

Sarracenia

Volume 20, Numbers 3&4

Fall 2012

ISSNs: 1920-5821 (Print) 1920-583X (Online)

Newsletter of the Wildflower Society of Newfoundland and Labrador.

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Viper's Bugloss, *Echium vulgare* H. Mann. See p. 17

Society Notices:

Indoor Meetings.

Our indoor meetings will resume in the Fall, probably on October 2nd. As members will have noticed, our recent meetings have been very well attended, too well for the Botanical Garden's Boardroom by the Fire Marshall's room occupancy rules; so we are looking for an alternative space. Some ideas are already being investigated, but if any member has a suggestion please let Madam President know. The room should preferably be able to accommodate an audience of at least 50, have screen and projection facilities, have free parking nearby and cost as little as possible..

Summer Field Trips.

Our long trip will be held from June 23rd to 28th starting at St Anthony on the Northern Peninsula. Members planning to attend should have booked their accommodation by now. John Maunder will be sending out a detailed schedule by e-mail before too long. We are pleased to hear that several of our Nova Scotian friends will be joining us again.

A fair number of local shorter trips are in the planning stages. Because of the uncertainties of the seasons members will be notified by email a few days beforehand. If you have a favourite walk that you would like to introduce members to, get in touch with Madam President; you needn't be an expert botanist, one or two of those usually turn up anyway.

In the early part of June we are thinking of an evening walk to see the spring flowers and one to the Hawke Hills for *Diapensia* and *Kalmia procumbens* (formerly *Loiseleuria*) as well as a good selection of clubmosses.

2013 Photo Competition & Slide Show.

These will be conducted more or less as last year's except that, in order to give him more time to get it organised, John would like the submissions in by October 15th at the latest. The judges this year will be Lydia Snellen, John Bridson, and Glen Ryan.

Photos for the Webpage.

Gene would be happy to receive topical pictures for the website from members – e.g. early blooms, unusual plants etc.

Send them to him at: gherzberg@nf.sympatico.ca.

Printed Copies of Sarracenia.

So far about a dozen members have signed up to receive printed copies of this magazine in addition to the email edition. If you would like to join them, send your extra \$15 to the treasurer (see below), who can also be found at many of our meetings!

The 2011-12 Executive		
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Robert Fortune, Flower Hunter.

By Pat Hill

Tea drinkers of Newfoundland, unite and let us pay homage to Robert Fortune, whose story as told by Mary and John Gribben (2008), relates how Fortune, while collecting plants in China, often in disguise, was able to infiltrate the northern tea plantations and bring the superior young tea plants and seedlings, along with their Chinese growers, to the foothills of the Himalayas and Ceylon for the East India Co. of

Britain.

Robert Fortune, a Scotsman, born in 1812, was better known as a plant collector rather than plant hunter as most of his work involved the purchasing of plants from Chinese nurseries. Fortune's career began as an apprentice in gardens at Kelloe, then as a gardener at Moredun and at age 28, he was employed by the Botanic Garden of Edinburgh. Two years later he became

superintendent of the hothouse department at the London Horticultural Society's garden at Chiswick. This was the gateway to his Chinese expeditions. China, in 1842, was opened up to foreigners to a limited extent by the Treaty of Nanking, ending the opium wars. The Horticultural Society of London saw advantage in this and sent Fortune to China to collect and purchase plants.

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November Blooms 2012.

By Howard Clase

Fall 2012 was very mild, and many wild flowers could be found in bloom in November around St John's until the first hard frost around the 20th and some even survived that. There was a wonderful response to my suggestion that members send in their observations and pictures. The 36 species clearly identified in one way or another are listed in the table. Most were reported by more than one observer; I've just listed all the people who contributed at the bottom. Many people sent pictures which helped with the identifications and in particular Judith Blakeley's, which were so good that I had to

include most of them with this article.

