

## Ericaceae

### heath family

All species of this family are woody, vines or shrubs. Totalling about 3500 species worldwide, most are found on peaty soils of headlands and bogs in particular.

Some are known for their ornamental beauty; others for their fruits.

Flowers are generally 4–5-merous, with twice as many stamens as petals. Ovary is inferior or superior, with a single pistil. Fruit is produced as a berry or capsule. Leaves are alternate, opposite or whorled.

#### Key to genera

- |   |                                  |
|---|----------------------------------|
| A. Plants non-green: white, yellow or orange; leaves reduced to scales.                             | B                                |
| B. Flowers few to many; plant yellow to orange when fresh becoming dark brown long after flowering. | <i>Hypopithys</i>                |
| bb. Flowers solitary; plants pure white when fresh, soon turning black.                             | <i>Monotropa</i>                 |
| aa. Plants not as above; leaves green, scale-like, needle-like, or expanded.                        | C                                |
| C. Leaves scale-like or needle like.  | D                                |
| D. Flowers miniature, barely visible, whitish.  | E                                |
| E. Fruit a dark berry.  | <i>Empetrum</i>                  |
| ee. Fruit a capsule.  | <i>Corema</i>                    |
| dd. Flowers large, pink to purple.  | <i>Calluna</i>                   |
| cc. Leaves expanded.  | F                                |
| F. Leaves arranged in a basal rosette; plants herbaceous.   | G                                |
| G. Inflorescence asymmetrical raceme; style recurved, at least 4mm long.                            | <i>Pyrola</i> , in part          |
| gg. Inflorescence secund, or single-flowered, not as above; style straight                          | H                                |
| H. Inflorescence a single flower.   | <i>Moneses</i>                   |
| hh. Inflorescence a secund raceme.  | I                                |
| I. Style 2.5-6.5mm long, exerted at maturity.   | <i>Orthilia</i>                  |
| ii. style <1.5mm and not exerted.   | <i>Pyrola</i> , in part          |
| ff. Leaves opposite, alternate or whorled.  | J                                |
| J. Leaves opposite or whorled.  | K                                |
| K. Leaves coarsely toothed; plant shrubby only at the base.   | <i>Chimaphila</i>                |
| kk. Leaves smooth on the edges; plant a shrub.  | <i>Kalmia</i>                    |
| jj. Leaves alternate.   | L                                |
| L. Fruit a dehiscent capsule (berry in <i>Gaultheria</i> )  | M                                |
| M. Petals separate; lower leaf surface with rusty orange tomentum.                                  | <i>Rhododendron</i> ,<br>in part |
| mm. Petals united, at least at the base; leaves without   | N                                |

tomentum beneath.		
N. Flowers four-merous, fruit with 4 locules.		O
O. Leaves alternate, not reduced to scales; native plants.	<i>Gaultheria</i>	
oo. Leaves opposite and scalelike; Introduced.	<i>Calluna</i>	
nn. Flowers 5-merous; fruit with 5 locules.		P
P. Arctic alpine shrubs; leaves 2–10mm long.	<i>Phyllodoce</i>	
pp. Boreal shrubs; leaves >1cm long.		Q
Q. Corolla bell, funnel or wheel-shaped, not constricted distally.		R
R. Corolla bell-shaped or funneliform.	<i>Rhododendron</i> , in part	
rr. Corolla round or saucer-shaped.	<i>Kalmia</i>	
qq. Corolla tubular or round, constricted distally.		S
S. Leaves rolled under, white tomentum beneath; flowers in a short terminal inflorescence.	<i>Andromeda</i>	
ss. Leaves flat, not as above; flowers produced in axils of leaves.		T
T. Flowers solitary in the leaf axils; pedicels with 2 bracteoles.	<i>Chamaedaphne</i>	
tt. Flowers in umbelliform lateral clusters in leaf axils or on leafless twigs forming a compound inflorescence.; pedicels without bracteoles.	<i>Lyonia</i>	
II. Fruit an indehiscent berry or drupe.		U
U. Ovary superior.		V
V. Foliage and fruit with wintergreen flavour when crushed.	<i>Gaultheria</i>	
vv.. Foliage and fruit without wintergreen flavour or odour when crushed.		W
W. Prostrate, matlike shrub; corolla oval, reflexed distally; flowers not fragrant.	<i>Arctostaphylos</i>	
ww. Trailing vine, corolla tube slender, with	<i>Epigaea</i>	

wide-spreading lobes; fragrant flowers.	
uu. Ovary inferior.	X
X. Upright shrub, flowers 4–5 merous.	Y
Y. Ovary with 4–5 locules, many seeds; leaves not glandular.	<i>Vaccinium</i> , in part
yy. Ovary with 10 locules; seeds 10; leaves glandular beneath.	<i>Gaylussacia</i>
xx. Trailing shrub; flowers 4-merous.	<i>Vaccinium</i> , in part

***Andromeda* L.**  
**bog rosemary**

There are two species of *Andromeda*, and both are circumboreal. One of these reaches NS. Plant has stiff evergreen leaves, bluish-green in colour, tightly inrolled, and sharply pointed. Lower surfaces are white. Flowers are white or pink, five-merous; the calyx is saucer-shaped.

***Andromeda polifolia* L.**  
**(= *A. glaucophylla* Link)**

**Bog-rosemary; andromède à feuilles de polium**



Photo by Sean Blaney

Distinctive, although it superficially resembles *Kalmia polifolia*. The narrow sharply pointed leaves of this species are dark bluish green above, white-pubescent below. Flowers are white or pink and waxy in texture. Our material belongs to var. *glaucophylla* (Link) DC.

