this pretty gutsy climber able to challenge our more-wimpy and coddled crop and horticultural species.

Plants like this always amaze me! It is perhaps worth considering as a garden ornamental, especially for gardeners who oft complain about their “brown thumbs”.

#### Reference Cited

*Neudorf, Jennifer and Angela Salzl. 2021. Identification of Selected Species in Solanaceae. Canadian Food Inspection Agency.*  
[https://www.idseed.org/ckfinder/userfiles/files/Identification\\_of\\_Solanaceae\\_2021.pdf](https://www.idseed.org/ckfinder/userfiles/files/Identification_of_Solanaceae_2021.pdf)

**Why are there so many “non-native” plant species growing in downtown St. John’s, and, for that matter, in Harbour Grace, Carbonear, and a few other “seaport towns” in Newfoundland? – John Maunder**

The answer is clearly connected with the long history of marine commerce in Newfoundland.

Well worth a read is the following (admittedly 46-year-old) McGill University thesis [plus a slightly more recent, *significantly compacted and tidied up* version of the same – see the second reference on the following page]:

*Cooper, Karyn G. 1977. The Distribution of Selected Exotic Weeds on the Avalon Peninsula of Newfoundland, Canada. A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirement for the degree of Master of Science. Department of Geography, McGill University. Montreal. July, 1977*  
<https://escholarship.mcgill.ca/downloads/gm80hw685?locale=en>



By the same author:

Cooper, Karyn G. 1981. *Alien Anthropophytic Vegetation of the Avalon Peninsula. Chapter 8, pp. 251-265 IN Macpherson, Alan G. and Joyce Brown Macpherson (eds.) The Natural Environment of Newfoundland, Past and Present. Department of Geography, Memorial University of Newfoundland.* [Not available online]

As Karyn Cooper explained for plants, and Carl Lindroth (1973) explained earlier for small animals (in “The faunal history of Newfoundland illustrated by Carabid beetles”), early maritime commerce between Europe and North America, and back, invariably involved stops in Newfoundland.

Particularly in the “Age of Sail”, “outgoing” ships, sailing without a substantial cargo, were “ballasted” to make them stable in rough seas.

In preparation for return trips, in order to make room for “paying loads”, onboard “ballast” had to be offloaded—usually onto dry land. Dumping “ballast” overboard” was generally banned in NF, literally to prevent the “filling-in” of harbours [!], as early as the 17<sup>th</sup> century.

The “ballast” originally loaded in Europe usually consisted of rocks, soils, sand, discarded building materials, demolition debris, and whatever else could be readily acquired (for free) from purposely-situated harbour-side “ballast piles”—or from direct “estuary dredging”—at the port of departure. Tangled up in all of this material were whatever plant seeds and roots [as well, insects, terrestrial arthropods, and small molluscs!] that happened to be part of the mix. Not surprisingly, such “transported organisms” quickly established themselves at their “ports of entry” and became part of the local non-native flora and fauna.

St. John’s (especially in the estuary area that once existed in the vicinity of the wide outflow of the Waterford River) seems to have received a particularly large number of wayward organisms; most of which are still present today.

Significant non-native flora and fauna also became established at the significant ports of Bay Bulls, Harbour Grace, Carbonear, and a number of our lesser ports.

In more recent years, more modern forms of transport have continued to transport additional species to our region, from an increasing number of places worldwide.

## Botanizing an “Urban Wasteland”. – John Maunder

Humans have a particular talent for creating “urban wastelands”.

The streets, sidewalks, parking lots, and general “commercial” and “industrialized” areas of towns and cities can be pretty grim places, especially to the “non-observant”!

But, for those willing to look a little closer, there is much to see and appreciate. For this, we can primarily thank the local “weeds” and “non-native plants”! Legions of these often tough and enterprising species find abundant opportunities, and considerable success, in such places.

Back in 2006, Howard and Leila Clase began paying closer attention to the flora of the sidewalks of downtown St. John’s, Newfoundland, and tried to interest others in doing some downtown botanical walks. An initial plant checklist, compiled to record their first findings, listed a remarkable 85 species! But, alas, public interest in the project was not as enthusiastic as hoped for.

