Campanulaceae
bellflower family

A larger family, with 2000 species worldwide. They may be woody or herbaceous, but all have simple, opposite leaves. The flowers are generally sympetalous and perfect. Corollas are regular or irregular, bearing the stamens at the base that may be attached to a nectary disk. Stamen number is equal to the corolla lobes and they alternate with the lobes and sometimes form a tube around the style. Fruit a capsule, contains many seeds.

Corolla regular; carpels 3–5. *Campanula*

Corolla bilabiate; carpels 2. *Lobelia*

Campanula L.
bellflowers

Mostly arctic and north-temperate, there are 300 species of bellflowers. Flowers have five sepals subtending a regular five lobed corolla. Most are in racemes or clusters, ranging from palest blue to nearly purple. The fruit is strongly nerved and opens via three or five lateral pores.

Key to species

A. Stems slender, tenuous and lax, angled. *Campanula aparinoides*

aa. Stems erect and ascending. B

B. Flowers solitary, or in loose open clusters; pedicels long and slender; leaves dimorphic. *C. rotundifolia*

bb. Flowers in a raceme; cauline leaves differing only in size. C

C. Flowers on short pedicels; raceme secund. *C. rapunculoides*

cc. Flowers sessile in a terminal head. *C. glomerata*

***Campanula aparinoides* Pursh**

Marsh Harebell; campanule faux-gaillet

Photo by Sean Blaney

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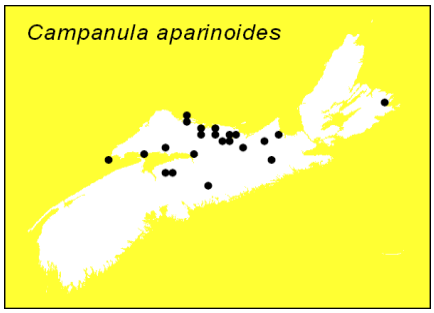


A weakly erect species with linear to narrowly elliptic leaves, marked only by shallow irregular teeth. Flowers are small, only 6–10mm long, borne on long slender pedicels.

Flowers in August.

Rare, known from river banks, meadows and ditches.

Northern, from Hants and Cumberland counties to Antigonish, with a single Cape Breton station.

Ranges from NS to SK, south to CO and GA; WA.

***Campanula glomerata* L.**

Clustered Bellflower; campanule agglomérée

Photo by Martin Thomas

Photo by Martin Thomas

Borne on a simple, erect stem, this plant may reach 70cm tall. It is puberulent throughout. Leaves are ovate to lanceolate, their margins serrate. Inflorescence is a terminal cluster of violet flowers, subtended by leafy bracts.

Flowers during June and July.

Found roadside, in old fields and fallow pastures. Garden plant.

Infrequently encountered in Hants and Kings counties.

Ranges from NS to MB and southward. Eurasian origin.

***Campanula rapunculoides* L.**

Bellflower; campanule fausse-raiponce

Photo by Marian Munro

A perennial, it spreads from creeping rootstocks, creating weedy patches that are difficult to remove once established. The unbranched stems reach 1m, and may be smooth or finely hairy. Leaves are lanceolate or cordate, puberulent and serrate. The purple flowers are borne in an elongated raceme, the lowermost subtended by a large leafy bract.

Flowers mid-July through August.

Once planted as an ornamental, it is persistent, occasionally escaping to nearby fields, but not invasive nor spreading.

Throughout the province.

Ranges from NF to BC, south to MD and OH. Eurasian origin.

Photo by Martin Thomas

***Campanula rotundifolia* L.**

Hare-bell; campanule à feuilles rondes

Photo by Sean Blaney

Photo by Jamie Ellison

A variable species, it has brilliant blue or purple campanulate flowers, the corollas to 3.5cm long. Branching, leaf width and pubescence, and size are all fluid characters. Generally the cauline leaves are linear and entire, whilst the basal leaves are ovate to cordate and toothed-crenate. White-flowered forms are known from Cape Breton.

Flowers mid-June through the summer.

Abundant on coastal headlands, in turf or rock crevices; sometimes riparian inland.

Common in sea meadows and cliffs along cool coasts; in Cape Breton also inland on cliffs.

A boreal species, south to PA, IN and in Eurasia.

Campanula trachelium (campanule gantelée)occurs as a garden escape in the Wolfville area. It differs from *C. rapunculoides* in having its flowers in axillary clusters of two or three, in contrast to the elongated raceme of *C. rapunculoides* and the calyx and young corolla are bristly ciliate. (These are smooth or minutely pubescent in *C. rapunculoides*.)

Lobelia L.
lobelias

A widespread genus, about 300 species are known. Typically plants are rhizomatous or annual, with simple stems and leafy racemes. Corollas are irregular and resupinate. The bilabiate corolla's tube is divided nearly to the base. Anthers and filaments are connate, the lower pair shorter and bearded, surrounding the style, which extends upward through the anther tube, forcing the pollen out.