Flowers produced in early June.

Grows on saturated peat, as in bogs or pools in barrens.

Common throughout NS.

NL to NU south to SK, IL and WVA.



Photo by Martin Thomas



Photo by Martin Thomas

### ***Arctostaphylos* Adans.**

Forty-five species comprise this genus, most numerous in western North America. All are low, creeping shrubs, producing five-merous flowers in short, terminal racemes of white to pink individuals. Drupes contain five seeds, and mature into bright red berries.

### ***Arctostaphylos uva-ursi* (L.) Spreng**

**Bearberry; Kinnikinnick; raisin d'ours**



Photo by Alain Belliveau

A mat-forming species, Bearberry is an attractive ground-cover. Its stems are lightly downy, bearing obovate dark green shiny leaves. Margins of the leaves are smooth. Bright red berries are not highly prized edibles here, as they are tasteless and mealy.

Flowers early June.

Grows on sandy, gravelly soils.

Locally distributed, but abundant where found. Annapolis Valley, southwestern counties, eastward to Cape Breton.

Arctic regions of North America, south to VA, NM and CA; Greenland.



Photo by Martin Thomas

## ***Calluna* Salisb. heather**

A monotypic genus, heather is native to Europe. It is a small compact shrub, with scalelike plicate leaves, opposite on the stem. Flowers are pink or red, borne in long slender racemes. Four-merous, the sepals are petaloid, exceeding the length of the corolla.

### ***Calluna vulgaris* (L.) Hull Scottish Heather; Ling; bruyère commune**



Photo by Alain Belliveau

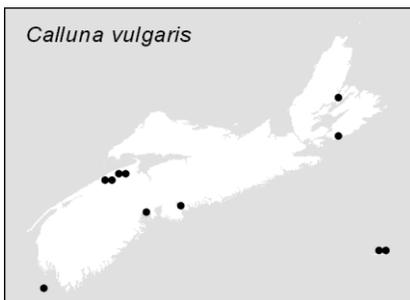
A sprawling freely-branched shrub, its flowers are pink or mauve, on long terminal racemes. The scalelike leaves bear auricles at the bases.

Flowers in August.

Peat or damp organic soils.

An introduction known from Point Pleasant Park, Halifax; Seal Island, Sable Island. Also from Kings Co.; Victoria and Richmond counties in Cape Breton.

Locally introduced; NF to QC, variously south to WI and VA; west coast.



## ***Chamaedaphne* Moench**

### **leather-leaf**

Another monotypic genus, it is limited to circumboreal regions. The alternate leaves are folded above the stem, appearing to be on one side only. Usually rusty-scaly, the leaves reduce in size distally. Nodding flowers are axillary forming a leafy raceme. Corolla is cylindrical, constricted at the throat.

### ***Chamaedaphne calyculata* (L.) Moench** **Leather-leaf; Cassandra; cassandre caliculé**



*Photo by Sean Blaney*

This is a distinctive shrub with its rusty appearance. Leaves are arranged in neat ranks, secund on the arcuate stems. Raceme is made up of waxy white vase-shaped flowers.

Flowers 15 May to 10 June.

Peat wetlands, lake margins and pond edges. Often dominant shrub at water's edge, particularly where soils are peaty.

Common throughout Nova Scotia.

NL to AK, south to BC, IA and GA.



*Photo by David Mazerolle*

## ***Chimaphila* Pursh**

Low-growing and nearly evergreen, describes this genus of shrubby perennials, with a single Nova Scotian species. Rhizomatous, it occurs in small colonies. Leaves are cauline, in opposite pairs, nearly whorled. Flowers are few, white or pink and arranged in small umbels or corymbs.

***Chimaphila umbellata* (L.) Bartram**  
**Princes-pine; Pipsissewa**



Photo by David Mazerolle

From creeping rhizomes, this little plant bears woody stems. Leaves are oblanceolate, distally toothed. Flowers are pinkish with darker stamens carried in umbels from a terminal peduncle. Ours is ssp. *cisatlantica* (SF Blake) Hultèn.

Flowers in mid-July.

Dry soils in rocky mixed conifer woods.

Not common but scattered throughout. Seems absent from eastern mainland.

Ranges from NF to AK, variously, south to CA and GA. Eurasia.



Photo by David Mazerolle

***Corema* D. Don**

This genus contains two species; one produces berries and is western European. The other is dry-fruited and our native *Corema conradii*. Dioecious species they have no petals; sepals number 3–4. Flowers are purplish and carried in sessile terminal heads. Dry globose fruit produce three seeds.

***Corema conradii* Torr.**

**Broom-crowberry; corème de Conrad**



Photo by Eugene Quigley

Reaching to 50 cm in height, these plants are freely branching and forming mats 2m wide. The leaves are linear, narrower than those of *Empetrum* and only 3–6mm long. Flowers are distal.

Early May flowering.

Sandy or rocky soils.



Photo by Eugene Quigley

Coastal barrens along Atlantic shores; granitic barrens inland. Kingston sand barrens. No Cape Breton collections. NS has rare- broom-crowberry-jack pine plant community.

Ranges from NS to QC, south to NJ. A globally rare plant.

## ***Empetrum* crowberries**

Northern hemisphere in distribution, there are two variable species, both in Nova Scotia. Flowers are green or purple, sessile and perfect or unisexual. They are four-merous in floral symmetry. Fruit is a drupe, with 6–9 stones.