Nevertheless, the writer of this present essay was inspired enough, by the initial “Clase checklist”, to lead his own “downtown plant walk”, as a one-off “public program” for the provincial museum, during the early days of “The Rooms” institution. And that was that. During the years since then, he has led at least three *Wildflower Society* “downtown plant walks”—the most recent being this past August [see the images on the cover and p. 9 of this issue].

Ultimately, Yours Truly took over the compilation and updating of the original “checklist”.

The “downtown list” presently records an astounding 167 species [only 27 of them being considered “native”!] and it increases modestly with each new “walk” or incidental visit.

As a *printable reference guide* for anyone who might wish to further explore the wonders of our “downtown flora”, on their own, or with companions, the most recent version of the checklist is appended at the end of this [Sarracenia] issue.

Hopefully, the checklist will continue to grow. To this end, any contributions that can be verified (i.e., by photos, etc.) will be gratefully received by Compiler: John Maunder – [jem@nl.rogers.com](mailto:jem@nl.rogers.com)



## “Our Concrete Gardens: The Surprising Botany of Downtown St. John’s, Newfoundland”

A “working checklist” of species from the sidewalks, parking lots and alleyways of Water, Duckworth, Gower, Bond and New Gower Streets, plus Plymouth, Military, Queen’s, Harvey, and Lemarchant Roads, and their numerous connecting thoroughfares.

Compiled, between 2006 and present, by Howard and Leila Clase, and John E. Maunder

Updated by John E. Maunder: September 12, 2023

Running Total: 167 species/subspecies/forms

**Note:** The common names of all of the “non-native species” recorded in this list are followed by either an “[i]” for “introduced”, or an “[e]” for “exotic” (= garden escapes or other artificially-occurring species). **Only about 27 of the 167 “species” recorded hereunder are considered to be “native”!** (i.e., only ~16.2% of the total)

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### Apiaceae: Parsley Family

___ <i>Aegopodium podagraria</i>	Goutweed - [NF] [i]
___ <i>Anthriscus sylvestris</i>	Wild Chervil - [NF] [i]
___ <i>Carum carvi</i>	Wild Caraway - [NF, LAB] [i]
___ <i>Daucus carota</i>	Queen Anne’s Lace; Wild Carrot - [NF] [i]
___ <i>Heracleum maximum</i>	Cow Parsnip - [NF, LAB]
___ <i>Myrrhis odorata</i>	Sweet Cicely, Myrrh - [NF] [i]
___ <i>Pimpinella saxifraga</i> subsp. <i>saxifraga</i>	Burnet Saxifrage - [NF] [i]

### Amaranthaceae:

___ <i>Atriplex patula</i>	Spreading Orache, Spearscale [NF, LAB] [i]
___ <i>Chenopodium album</i> var. <i>album</i>	Lambs-quarters, Pigweed - [NF, LAB] [i]
___ <i>Chenopodium album</i> var. <i>lanceolatum</i>	Pigweed - [NF] [i]

### Asteraceae: Aster Family

___ <i>Achillea millefolium</i>	Common Yarrow - [NF, LAB] [i]
___ <i>Anaphalis margaritacea</i>	Pearly Everlasting - [NF, LAB]
___ <i>Arctium minus</i>	Common Burdock - [NF] [i]
___ <i>Artemisia vulgaris</i>	Common Mugwort - [NF] [i]
___ <i>Bidens frondosa</i>	Devil’s Beggarticks - [NF]
___ <i>Centaurea nigra</i>	Black Knapweed - [NF] [i]
___ <i>Cirsium arvense</i>	Canada Thistle - [NF, LAB] [i]
___ <i>Cirsium vulgare</i>	Bull Thistle - [NF] [i]
___ <i>Erigeron canadensis</i> [= <i>Conyza canadensis</i> ]	Canada Horseweed [NF] [i]