After a lot of thought about how to order the list I decided to put them in order of generic names, which puts similar plants together. One thing that is noticeable is that they are all dicots – although I suspect if we had looked hard we might have found the odd monocot in the form of a grass in flower even if the orchids and irises were long over. All but five are aliens which isn't surprising as most of the observations were from around town (The natives are in **bold type**) No less than 18 of them are in the daisy family (*Asteraceae*). Some plants are opportunistic and go on flowering

as long as they can, others, particularly those growing in lawns and other mowed areas, may have been damaged before they could flower in their normal seasons and are having another go. I've always noticed a few Bunchberries flowering out of season – maybe this is the way a species explores its options in case changing conditions would give it better chance of survival if it flowered at a different time. All of them are fairly common plants around here except for the Shaggy Soldier, and I'll write a longer account of that later.



Blueberry



Creeping Buttercup

November Blooms 2012.

Common Name	Linnaean name	Place	Notes
Yarrow	<i>Achillea millefolium</i>	Everywhere	Flat heads of tiny daisy flowers.
Shepherd's Purse	<i>Capsella bursa-pastoris</i>	St Clare's Hosp.	Small white flowers, heart-shaped seed cases
Black Knapweed	<i>Centaurea nigra</i>	Bowring Pk.	Purple thistle-like flowers – no prickles
Bunchberry	<i>Cornus canadensis</i>	Various places	White petal-like bracts. Native.
Common Eyebright	<i>Euphrasia nemoralis</i>	École des Grands Vents.	Low, tiny white and violet flowers
Hemp-nettle	<i>Galeopsis tetrahit</i>	Waterford R. Walk	Pink "mint" flowers, toothed leaves

Shaggy Soldier	<i>Galinsoga quadriradiata</i>	Churchill Square	Behind closed supermarket. Tiny white daisy, 4-5 petals only. Rare CFA.
Common Hawkweed	<i>Hieracium lachenalii</i>	TJ's Garage	Yellow flowers, toothed leaves
Sheep Laurel	<i>Kalmia angustifolia</i>	Various places	Pink flowers, foliage above (Native!)
Field Scabious	<i>Knautia arvensis</i>	Waterford R. Walk	Mauve disk flowers ~2 cm.diam
Fall Dandelion	<i>Leontodon autumnalis</i>	MUN campus	Smaller flowers, thin, solid stem.
Ox-eye Daisy	<i>Leucanthemum vulgare</i>	Bowring Pk.	White Daisy, pinnate leaves
Butter & Eggs	<i>Linaria vulgaris</i>	St Clare's Hosp.	Yellow & white flowers
Pineapple Weed	<i>Matricaria discoidea</i>	Various places	Rayless flowers; plant's pineapple smell.
Black Medic	<i>Medicago lupulina</i>	MUN campus	Small clover with yellow flowers and twisted seeds.
Evening Primrose	<i>Oenothera biennis</i>	Portugal Cove	Large 5 petalled pale yellow flowers
Lady's Thumb	<i>Persicaria maculosa</i>	Kilbride	Spike of pink flowers. Leaves with large blotch.



Sheep's Laurel - Glen Ryan



Common Speedwell

Orange Hawkweed	<i>Pilosella aurantiaca</i>	Various places	Orange flowers, entire (untoothed) leaves
Burnet Saxifrage	<i>Pimpinella saxifraga</i>	Pleasantville	Umbellifer with burnet-like basal leaves
Small leaved Knotweed	<i>Polygonum aviculare</i> subsp. <i>depressum</i>	Churchill Square	Tiny flowers, small leaves, all the same size.
Creeping Buttercup	<i>Ranunculus repens</i>	Clovelly	Creeping habit, a dreadful weed!
Sticky Groundsel	<i>Senecio viscosus</i>	Everywhere	Yellow petals, sticky foliage.
Common Groundsel	<i>Senecio vulgaris</i>	Churchill Square	No petals, some phyllaries black tipped, not sticky
Rough Goldenrod	<i>Solidago rugosa</i>	Bowring Park.	Hairy stem and leaves, short pedicels
Spiny-leaved Sowthistle	<i>Sonchus asper</i>	Waterford R. Walk	Small flowers, prickly leaves
Sowthistle	<i>Sonchus oleraceus</i>	Churchill Square	Smallish flowers, leaves not prickly
Chickweed	<i>Stellaria media</i>	Kilbride	5 white petals, divided to look like 10, broad leaves