Key to species

Young twigs smooth; fruits black.

*Empetrum nigrum*

Young twigs densely white tomentose; fruits red or purple.

*E. eamsii*

### ***Empetrum eamsii* Fern. & Wieg.**

(=*E. rubrum* Vahl.)

#### **Purple Crowberry; camarine noire-pourprée**



Photo by David Mazerolle

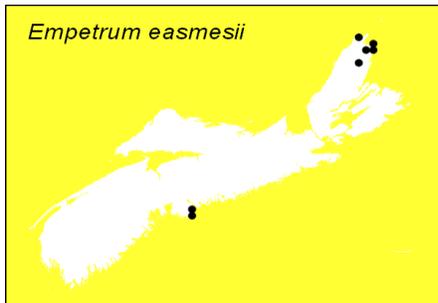
Young twigs are densely white-woolly. Leaves are evergreen. Fruit is reddish or purplish, but not black. There are two subspecies. Both are reported from NS.

Ssp. *atropurpurem* (Fern. & Wieg.) D. Löve has dark-red fruit and longer leaves than the following subspecies. Its North American range extends to Lake Superior.

Ssp. *eamesii* has its leaves shorter and the fruit may be light



Photo by Sean Blaney



*Empetrum easmesii*

brown or red, with translucent skin. Its range is limited to NS, NF and St. Pierre & Miquelon.

Both subspecies flower early, producing fruit from July until frost.

Habitat includes sands and gravels of headlands, bogs and barrens.

Recently found at South Canoe Lake a *Corema* community on granite. Collected from Halifax to Peggys Cove and in northern Cape Breton, with both subspecies having similar distribution in the province.

NL to NS, ME, NY and west to Lake Superior.

Hybrids are frequent.

***Empetrum nigrum* L.**

**Black Crowberry; camarine noire**



Photo by David Mazerolle



Photo by Sean Blaney

Branches are smooth and sometimes shiny brown distally. Leaves are short and needlelike. Fruit is black, but glaucous.

There are two ssp. the typical one is said to be the diploid form and with all flowers unisexual. Ssp. *hermaphroditum* (Hagerup) Sorensen sometimes has perfect flowers.

Fruits from July to September.

Habitats include bogs, acidic barrens (may be dominant) and exposed sites such as headlands.

Around the entire Fundy and Atlantic coasts. Nearly absent along the Northumberland plain.

Ranges from Greenland across Canada, south to alpine areas in NY, MN and CA.



Photo by Eugene Quigley

Forms hybrids with *E. eamsii*.

## ***Epigaea* L.**

A small genus of only three species, one is well-known in Nova Scotia, as the Mayflower. The other species are native to Japan, Asia Minor and the Caucasus region. Species are dioecious, although flowers appear perfect. Flowers are five-merous and pleasantly scented, and white to pinkish. Inflorescence is a terminal spike, sometimes arising from the leaf axils. Sepals are persistent, connate and subtended by two oval bracts. Fruit is a fleshy capsule. Evergreen leaves are alternate and leathery in texture. Elsewhere they would be evergreen.

### ***Epigaea repens* L.**

#### **Trailing Arbutus; Mayflower; épigée rampante**



Photo by Ross Hall

Nova Scotia's provincial flower is an evergreen vine, that flowers in early spring. Its leaves are ornamented by a rusty bristly pubescence. Veins prominently mark the ovate leaves. Sweetly fragrant flowers range from nearly white to deep pink. Fruits only occasionally.

Look for flowers 15 April until mid-May.

Grows on acidic and well-drained soils of pastures, fields, barrens, woods and uplands.

Common throughout the province.

NL to MB, south to MS and FL.

## ***Gaultheria* L.**

### **wintergreens**

Best developed in mountainous regions of South America, there are about 150 species, two only, in Nova Scotia. Woody plants, their leaves are persistent and flowers generally solitary and white. Fruit of both our species are edible. Both taste of wintergreen.

Stems erect, leafy; leaves 2.5–3.5 cm long, reddish and smooth;  
flowers five-merous; berries red.

*Gaultheria procumbens*

Stems long-trailing; leaves <1cm long, green, glandular below; flowers four-merous; berries pure white.

*G. hispidula*

### ***Gaultheria hispidula*** **(=*Chiogenes h.* Salisb.)** **Creeping Snowberry**



Photo by Sean Blaney

A small, inconspicuous trailing plant, it is often overlooked. Its scaly stems bear acute elliptic leaves. Small white waxy berries are produced mid-summer, partially buried in the mossy ground or stump.

Flowers in June.

Prefers mossy stumps, in shady spots, treed bogs, swamps and barrens.

Scattered throughout.

NL to NU and BC, variously south to ID and WVA.

### ***Gaultheria procumbens* L.**

#### **Eastern Teaberry; Checkerberry**



Photo by Alain Belliveau

A low-growing plant, it is no more than 20cm tall, bearing the pleasant scent of wintergreen, in leaves and fruit. The leaves are terminal, 3–5, drooping over the flowers and fruit beneath. Dentate on the margins, they tend to be dark green to purplish. Delicious red berries are formed from the sepals, which soon become fleshy, enclosing the capsule. Berries are persistent, providing food for birds and wildlife

over winter.

Flowers July and August.

Forests, barrens, pastures and even drier bogs.

Very common throughout.

NL to MB, south to GA and AL.

## ***Gaylussacia* Kunth huckleberries**

A genus of colonial shrubs, 50 species are limited to North and South America. Small leaves are sprinkled with gold-coloured resinous glands, a defining character. Flowers are five-merous; the corolla is tubular or conical. Fruit is a drupe, containing 10 seeds, that separates them from the blueberries.