___ <i>Euthamia graminifolia</i>	Grassleaf Goldenrod - [NF]
___ <i>Gnaphalium uliginosum</i>	Marsh Cudweed, Low Cudweed - [NF, LAB] [i]
___ <i>Hieracium lachenalii</i> subsp. <i>cruentifolium</i>	Common Hawkweed - [NF, LAB] [i]
___ <i>Hypochaeris radicata</i>	Hairy Cat's Ear - [NF] [i]
___ <i>Jacobaea vulgaris</i> [= <i>Senecio jacobea</i> ]	Tansy Ragwort, Stinking Willie - [NF] [i]
___ <i>Lapsana communis</i>	Common Nipplewort [NF] [i]
___ <i>Leucanthemum vulgare</i> [= <i>Chrysanthemum leucanthemum</i> ]	Oxeye Daisy - [NF, LAB] [i]
___ <i>Matricaria discoidea</i> [= <i>Matricaria matricarioides</i> ]	Pineappleweed, Rayless Chamomile - [NF, LAB] [i]
___ <i>Matricaria chamomilla</i> [= <i>Matricaria recutita</i> ]	Wild Chamomile - [NF] [i]
___ <i>Omalotheca sylvatica</i> [= <i>Gnaphalium sylvaticum</i> ]	Woodland Cudweed, Heath Cudweed - [NF]
___ <i>Pilosella flagellaris</i> [= <i>Hieracium flagellare</i> ]	Whiplash Hawkweed [NF] [i]
___ <i>Pilosella officinarum</i> [= <i>Hieracium pilosella</i> ]	Mouse-ear Hawkweed - [NF, LAB] [i]
___ <i>Scorzoneroides autumnalis</i> [= <i>Leontodon autumnalis</i> ]	Fall Dandelion - [NF, LAB] [i]
___ <i>Senecio sylvaticus</i>	Woodland Ragwort, Heath Groundsel - [NF] [i]
___ <i>Senecio viscosus</i>	Sticky Ragwort, Sticky Groundsel - [NF] [i]
___ <i>Senecio vulgaris</i>	Common Ragwort, Common Groundsel - [NF, LAB] [i]
___ <i>Solidago rugosa</i> var. <i>rugosa</i>	Roughstemmed Goldenrod - [NF]
___ <i>Sonchus arvensis</i> subsp. <i>arvensis</i>	Field Sowthistle [NF] [i]
___ <i>Sonchus asper</i>	Spinyleaf Sowthistle - [NF] [i]
___ <i>Sonchus oleraceus</i>	Common Sowthistle, Annual Sowthistle - [NF] [i]
___ <i>Symphyotrichum novi-belgii</i> var. <i>novi-belgii</i>	New York Aster - [NF, LAB]
___ <i>Symphyotrichum</i> sp. [var. ?]	a horticultural variety of New York Aster? [e]
___ <i>Tanacetum parthenium</i>	Common Feverfew - [NF] [i]
___ <i>Tanacetum vulgare</i>	Common Tansy, Golden Buttons - [NF, LAB] [i]
___ <i>Taraxacum officinale</i>	Common Dandelion - [NF, LAB] [i]
___ <i>Tripleurospermum maritimum</i> subsp. <i>phaeocephalum</i>	Maritime Chamomile - [NF]
___ <i>Tripleurospermum inodorum</i>	Scentless Chamomile [NF, LAB] [i]
___ <i>Tragopogon pratensis</i>	Goatsbeard [NF] [i]
___ <i>Tussilago farfara</i>	Coltsfoot - [NF, LAB] [i]

#### **Betulaceae: Birch Family**

___ <i>Betula pendula</i>	European Birch - [NF] [e]
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### **Boraginaceae: Forget-me-not Family**

- \_\_\_ *Myosotis arvensis* Field Forget-me-not, Field Scorpion Grass - [NF] [i]
- \_\_\_ *Symphytum officinale* Common Comfrey - [NF] [i]

### **Brassicaceae: Mustard Family**

- \_\_\_ *Alliaria petiolata* Garlic Mustard [NF] [i]
- \_\_\_ *Barbarea verna* Early Wintercress, Belle Isle Cress - [NF] [i]
- \_\_\_ *Barbarea vulgaris* Yellowrocket, Common Wintercress - [NF, LAB] [i]
- \_\_\_ *Brassica napus* Rutabaga, Swedish Turnip, Rapeseed - [NF, LAB] [e]
- \_\_\_ *Brassica oleracea* Kale [NF] [cultivar] [e] [becoming established]
- \_\_\_ *Capsella bursa-pastoris* Shepherd's Purse, Pickpocket - [NF, LAB] [i]
- \_\_\_ *Cardamine flexuosa* Wavy Bittercress - [NF] [i]
- \_\_\_ *Cardamine hirsuta* Hairy Bittercress - [NF] [i]
- \_\_\_ *Erucastrum gallicum* Dog Mustard, French Rocket - [NF] [i]
- \_\_\_ *Erysimum cheiranthoides* Wormseed Mustard, Treacle Mustard - [NF, LAB] [i]
- \_\_\_ *Hesperis matronalis* Dame's Rocket, Dame's Violet - [NF] [i]
- \_\_\_ *Lepidium campestre* Field Peppergrass - [NF] [i]
- \_\_\_ *Lepidium didymium* [= *Coronopus didymus*] Lesser Swinecress - [NF] [i]
- \_\_\_ *Thlaspi arvense* Field Pennycress, Frenchweed - [NF, LAB] [i]