New York Aster	<i>Symphotrichum novi-belgii</i>	Near Railway Station	Purple flowers, phyllaries curved outwards.
Common Tansy	<i>Tanacetum vulgare</i>	Bowring Park	Disk flowers only, many heads per stem
Dandelion	<i>Taraxacum officinale</i>	Allandale Place	Yellow flower, hollow, milky stem
Red Clover	<i>Trifolium pratense</i>	MUN campus	Three leaves under pink flowerhead.
White Clover	<i>Trifolium repens</i>	Bowring Park	White flowers on leafless stem
Scentless Mayweed	<i>Tripleurospermum inodorum</i>	MUN campus	White daisy, very fine leaves, no scent!
Mullein	<i>Verbascum thapsus</i>	Red Cliff Road	Tall spike of yellow flowers, hairy leaves
Common Speedwell	<i>Veronica officinalis</i>	Jones Pond	Creeping, tight spike of blue flowers
Cow vetch	<i>Vicia cracca</i>	MUN campus	Bluish purple pea flowers.

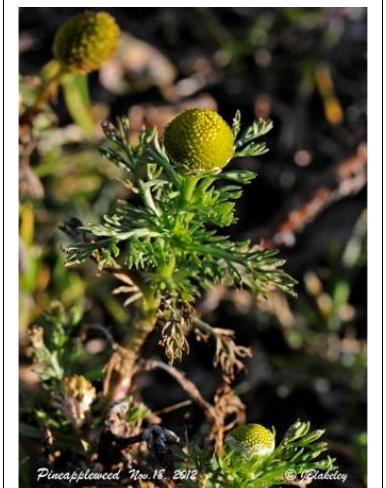
Contributions from: Judith Blakeley, Pat Hill, Elke & John Molgaard, Pam Bruce, Bruce Ryan, Gene Herzberg, Heather Saunders, Michel Savard, John Maunder, Leila & Howard Clase.



Bunchberry



Black Knapweed



Pineappleweed

By Their Leaves Shall Ye Know Them.

By Howard Clase

When I suggested we did a survey of November flowers I mentioned that you should note or photograph the leaf shape as well as the flower. When the results came in I found that many members didn't realise how important this is in identifying plants – particularly in the yellow petalled members of the *Asteracea* – the dandelions and hawkweeds. These all have very similar flowers, but there are enough differences in their leaves to enable them to be distinguished, at least at the generic

level.

The picture shows a selection of the leaves that I was able to gather, not the best, but what can you expect in late November? The most common one flowering around the city on lawns and roadsides at this time of year is the Fall Dandelion, *Leontodon autumnalis*, (the generic name of this species actually does mean “Lion's tooth” just like our English corruption of the French *dent de lion*). I think many people mistook this for a yellow hawkweed.

There were also a few true Dandelions, *Taraxacum officinale*, which you seem to be able to find at almost any time of the year, even though the main season is spring and early summer. The Dandelion is the only one of the group that is fairly easy to identify from the flower alone, as it's larger than the others and generally has that central tight bunch of little petals, it is also unique in having a hollow stem, with only one flower head. The Fall Dandelion starts flowering a little later, and

continues to decorate our lawns and roadside verges right through summer and fall. It is smaller, has a solid stem, only occasionally divided with more than one flower head. Now look at the leaves, both have

only basal rosettes, and pinnately toothed or lobed leaves, but the Dandelion's [A] are wider and softer, and have backward pointed lobes like an Indian arrowhead, while the smaller, narrower and stiffer Fall

Dandelion's leaves [B] have teeth that stick straight out sideways. There's quite a lot of individual variation, but once you've looked at a few you'll soon be able to tell which is which.