Leaves ovate, rounded distally, but ending in a sharp point formed from the midvein; ovary and fruit hirsute.

*Gaylussacia dumosa*

Leaves elliptic, tapering to a point; ovary and fruit smooth.

*G. baccata*

### ***Gaylussacia baccata* (Wang.) K. Koch Huckleberry; gaylussaquier à fruits bacciformes**



*Photo by Alain Belliveau*

One of our most common shrubs, with leathery thin ovate leaves, bearing golden shiny dots on the undersurfaces. Fruit is a smooth purplish black berry, sometimes produced in large numbers.

Flowers in early June.



Photo by Sean Blaney

Frequents rocky soils in pastures, barrens, edges of woods and bogs.

Throughout the province.

NF to ON, south to GA and AR.



Photo by Sean Blaney

***Gaylussacia dumosa* (Andr.) T&G**  
**Bog Huckleberry; gaylussaquier de Bigelow**



Photo by Sean Blaney

Leaves are noticeably leathery, oblong to obovate. Midrib extends beyond the rounded apex, in a sharp point. Edible black fruit are soft-bristly.

Flowers in early June.

Frequents wet barrens and sphagnous bogs in coastal regions.



Photo by Sean Blaney

Common along the Atlantic coast; scattered elsewhere.

Ranges from NL to ON, south to LA and FL.

## ***Hypopitys* Crantz**

Plants are parasitic on fungi that form a mycorrhizal association with trees. Chlorophyll is absent. Leaves are vestigial and alternate, the entire plant is yellowish with a reddish hue. Flowers are 4–5-merous. They are borne in a raceme; they are regular and hypogynous. Sepals are distinct. Fruit is a capsule, dehiscent from the top.

### ***Hypopitys monotropa* Crantz**

(=*Monotropa hypopitys* L.)

Pinesap; monotrope du pin



Photo by Martin Thomas

These yellowish plants turn dark brown long after flowering. From one to eleven flowers are arranged in a raceme.

Associated with conifers.

Throughout Nova Scotia, although less common than the next species.

Across Canada, in most regions south to FL and CA; Eurasia.



Photo by Martin Thomas

***Kalmia* L.**  
**laurels**

Shrubs, the plants produce showy saucer-shaped corollas, with rose or pink petals. Each flower bears 10 stamens, sunk into the surface of the corolla. Plants are toxic to livestock and people.

Key to species

Leaves glaucous beneath; flowers lateral and never terminal; twigs round in cross-section.

*Kalmia angustifolia*

Leaves with downy white pubescence beneath, margins inrolled; flowers terminal; twigs sharply angled.

*K. polifolia*

***Kalmia angustifolia* L.**

**Lambkill, Sheep Laurel; kalmia à feuilles étroites**



Photo by Eugene Quigley

Leaves are opposite, smooth and glaucous beneath. Their margins may be slightly inrolled. Flowers after leaves unfold, the magenta flowers borne in a lateral cluster beneath the leaves. Corolla is saucerlike.

Flowers late May to early July.

Colonial species on acidic soil, fields, barrens, forest openings, bog margins.

Very common throughout.

Ranges from NL to ON, south to NC.



Photo by Martin Thomas

***Kalmia polifolia* Wang.****Bog Laurel; Pale Laurel; kalmia à feuilles d'andromède**

Photo by Sean Blaney

Differs not just in habitat from the species above, but the leaves are distinctly shiny dark green, their margins tightly rolled inward. Flowers are palest of pink, terminal on the stem rather than lateral like the previous species. Generally, individual plants are found; it is not colonial. It is similar to *Andromeda*, except in leaf colour, having opposite leaves and the absence of a sharp point. (Leaves are glaucous and alternate in *Andromeda*, ending in a sharp point).

Flowers mid-June.

Grows on peat bogs.

Common in its preferred habitat, scattered throughout.

NL to AK, south to MT and NJ.



Photo by Sean Blaney

***Kalmia procumbens*** Gift, Kron & P.F. Stevens ex Galasso, Banfi & F. Conti (= *Loiseleuria procumbens* (L.) Desv. is not included in the keys. This species was historically reported from Kingsport and not seen until a recent report from Saint Paul Island.

***Lyonia* Nutt.**

A genus of the northern hemisphere, *Lyonia* includes 35 species. The shrubs are freely branching and bear simple serrulate leaves alternately arranged along the stems. The inflorescence is compound made up of numerous axillary clusters of flowers, white to rose in colour. The flowers are five-parted with a saucer-shaped calyx and the corolla round to tubular. Stamens are deeply inserted, their filaments dilated at the base and often geniculate. Nova Scotia is host to a single species of *Lyonia*, recently found in southwestern NS.

***Lyonia ligustrina* (L.) DC****Maleberry***Photo by Martin Thomas*

This shrub is deciduous, reaching up to 4m bearing thin obovate leaves, which are minutely serrated. The flowers number 2–8 per cluster at the ends of the previous year's wood, forming a panicle. Sepals are deltate and the corollas are globose.

Flowers in May throughout its range.

Generally found in wet mucky soils.

In Nova Scotia, so far known only from Springhaven, Yarmouth Co.

Elsewhere from NS; ME to KY and AR, south to FL and LA.

*Photo by Martin Thomas**Photo by Martin Thomas****Moneses* Salisb.****One-flowered Shinleaf**

A monotypic genus, it produces basal clusters of pairs or triplets of globose leaves. Its single waxy white flower nods from the top of the peduncle.