### **Caprifoliaceae: Honeysuckle Family**

- \_\_\_ *Symphoricarpos albus* var. *albus* Snowberry - [NF] [i]

### **Caryophyllaceae: Pink Family**

- \_\_\_ *Cerastium fontanum* subsp. *vulgare* Common Mouse-ear Chickweed - [NF, LAB] [i]
- \_\_\_ *Sagina japonica* Japanese Pearlwort - [NF] [i]
- \_\_\_ *Sagina procumbens* Procumbent Pearlwort - [NF, LAB]
- \_\_\_ *Spergula arvensis* Corn Spurry - [NF, LAB] [i]
- \_\_\_ *Spergularia rubra* Red Sandspurry - [NF] [i]
- \_\_\_ *Stellaria graminea* Grassleaf Starwort, Lesser Stitchwort - [NF, LAB] [i]
- \_\_\_ *Stellaria media* Common Chickweed - [NF, LAB] [i]

### **Convolvulaceae: Morning Glory Family**

- \_\_\_ *Calystegia sepium* subsp. *sepium* Hedge Bindweed (white flowers) - [NF] [i]



**Crassulaceae: Stonecrop Family**

\_\_\_ *Sedum rupestre* [= *S. reflexum*] Rocky Stonecrop – [NF] [e]

**Cyperaceae: Sedge Family**

\_\_\_ *Carex nigra* Black Sedge [NF, LAB]

**Euphorbiaceae: Spurge Family**

\_\_\_ *Euphorbia helioscopia* Sun Spurge - [NF] [i]

**Fabaceae: Pea Family**

\_\_\_ *Medicago lupulina* Black Medick - [NF] [i]  
\_\_\_ *Melilotus albus* White Sweetclover – [NF] [i]  
\_\_\_ *Trifolium arvense* Rabbitfoot Clover [NF, LAB] [i]  
\_\_\_ *Trifolium aureum* Golden Clover, Hop Clover - [NF, LAB] [i]  
\_\_\_ *Trifolium dubium* Small Hop Clover – [NF] [i]  
\_\_\_ *Trifolium hybridum* Alsike Clover - [NF, LAB] [i]  
\_\_\_ *Trifolium pratense* Red Clover - [NF, LAB] [i]  
\_\_\_ *Trifolium repens* White Clover [leaf chevron] - [NF, LAB] [i]  
\_\_\_ *Vicia cracca* Cow Vetch, Tufted Vetch - [NF, LAB] [i]

**Fagaceae: Beech Family**

\_\_\_ *Fagus sylvatica* European Beech, Copper Beech - [NF] [e]

**Hypericaceae [= Clusiaceae]: St. John's-wort Family**

\_\_\_ *Hypericum perforatum* subsp. *perforatum* Common St. Johnswort - [NF] [i]

**Lamiaceae: Mint Family**

\_\_\_ *Galeopsis bifida* Bifid Hempnettle - [NF, ?LAB] [i]  
\_\_\_ *Galeopsis tetrahit* subsp. *tetrahit* Common Hempnettle - [NF, LAB] [i]  
\_\_\_ *Glechoma hederacea* Ground Ivy, Gill-over-the-Ground - [NF, LAB] [i]  
\_\_\_ *Prunella vulgaris* subsp. *vulgaris* European Selfheal, European Heal-all - [NF, ?LAB]  
\_\_\_ *Stachys palustris* Marsh Hedgenettle - [NF] [i]

### Malvaceae: Mallow Family

\_\_\_ *Malva moschata* Muskmallow - [NF] [i]

### Oleaceae: Olive Family

\_\_\_ *Fraxinus excelsior*. European Ash - [NF] [i]