Hawkweeds also have solid stems and there are quite a lot of them divided into two groups; now generally put into different genera (older books call them all *Hieracium*). I'm just giving an outline here, the separation of all the species is quite complicated (mostly having to do with the hairiness of the leaves and the phyllaries - the little bracts under the flower head). The *Pilosella* group have long narrow untoothed leaves in basal rosettes only [C], there are three that are fairly easy to identify, the Orange Hawkweed, *Pilosella aurantiacum*, and two other mid-summer flowerers that we didn't find

in November that are short and have one flower per stem. When they have many heads these are bunched together tightly at the top of the stem. These are the difficult ones. The *Hieracium* group mostly flower a bit later, have stem leaves as well as basal rosettes and several heads on each stem more loosely arranged than those of the *Pilosellas*. Their leaves are broader and generally more toothed than the only one I could find [D]. This was growing and flowering in cracks in the concrete around Churchill Square and is probably *H. lachenalii*, the most common one in such locations.

There are three or four species of *Hieracium* found around the city, flowering from mid summer onwards. As a general rule the later they flower the more stem leaves they have and some of the later ones have lost their basal leaves by the time the flowers open. One of these, Canada Hawkweed, *H. kalmii*, is the only native plant among the dandelion lookalikes – although the Fall Dandelion is so well distributed into remote spots of the province that the other aliens never find, that I do sometimes wonder whether it's really an alien.

Uncommon Wildflowers of Newfoundland 12: Viper's Bugloss (*Echium vulgare* L.)

By Henry Mann

“One man’s weed is another Mann’s pretty wildflower” This maxim is surely applicable when we consider the appearance, virtues and habits of this species. That the irregular trumpet-like flowers, emerging pink and turning blue, are beautiful is undeniable even by the most ardent Weed Nazi (Figure 1). Long reddish stamens emerge from the flower mouth further adding to the distinctive floral display. Viper’s Bugloss¹, also known as “Blueweed” and a number of other common names, belongs to the Borage Family which includes some common plants like Garden Borage, Comfrey, and the Forget-Me-Nots. Inflorescences in this family are



Figure 1: *Echium* flowers, pink in bud, turning blue at maturity.

“*Echium*” is from the Greek meaning “viper” indicating that the plant has been used for centuries to treat viper bites. According to the “Doctrine of Signatures” it has features that resemble the Speckled Viper (spotted stems, “seeds” resembling a viper’s head) so extracts were used for this purpose, hence the common name also. Although this concept is now discredited, ancient and modern herbals list its uses for a variety of ailments unrelated to vipers. The whole plant is chocked full of various chemicals, some having been used medicinally, while others are of a toxic

nature. The name “Bugloss” apparently comes from the Latin “buglossa” meaning ox-tongue. Being familiar with the tongues of cattle from my farmer days, I can see a number of possibilities. This may refer to the shape of the lower leaves or to their rough surface like that of an ungulate tongue, or maybe the ability of an ox tongue to curl around vegetation as it is being cropped off, resembling the shape of the uncoiling inflorescence. Perhaps all three.

Blueweed has occasionally been used horticulturally in rock gardens and borders. Its black deep taproot, a meter or more, helps to stabilize soils in disturbed erosion prone areas and has been shown to remove

coiled branches with flowers along one side. These unroll as the flowering season progresses (Figure 2). In botanical jargon, this type of inflorescence is “scorpioid”, or coiled at the tip like the tail of a scorpion.

E. vulgare is a biennial or short-lived perennial forming a ground hugging rosette from seed the first year and producing one or more vertical flowering stems the second or third year up to 100 cm in height (Figure 3 p.18). The whole plant is covered with stout spreading hairs which arise from little black or reddish colored bumps at their base (Figure 4 – see cover). Contact with these hairs can produce severe inflammation and itching of the skin in some individuals.



Fig. 2: Scorpioid inflorescences.

somewhat unusual, consisting of

¹ Pronounced “b’youghloss”. Ed.

heavy metals from contaminated soils. But perhaps its greatest importance to humans is its nectar production. In Europe and North America in localities where it is common, it is a valuable honey producer. The honey is said to be therapeutic, but some sources caution long term and prolonged use because of certain chemicals present in low concentrations.