***Moneses uniflora* (L.) A. Gray****One-flowered Shinleaf; monésès uniflore***Photo by Sean Blaney*

Leaves are round to elliptic, toothed on the margins and forming a basal rosette. Petioles may reach to 1cm long. Solitary flowers are borne on peduncles to 10cm tall. Stamens are appressed to the petals.

Flowers from late June-late July.

Deciduous or mixed coniferous forest.

Throughout mainland Nova Scotia and Cape Breton.

LB to AK, south to PA, AZ and CA; Eurasia.

*Photo by David Mazerolle****Monotropa* L.**

A northern genus of parasitic plants, now including four species. All are without chlorophyll and depend upon their relationship with mycorrhizal fungi. Inflorescence is white turning black upon dessication. Flowers are the same colour as stems, erect or nodding. Petals are distinct, forming a corolla tube. Round capsule dehisce from the top downwards.

***Monotropa uniflora* L.**  
**Indian Pipe; monotrope uniflora**



*Photo by Sean Blaney*



*Photo by David Mazerolle*

Nearly pure white plants, they are translucent in appearance. The reduced cauline leaves are alternate. Flowers are solitary on the stem and nodding, becoming erect in fruit.

Flowers June to September.

Of coniferous forests, or in deep leaf mould in mixed deciduous forests.

Scattered throughout Nova Scotia.

NL to BC south to CA, TX and FL into Mexico. Absent from the arid southwest.



Photo by Sean Blaney

## ***Orthilia* Raf**

Recently separated from *Pyrola* on the presence of single pollen grains, rather than the typical groups of four. In addition there is a hypogynous disk, bearing 10 lobes. The petals are united to form a corolla tube, the stamens and style are exerted, and straight.

### ***Orthilia secunda* (L.) House**

#### **Sidebells Wintergreen; One-sided Wintergreen; pyrole unilatérale**



Photo by Ross Hall

Bearing broad ovate leaves, their margins are crisped or serrate. Leaves are basal, or reduced in size and number on the stem. Flowers 7–15 in a secund raceme. Petals are white or green; the styles exerted.

Flowers in July.

Generally found in mixed or coniferous forests, thriving after clearing.

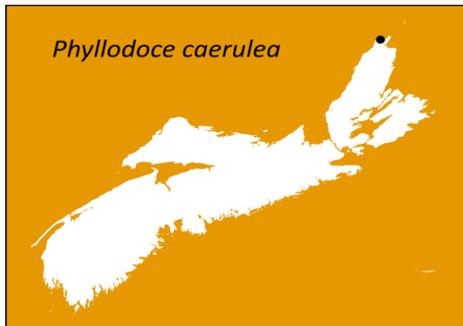
Scattered to common throughout.

NF to AK, south to CA and VA; Greenland.

## ***Phyllodoce* Salisb.**

A shrub genus of the arctic and north-temperate zone, only one species is known from Nova Scotia. Flowers are five-merous and borne on long peduncles arising from the leaf axils.

### ***Phyllodoce caerulea* (L.) Bab. phyllodoce bleue**



Mat-forming and low, this wiry shrub is freely branching from its cespitose base. Leaves are linear.

Flowers from June to August.

Peaty pockets on alpine rocks.

Known only from Lockhart Brook, Salmon River, Victoria Co.

Species is circumboreal. NF to NT and AK; south to MB, ON and VT.

STATUS: ORANGE-listed in NS.

## ***Pyrola* L. wintergreens**

These are typical species of bogs, barrens and coniferous forests, indicating acidic soils. Limited to the north-temperate zones, there are about 40 species; five in Nova Scotia. Perennials, they arise on creeping rhizomes. Generally the leaves are basal and may persist. Flowers are borne in racemes.

### Key to species

- |  |                      |
|--|----------------------|
| A. Flowers with corolla tube; stamens and style straight.  | <i>Pyrola minor</i>  |
| aa. Flowers with distinct petals; stamens and styles recurved, with tips erect.  | B                    |
| B. Bracts on the stem absent, or <3, narrowly lanceolate and acuminate, not sheathing; sepals shorter than broad.                            | C                    |
| C. Blades of the leaves nearly round, 1–3cm long, acuminate and shorter than the petioles; basal bracts <5mm long, distinct from the leaves. | <i>P. chlorantha</i> |

cc. Blades of the leaves ovate to elliptic, 3–8cm long, exceeding that of the petioles; bracts at least 1cm long, often grading into leaves.

*P. elliptica*

bb. Bracts on the stem 1–5, ovate to lanceolate, sheathing the stem, sepals longer than broad.

D

D. Sepals oblong, blunt or sharp, not overlapping; flowers white; leaves not cordate.

*P. americana*

Page | 530

dd. Sepals deltate, acute, overlapping at the base; petals crimson to pale pink; leaves cordate or blunt across the base.

*P. asarifolia*

### ***Pyrola americana* Sweet**

**(=*P. rotundifolia* L.)**

**Round-leaved Pyrola; pyrole d'Amérique**



*Photo by David Mazerolle*

Leaves are ovate, elliptic or round. Bracts are present on the stem below the inflorescence, which is 2–9cm tall and bears 3–12 white flowers.

Flowers July and August.

Frequents from Yarmouth to Colchester counties. Scattered to southern Antigonish Co.

Greenland and NL west to MB, and SD, south to TN and NC.