### Onagraceae: Evening-Primrose Family

\_\_\_ *Chamerion angustifolium* subsp. *circumvagum* Fireweed - [NF, LAB]  
\_\_\_ *Epilobium ciliatum* subsp. *glandulosum* Glandular Willowherb - [NF, LAB]  
\_\_\_ *Epilobium montanum* Broadleaf Willowherb - [NF] [i]  
\_\_\_ *Oenothera biennis* Common Evening Primrose - [NF] [i]  
\_\_\_ *Oenothera parviflora* Northern Evening Primrose - [NF]

### Orobanchaceae: Broom-Rape Family

\_\_\_ *Euphrasia nemorosa* Common Eyebright - [NF, LAB] [i]

### Plantaginaceae: Snapdragon Family

\_\_\_ *Cymbalaria muralis* subsp. *muralis* Ivy-leaf Toadflax - [NF] [i]  
\_\_\_ *Digitalis purpurea* subsp. *purpurea* Foxglove [NF] [i]  
\_\_\_ *Linaria repens* Striped Toadflax - [NF] [i]  
\_\_\_ *Linaria x sepium* [hybrid] Hybrid Toadflax - [NF] [i]  
\_\_\_ *Linaria vulgaris* Butter and Eggs - [NF, LAB] [i]  
\_\_\_ *Plantago lanceolata* English Plantain, Lanceleaf Plantain - [NF] [i]  
\_\_\_ *Plantago major* Common Plantain - [NF, LAB] [i]  
\_\_\_ *Veronica arvensis* Corn Speedwell - [NF] [i]  
\_\_\_ *Veronica longifolia* Longleaf Speedwell - [NF] [i]  
\_\_\_ *Veronica officinalis* Common Speedwell, Gypsyweed - [NF] [i]  
\_\_\_ *Veronica serpyllifolia* Thymeleaf Speedwell - [NF, LAB]

### Poaceae: Grass Family

\_\_\_ *Agrostis capillaris* Colonial Bent, Rhode Island Bent - [NF, LAB] [i]  
\_\_\_ *Agrostis scabra* Rough Bent, Rough Hairgrass - [NF, LAB]  
\_\_\_ *Alopecurus pratensis* Meadow Foxtail - [NF, LAB] [i]  
\_\_\_ *Anthoxanthum odoratum* Sweet Vernalgrass - [NF] [i]



___ <i>Avena sativa</i>	Cultivated Oats - [NF] [i] [ephemeral]
___ <i>Bromus ciliatus</i>	Fringed Brome - [NF, LAB]
___ <i>Calamagrostis canadensis</i> var. <i>canadensis</i>	Bluejoint Canada Reedgrass - [NF, LAB]
___ <i>Dactylis glomerata</i>	Orchard Grass - [NF] [i]
___ <i>Elymus repens</i>	Quackgrass, Couchgrass - [NF, LAB] [i]
___ <i>Festuca rubra</i> s.l.	Red Fescue - [NF, LAB] [i]
___ <i>Hordeum jubatum</i>	Foxtail Barley - [NF, LAB]
___ <i>Hordeum vulgare</i>	Barley - [NF] [i] [ephemeral]
___ <i>Lolium perenne</i>	Perennial Ryegrass, Common Darnel - [NF] [i]
___ <i>Milium effusum</i> var. <i>cisatlanticum</i>	Wood Millet [NF, LAB]
___ <i>Phalaris arundinacea</i> var. <i>arundinacea</i>	Reed Canarygrass - [NF]
___ <i>Phleum pratense</i> subsp. <i>pratense</i>	Common Timothy - [NF, LAB] [i]
___ <i>Poa annua</i>	Annual Bluegrass - [NF, LAB] [i]
___ <i>Poa pratensis</i> subsp. <i>pratensis</i>	Kentucky Bluegrass - [NF, LAB] [i]
___ <i>Setaria viridis</i> var. <i>viridis</i>	Green Foxtail - [NF] [i]
___ <i>Triticum aestivum</i>	Wheat - [NF] [i] [ephemeral]