Key to species

A. Leaves succulent, hollow, straplike.	*Lobelia dortmanna*
aa. Leaves not succulent, flat or filiform.	B
B. Leaves linear, filiform; of calcareous soils.	*L. kalmii*
bb. Leaves lanceolate to obovate, not in specialized habitat.	C
C. Hypanthium obovate; nearly equal to the corolla, inflated in fruit.	*L. inflata*
cc. Hypanthium conical, shorter than the corolla and not inflated in fruit.	*L. spicata*

***Lobelia dortmanna* L.**

Water Lobelia; lobélie de Dortmann

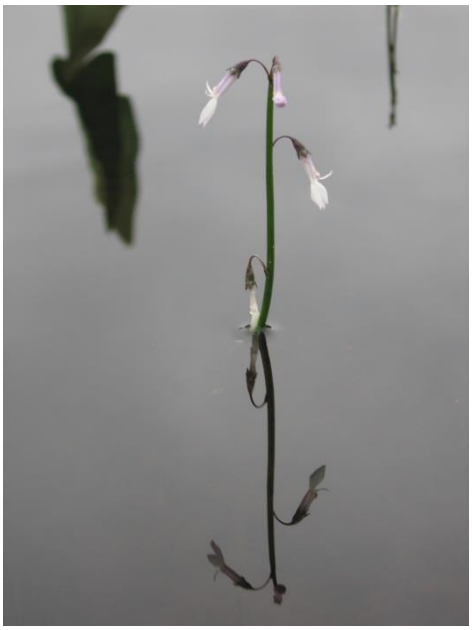


Photo by Sean Blaney

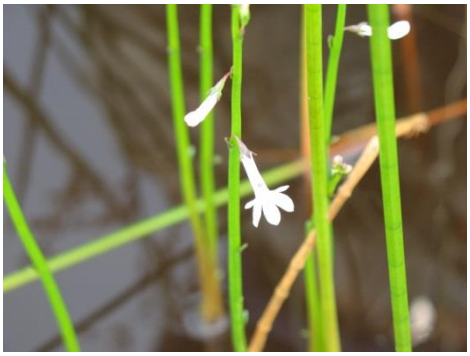


Photo by Sean Blaney

The dark green rosettes of the Water Lobelia are indicators of healthy, nutrient poor lakes. These are found furthest out on the lakeshore with other "isoetid" species such as the pipeworts and quillworts. Basal rosettes form hollow flowering stems that bear lilac flowers above the water. Cauline leaves are few and scalelike. Raceme is sparsely flowered with nodding lavender to white flowers.

August flowering.

Common along the edges of ponds, lakes and pools in the acidic regions. Often in sand.

Found throughout, but more common in the southwest of the province.

Ranges from NF to AK, south to OR and MD and northern Europe.

***Lobelia inflata* L.**

Indian Tobacco; lobélie gonflée

Photo by Martin Thomas

These small annual or biennial plants produce a flowering stem from a basal rosette of leaves. The pubescent stems bear sessile ovate to oblong leaves which are shallowly toothed. The inflorescence is branched; the flowers are plentiful, bracts reducing in size upwards.

Flowers July and August.

Photo by Martin Thomas

Found generally in poor soils, fallow fields, logging roads, barrens, etc.

Common throughout, but for northern Cape Breton.

NS to ON and OK, south to LA and GA; BC.

***Lobelia kalmii* L.**
lobélie de Kalm

Photo by Sean Blaney

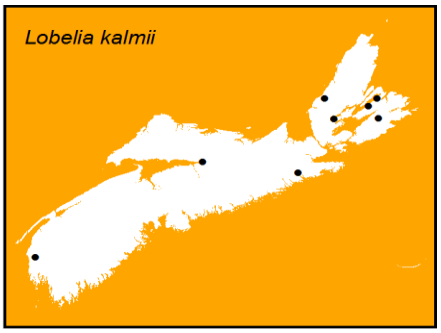
Plant arises on a slender stem bearing entire, linear or narrowly elliptic leaves. The basal rosette comprises small spatulate leaves. A few flowers are borne in a slender loose raceme, violet-blue and subtended by a linear bract.

Flowers from July through September.

Limited to dripping cliffs, meadows and bogs in calcareous soils.

Rare and local. Limited to Cape Breton.

Ranges from NF to BC; NT, south to ID, IL and NJ.



***Lobelia spicata* Lam.**
Blue Lobelia; lobélie à épi


Photo by Ruth Newell

Height ranges from 0.3m to 1m, with simple stems bearing obovate sessile leaves. The basal leaves are oblanceolate. Leaves just beneath the raceme are reduced to bracts. Flowers are violet, crowded into a raceme. Each flower is subtended by a linear bract.

Found in dry fallow soils.

Very rare and at risk. Scattered locations: Cape Blomidon, Kings Co.; Linden, Cumberland Co. and reported from Yarmouth Co. Local but may be abundant where found.

Ranges from NS to ON and ND, south to OK, LA and GA.

Photo by R. Newell