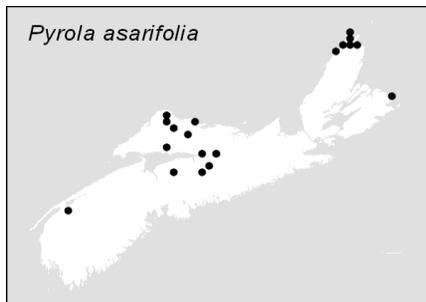


*Photo by Sean Blaney*

***Pyrola asarifolia* Michx.**  
**pyrole à feuilles d'asaret**



Photo by Jamie Ellison



Bearing leaves on long petioles, their blades are round or ovate, cordate at the base. Their margins are scalloped rather than serrate. Bracts are present. Flowers are pink, with deltate sepals. Ours are ssp. *asarifolia*. The varieties are no longer recognized.

Flowers from late June to early August.

Found mostly in fertile calcareous woodland and thickets.

Scattered on the northern side of the province from Digby County to northern Cape Breton.

Ranges from NF to AK, south to CA, NM and IN; Asia.

***Pyrola chlorantha* Swartz**  
**Green-flowered Wintergreen; pyrole à fleurs verdâtres**



Photos by Martin Thomas

Leaves are broadly ovate or elliptic, margins toothed or scalloped. Petiole length exceeds that of blade. Flowers are distant and on all sides of the scape, from midpoint to the top. Bracts are absent.

Flowers during July and August.

Grows on dry sandy soil, usually under conifers.

Scattered from Digby to Hants counties and common eastward to northern Cape Breton Absent from extreme southwestern regions and central NS.

NL to AK, south to CA, NE and VA; Eurasia.



***Pyrola elliptica* Nutt.**

**Shinleaf; pyrole eliiptique**



*Photo by Martin Thomas*

Shinleaf is one of the easier species to identify and is often found. Its leaves have the oblong blades longer than the petioles. Bracts are present, leafy and elliptic in outline, about 1cm long and borne at the base of the plant.

Flowers from early July to early August.

Frequents open woods and fields, pastures and other sites with lighter soils.

Common throughout NS.

Ranges across Canada south to PA, IA and ID; AZ and NM; Japan.



*Photo by David Mazerolle*

***Pyrola minor* L.**

**Small Wintergreen; pyrole mineure**



Leaves are globose or at least broadly elliptic, borne on petioles 1–3cm long. Numerous bracts are present at the base of the plant. Nodding flowers are carried in a raceme. Style is inserted

Flowers during July and August.

Photo by David Mazerolle

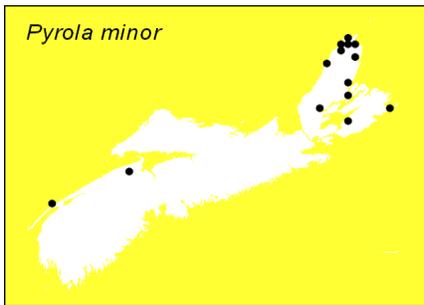


Characteristic of mature coniferous forests.

Scattered north from Digby Neck to Kentville and east to Cape Breton.

Ranges from Greenland to AK, south to CA, NM and NY. Eurasia.

Photo by Sean Blaney



### **Rhododendron L.**

A larger genus, with about 850 species, many of them prized ornamentals, such as Azaleas. Ours are shrubs, although further south, there are tree species as well. Leaves are alternate, deciduous or persistent. Flowers are borne in umbels (in our species), five-merous. Ovary is superior and is divided into five locules.

- A. Leaves deciduous, thin; erect common shrub. B
- B. Flowers with distinct petals, white. Leaves with *Rhododendron groenlandicum*  
white to rusty tomentum below.
- bb. Flowers with petals fused to form a tube, pink to purple; leaves *R. canadense*  
scurfy or scaly but without tomentum.
- aa. Leaves evergreen, leathery; dwarf matted and aromatic shrub; alpine in Cape *R. lapponicum*  
Breton.

***Rhododendron canadense* (L.) Torr.**  
**Rhodora; rhododendron du Canada**



*Photo by Sean Blaney*

It is most noticeable in late spring, when the magenta flowers colour our ditches and wetlands. Leaves are obovate, smooth, appearing after the flowers. Corolla is asymmetric, with three connate upper petals and two distinct lower petals. White forms are sometimes reported.

Flowers from early May to late June.

Swamps, and barrens, bogs and any poorly-drained soils.

Very common.

NL to ON, south to NJ.



*Photo by Sean Blaney*



*White form*

*Photo by Sean Blaney*

***Rhododendron groenlandicum* (Oeder) Kron & Judd  
(=*Ledum groenlandicum* Oeder)**

Labrador Tea; thé du Labrador



Photo by Martin Thomas

Plants are freely branching shrubs with downy stems and woolly tomentum of white to orange on the undersurfaces of the sessile leaves. Their margins are tightly inrolled. White flowers are arranged in terminal corymbs.

Flowers in June.

Grows on wet acidic soil as in bogs, wooded swamps, wet barrens and poorly drained pastures.

Scattered in its habitat throughout.

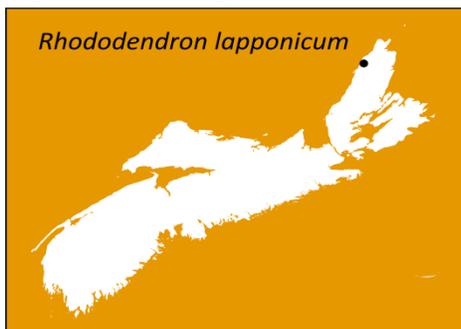
Arctic North America, south to OH and OR; Greenland.  
Leaves were traditionally used to make teas.