#### **Polygonaceae: Buckwheat Family**

___ <i>Persicaria hydropiper</i>	Common Smartweed, Waterpepper - [NF] [i]
___ <i>Persicaria lapathifolia</i>	Nodding Smartweed, Pale Smartweed - [NF, LAB]
___ <i>Persicaria maculosa</i>	Lady's-thumb, Redshank - [NF, LAB] [i]
___ <i>Polygonum aviculare</i> subsp. <i>aviculare</i>	Small Leaf Knotgrass - [NF] [i]
___ <i>Polygonum aviculare</i> subsp. <i>depressum</i> [= <i>Polygonum arenastrum</i> ]	Depressed Small Leaf Knotgrass - [NF, LAB] [i]
___ <i>Polygonum</i> cf. <i>ramosissimum</i> subsp. <i>ramosissimum</i>	Bushy Knotgrass - [NF] [i] [ephemeral]
___ <i>Reynoutria japonica</i> var. <i>japonica</i> [= <i>Fallopia japonica</i> var. <i>japonica</i> ]	Japanese Knotweed - [NF] [i]
___ <i>Rumex acetosa</i>	Garden Sorrel - [NF, LAB] [i]
___ <i>Rumex acetosella</i>	Sheep Sorrel - [NF, LAB] [i]
___ <i>Rumex crispus</i>	Curly Dock - [NF] [i]
___ <i>Rumex longifolius</i>	Longleaf Dock, Domestic Dock - [NF, LAB] [i]
___ <i>Rumex obtusifolius</i>	Broadleaf Dock, Bitter Dock [spiky fruit] - [NF] [i]

#### **Ranunculaceae: Buttercup Family**

___ <i>Aquilegia vulgaris</i>	Garden Columbine, European Columbine - [NF, LAB] [i]
___ <i>Ficaria verna</i> [= <i>Ranunculus ficaria</i> ]	Lesser Celandine, Marsh Pilewort [NF] [i]
___ <i>Ranunculus acris</i>	Common Buttercup, Tall Buttercup [NF, LAB] [i]

\_\_\_ *Ranunculus repens*

Creeping Buttercup [NF, LAB] [i]

**Rosaceae: Rose Family**

\_\_\_ *Alchemilla* sp.

Lady's Mantle - [NF] [i]

\_\_\_ *Crataegus monogyna* var. *monogyna*

English Hawthorn [NF] [e]

\_\_\_ *Fragaria vesca* subsp. *americana*

Woodland Strawberry [NF]

\_\_\_ *Potentilla argentea*

Silverleaf Cinquefoil - [NF] [i]

\_\_\_ *Potentilla intermedia*

Downy Cinquefoil - [NF] [i]

\_\_\_ *Potentilla norvegica*

Norwegian Cinquefoil, Rough Cinquefoil - [NF, LAB]

\_\_\_ *Rubus idaeus* subsp. *strigosus*

Wild Red Raspberry - [NF, LAB]

\_\_\_ *Sorbus decora*

Showy Mountain Ash, Small Dogberry - [NF, LAB]

\_\_\_ *Sorbus intermedia*

Swedish Whitebeam - [NF] [e]

**Rubiaceae: Madder Family**

\_\_\_ *Galium mollugo*

Smooth Bedstraw – [NF, LAB] [i]

\_\_\_ *Galium palustre*

Marsh Bedstraw - [NF, LAB]

**Salicaceae: Willow Family**

\_\_\_ *Populus xcanescens* [*P. alba* x *P. tremula*]

Hybrid White Poplar - [NF] [e]

**Sapindaceae: Soapberry Family**

\_\_\_ *Acer platanoides* subsp. *platanoides*

Norway Maple - [NF] [e]

\_\_\_ *Acer pseudoplatanus*

Sycamore Maple - [NF] [e]

\_\_\_ *Aesculus hippocastanum*

Horse Chestnut- [NF] [e]

**Scrophulariaceae: Figwort Family**

\_\_\_ *Verbascum thapsus* subsp. *thapsus*

Common Mullein, Flannel Plant - [NF, LAB] [i]

**Solanaceae: Potato Family**

\_\_\_ *Solanum dulcamara*

Bittersweet Nightshade - [NF] [i]

**Ulmaceae: Elm Family**

\_\_\_ *Ulmus glabra*

Wych Elm, Scotch Elm - [NF] [i]

**Urticaceae: Nettle Family**

\_\_\_ *Urtica dioica* subsp. *dioica*

Stinging Nettle - [NF] [i]