Viper's Bugloss is a plant of disturbed open habitats. I have seen it infrequently in the Codroy Valley, the Humber Valley and around Bonne Bay, but only as incidental or a few scattered plants, nowhere have I observed it growing in great profusion.

All observations were from sandy,

gravelly soils of roadsides, disturbed areas and beaches. Originally of

European and North African origin, it has spread across most of temperate

North America and is reported from every province in Canada, especially abundant in southern Ontario and Quebec. Some localities consider it a troublesome weed. It has the potential to become more common in disturbed Newfoundland habitats, but is not likely to compete with the native vegetation. There are few published records of this pretty photogenic species in Newfoundland so perhaps readers can let us know of their sightings.

Happy
Botanizing!



Figure 3: Habit of entire plant.

Robert Fortune. *Continued from p. 12*

Fortune sailed for China on board the Emu February 26, 1843, six months after the treaty signing. Landing in Hong Kong, Fortune was disappointed with the island, which offered no good botanical opportunities and was rife with fever. Moving on to Amoy, accompanied by the fever which he had contracted and overcome, Fortune found this place also backward and filthy but used it as a base for his first plant gathering trips. But here more importantly, he learned about Chinese culture and how to interact with the people. In fact, Fortune's



later success in penetrating into the forbidden areas of northern China beyond the treaty ports was his ability to adapt to Chinese culture, imitating dress, hair and eating styles.

Shortly after, leaving Amoy and hailed as a hero for almost single-handedly repelling pirates attempting to board their ship, he landed on the island of Chusan, and seeing the "azalea-clad mountains" found this area ideal for his purposes and made it his base of operations. During his two years of travelling around the area, including the green tea district



Mahonia fortunei – one of the many plants named after Fortune

near Ningpo, Fortune learned methods of tea production including the fact that both green tea and black tea were made from the same kind of plant, the difference being in how the

leaves were processed and dried. He returned to England in 1846. In 1848, the East India Co. asked him to return to China to collect tea plants to be grown in India. But this was a riskier expedition as the Chinese had a near monopoly on the tea industry and guarded her secrets assiduously. India already had tea plantations, growing easily obtained tea plants from southern China, but these were inferior in quality to those of the north. Arriving in Hong Kong in August 1848, Fortune found it greatly changed and prosperous with English and American expats living there and the Chinese moving further inland. With western influence restricted to the treaty ports, the tea district further inland was closed to foreigners. But Fortune found two men willing to accompany him to the city of Soo-chow-foo with himself disguised as a Chinese visitor from another province. With these tactics he was able to obtain both young tea plants and seeds and the "expert tea

makers" to go with him to India. He also confirmed that both green and black teas come from the same shrub and tea harvesting was very labor intensive.

Another earlier invention, the Wardian cases, which Robert Fortune further developed, was also instrumental in the success of transporting these young plants and seedlings to India. Robert Fortune had a total of four expeditions to China and another to Japan before retiring and moving his family to Berwickshire around 1862. He lived comfortably for many years from the proceeds of his books which he had written previously about his travels and from the sale of collectibles he had obtained in the East. He introduced many plants into England and there are many species that bear his name. Robert Fortune died in 1880.

Reference.

Gribben, John & Mary. 2008. Flower Hunters, Chapter 6, O.U.P., Oxford.

Selection of Pictures from 2012 Competition and Show.

Some of the pictures shown in our December Meeting that appealed to your editor, and were the right shape for the space. More in future issues.

Flower Portraits: First



© Todd Boland

Calystegia sepium subsp. *americanum*.
Hedge Bindweed (native subspecies)

Flower Portraits: Honourable mention



© John Bridson

Menyanthes trifoliata
Bog Bean

Other plant portraits: Third



Daucus carotta - Queen Anne's Lace

From Slide Show.



Lychnis flos-cuculi – Ragged Robin

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