Photo by Martin Thomas

***Rhododendron lapponicum* (L.) Wahlenb.**

Lapland Rosebay; *rhododendron de Laponie*



A dwarf shrub, it forms prostrate mats with long-trailing leafy stems to 60cm. Stems and leaves are rugose, leaves 2cm long. Corollas are purple. Fruit is a capsules, 4–7mm long.

Calcareous ledges.

Only known to date from Corney Brook gorge, Cape Breton

Highlands National Park, Inverness Co.

Limited range from NF to AK, south to BC, WI and NY.

ORANGE-listed in NS.

***Rhododendron maximum* L.:** Previous reports of localities of *Rhododendron maximum* have not been substantiated in 50 years. Historically collected midway between the “Upper Musquodoboit and the sea”. There are no extant collections and the accuracy of the original identification was contested in 1876 (Lawson, 1876, Proc. NSIS, Vol.4: 1875-1878; Dore, WG, 1970, personal comm.).

### ***Vaccinium* L.**

Nearly 500 species comprise this genus, best-developed in Asia and on its archipelagos. Several North American species are cultivated commercially for their edible fruit, such as cranberries and blueberries. These and other native species have enjoyed gathering by aboriginal communities long before agricultural endeavours.

Identification can be complicated by frequent hybridization. In general, the flowers are epigynous or nearly so, arranged in racemes, and 4–5-merous. The lobed corolla is tubular, ovate or bell-shaped. Here they are shrubs, although trees are included in the genus elsewhere. Species may be evergreen or deciduous.

The following key is extracted from VanderKloet (1988)

#### Key to species

- A. Twigs of current year’s growth warty or nodular. B
- B. Shrubs forming a crown, shrub >1.5m tall; leaves *Vaccinium corymbosum*  
3.5–5.5(+)cm long.
- bb. Shrubs rhizomatous, colonial; <75cm tall; leaves <3.5cm (rarely 4cm) C  
long.
- C. Leaf margins entire, or irregularly serrate; leaf blades *V. myrtilloides*  
pilose.
- cc. Leaf margins evenly serrate; not pilose. D
- D. Shrubs 2–5cm tall; leaf blades 2.5–5.5mm wide; *V. boreale*  
northern or alpine.
- dd. Shrubs 9–27cm tall; leaf blades 6–16mm wide; *V. angustifolium*

widespread.

- aa. Twigs of current year's growth not warty or nodular. E
- E. Bud scales 2. F
- G. Shrubs <50cm tall; new twigs terete. *V. cespitosum*
- gg. Plants >50cm tall; new twigs angled. *V. ovalifolium*
- ee. Bud scales more than 2. H
- H. Plants erect. *V. vitis-idaea*
- hh. Plants trailing, creeping or mat-forming. I
- I. Plants not evergreen; corolla urceolate; leaves strongly bluish green. *V. uliginosum*
- ii. Plants evergreen; corolla split to below the middle; leaves leathery and green. J
- J. Leaves ovate or strongly inrolled. *V. oxycoccus*
- jj. Leaves narrowly elliptic, not strongly inrolled. *V. macrocarpon*

***Vaccinium angustifolium* Ait.**

**Lowbush Blueberry; bleuet à feuilles étroites**



Photo by Martin Thomas

It is the dominant blueberry of barrens, fields and of course, commercial blueberry production. It forms dense colonies. Leaves are deciduous, their margins serrate. Plants are generally smooth, exceeding 10cm in height. A variable species, although white-fruited forms are relatively rare.

Flowers late May until mid-June.



Photo by Sean Blaney

Peaty, acidic soils as found on barrens, in fields, headlands and other dry, sandy areas.

Common throughout.

NL to MB, south to TN and NC.

***Vaccinium boreale* Hall and Aalders**  
**Sweet-hurts; Northern Blueberry; bleuet boréal**



Photo by Martin Thomas

Dense colonies are formed of shrubs less than 10cm tall. Twigs are delicate and green, with the plants freely branching. Leaves are bright green, narrowly elliptic. Similar to the above species, it varies according to environmental factors.

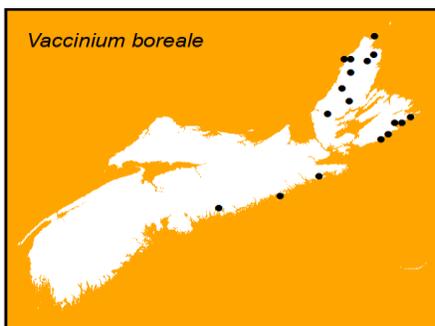
Grows on the windswept headlands and barrens.



Photo by Martin Thomas

Scattered at several Cape Breton localities, rare on the mainland.

NL to QC, south to NY.



***Vaccinium cespitosum* Michx.**  
**Dwarf Bilberry; airelle gazonnante**



Photo by David Mazerolle

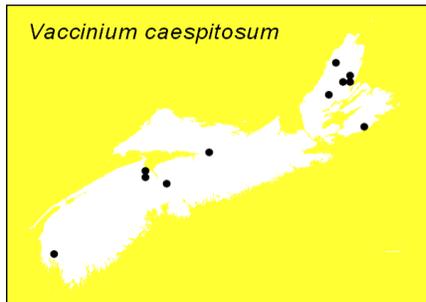
A rhizomatous species, it forms mats of small branching plants. Leaves are obovate and serrate, arising from puberulent twigs. Nodules are absent. Fruit is blue, rarely black and usually glaucous.

Rocky cliffs and crevices and lowland acidic soils.

Localities are widespread: Black River area, Kings Co. ; to near Riversdale, Colchester Col. and locally abundant in



Photo by Sean Blaney



northern cape Breton.

Its range is circumpolar, across North America and south to CA and NM in the west and MN and NY in the east.

STATUS: YELLOW-listed.

### ***Vaccinium corymbosum* L.**

#### **High-bush Blueberry; bleuet en corymbe**



Photo by Alain Belliveau

A tall shrub, it forms a crown 1.4m tall. It is variable in both colour and pubescence. Leaves are elliptical and sharply serrate. Berries are glaucous, blue to dull black or shiny. Easily suckers if damaged.

At least 50 cultivars have been named of this widely planted species, since 1920.

Flowers appear in mid-June.

Limited to bogs, rock barrens and lakeshores.

Distinctly coastal plain in distribution, from Digby to Queens counties.



*Photo by David Mazerolle*

NS to ON, south to GA and TX; BC to WA.

***Vaccinium macrocarpon* Ait.**

**Large Cranberry; canneberge à gros fruits; su'n**



*Photo by Sean Blaney*

A small evergreen vine, it has elliptic leaves slightly longer than 1 cm. Their lower surfaces are covered with a waxy indument. Nodding flowers are carried solitary in the axils of the current year's leaves, on slender pedicels. Green bracts are persistent. Red berries range in size from 9–14mm.

Commercial cranberries are cultivars of this species.

Flowers mid-July.

Acidic soils as in bogs, barrens, lakeshores, meadows and streamsides.

Common throughout.

Ranges from NL to ON, south to TN and NC; NT and AK south to CA.



*Photo by Alain Belliveau*

***Vaccinium myrtilloides* Michx.**

**Velvet-leaf Blueberry; bleuët fausse-myrtille**



*Photo by Sean Blaney*

Downy pubescence marks this species and the warty young twigs. Leaves are entire and softly hairy. Small glaucous fruits are produced. Plants are colonial, although the colonies remain small.

Sterile and dry soils in barrens, thickets and coniferous woods.

Common throughout.

NL to NT, south to WA and NC.

Hybridizes with *V. boreale*.

***Vaccinium ovalifolium* JE Smith**

**Oval-leaved Blueberry; airelle à feuilles ovées**

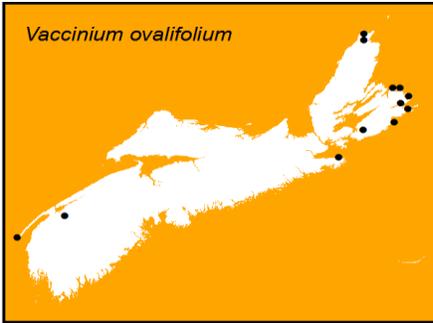


*Photo by David Mazerolle*

Small shrub to 50cm tall, it produces yellow-green or golden brown twigs. The leaves are ovate, irregularly serrate and their undersurfaces are bluish green. Berries range from blue to black, often glaucous.

Flowers late, from July to September.

Habitat preferences include coniferous woods from sea-level to 2100msl, throughout its range.



Two localities in northern Cape Breton.

NS; NF to ON and south to MI; NT to AK south to OR and SD.

STATUS: ORANGE-listed in NS.

***Vaccinium oxycoccos* L.**

**Small Cranberry; canneberge commune**



*Photo by Sean Blaney*

A vine, it has tiny revolute leaves. The flowers are borne 1–4 on long slender pedicels, bearing minute scales. Fruit is a red berry, 6–12mm wide. It is a highly variable species throughout its range.

Flowers towards the end of June.

Open bogs, swamps and usually on Sphagnum hummocks.

Throughout the province.

Circumboreal. NF to AK, south to VA, IL and OR. Absent on the arctic archipelago.

***Vaccinium uliginosum* L.**

**Alpine Whortleberry; Bog Blueberry; airelle des marécages**



*Photo by David Mazerolle*

A dwarf creeping shrub, it forms tight mats or large open colonies. Young twigs are smooth and pale green. Bluish green leaves are ovate. Fruit are blue.

Wide tolerance of moisture and fertility, but generally acidic soils.

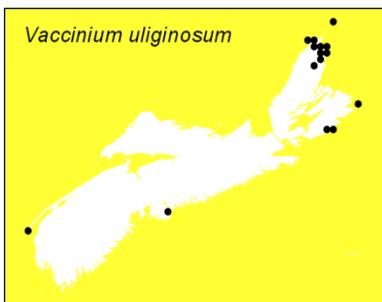
Ranges from Halifax and Digby along the east coast to Baleine; northern Cape Breton.



*Photo by David Mazerolle*

Ranges across the continent, south to CA, WY and NY.

STATUS: YELLOW-listed in NS.



***Vaccinium vitis-idaea* L.**

**Foxberry; Mountain Cranberry; Lingonberry; airelle rouge**



*Photo by David Mazerolle*

A low rhizomatous shrub, it forms small colonies where found. Fruit are shiny red berries. Leaves are ovate and glossy.

Flowers in June.

Frequent on cooler barrens and headlands, especially on the coast.

Most common along Atlantic shore and in cape Breton; inland populations are scattered and often vegetative.

Ranges across arctic America, south to New England, WI and BC; Eurasia.

Delicious cooked, as in jams and sauces. Their harvest is a cottage industry in NF, where they are sold as Partridgeberries.



*Photo by Martin Thomas*