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Yellow lady's-slipper; Cypripede soulier

Cypripedium parviflorum

Orchid Family (Orchidaceae)

Clusters of egg-shaped 'slippers' bob and shake with each gust of wind. These flowers are dressed for business. Bumblebees and other pollinators are attracted by sweet scent and the red lip around the mouth of each bright pouch-shaped lower petal. But these flowers are also deceivers, they contain no nectar—there is no reward. Once inside, insects are trapped and forced to do the plants' bidding. The hapless captives cannot leave without pushing past the flower's reproductive parts—depositing pollen from previous flowers, and being plastered with sticky new packets of pollen as they leave. • Germinating orchid seedlings must immediately locate a nearby fungal filament that they can parasitize for nutrients, or they will die. As an orchid grows, it develops green leaves and starts to use sunlight to produce its own food, but it cannot start life without a fungal host. • This plant is named after the Greek goddess *Cypris* (Lady of Cyprus, or Aphrodite—goddess of passion, beauty, and procreation). *Pedilon*, is Greek for 'shoe'. The Latin word *parviflorum*, means 'small-flowered'. • This uncommon herbaceous perennial grows on limestone and other calcium-rich soils, and can reach 20 cm tall.

Joyful yellow blooms

Ablaze on summer barrens.

Warm my winter heart.

Purple mountain saxifrage; Saxifrage à feuilles opposées
Saxifraga oppositifolia

Saxifrage Family (Saxifragaceae)

Winters are hard on the Great Northern Peninsula. This flower is the first sign that spring has arrived, and it is locally known as *mayflower*. It bursts into bloom as soon as the snow has uncovered a few patches of stony limestone soil—each plant a tight magenta mound hugging the cold grey gravel. • This plant excretes excess calcium through glands on its leaves. The calcium forms a white crust that discourages small plant eaters. It is an Arctic-alpine species with circumpolar distribution—and lives as far north as flowering plants can grow. It is also a pioneer species, colonizing soils disturbed by frost churning or human activity. It grows as high as 3,800 m in mountains, but lives at sea level in western Newfoundland and in the Arctic. • *Saxifraga* means ‘stone breaker’, probably because saxifrages often colonize clefts in rock. This led to the belief that they might be a medicine for kidney stones (based on the archaic Doctrine of Signatures). The species name, *oppositifolia*, refers to the tiny, paired (opposite) leaves. • This herbaceous perennial only grows on limestone and other moist, calcium-rich soils. It can grow to 5 cm tall.

Pink islands afloat

In a sea of grey limestone.

Spring has come again.

Laurentian primrose; Primevère laurentienne

Primula laurentiana

Primrose Family (Primulaceae)

This herbaceous perennial grows on moist, basic, open sites, or in partial shade. It is usually found in coastal meadows, on cliffs, along roadsides and stream banks, and on limestone barrens. The wind-tossed flowers are pollinated by bees, butterflies and hoverflies. • This bright spring flower grows only around the Gulf of St Lawrence, the Bay of Fundy, and westward to Ontario. A true coastal plant, this primrose is rarely found out of sight of salt water. It thrives on calcium-rich bedrock and in the basic soil conditions created by sea spray, where difficult soil conditions exclude many larger plants that would otherwise compete for habitat. • The undersides of this plant's leaves, the flower stem, and the sepals that clasp each flower are covered in a dense dusty coating of wax secreted by the plant. The leaves form a basal rosette, and after flowering, rosettes sprout buds and eventually create a tight cluster of plants. • The name *Primula*, derived from the Latin word *primus*, signifies that this is one of the first flowers of spring, and *laurentiana* refers to the Gulf of St. Lawrence, the centre of this species' distribution. Flowering stems can reach heights of 20 cm, but on exposed sites they are much smaller, sometimes flowering at only a few centimetres tall.

*In thrall to the sea,
Clinging to beaches and cliffs,
Trapped by forest's edge.*

Marsh grass-of-Parnassus; Parnassie des marais *Parnassia palustris*

Staff-vine Family (Celastraceae)

In rich peaty wetlands (fens) and along the shores of lime-rich ponds, dense clusters of these creamy-white flowers sway in summer breezes, their pale flowers in sharp contrast against the dark soil. Slightly fleshy, hairless, spoon-shaped leaves form rosettes on the soil surface, and the tall angular flowering stems arise from their centres. Each flower has five strongly veined petals, and five stamens. Between each pair of stamens is a cluster of five yellow glands referred to by the ungainly technical name 'nectariferous staminodes'. • The faint honey-like scent of the flowers attracts beetles, flies, bees, and other insect pollinators. Once mature, seed capsules release hundreds of tiny seeds, each bearing flanges that increase their buoyancy in the wind. • The name *Parnassia* is from ancient Greek, and may have been applied to this group because cattle on Mount Parnassus ate the plants along with forage grasses. *Palustris* means 'of the marsh', a reference to the plants' wetland habitat. • This species grows in calcareous boreal wetlands throughout the northern hemisphere, and can reach 30 cm tall.

*Wet soil underfoot,
A breeze sighs through larch branches,
Stars float above peat.*

Dwarf hawksbeard; Crépis nain

Askellia pygmaea

Daisy Family (Asteraceae),

Like many northern species, this tiny plant survives by hugging the ground. This keeps it within the “boundary layer”—a thin layer of slower-moving air close to the ground surface, warmed by sun-heated soil. Spoon-shaped, hairless leaves sprout from tight rosettes, and appear bluish because of a waxy cuticle that repels salt spray and slows drying. Each plant is firmly anchored in the frost-heaved gravel by a stout taproot that reaches deep into the soil. • Bright yellow flowerheads, like miniature dandelions, pepper mature plants. The fruit (seeds) are also dandelion-like, and are carried afar beneath silky parachutes by the strong winds that blast across the barrens. Found a century ago on Burnt Cape by Fernald and his team, more common in northern Labrador. • This Arctic-alpine species lives throughout northern Asia and northern North America, and a small population is found on limestone at the extreme northwestern tip of Newfoundland. Short-lived, herbaceous perennial, grows to 5 cm tall.

Dwarfed tuft huddled low,

Not yielding to life's harshness.

Determination.

Barrens willow; Saule des landes

Salix jejuna

Willow Family (Salicaceae)

Although descended from a family of trees, this willow never manages to grow more than five centimetres tall. It is restricted to the limestone barrens of the Great Northern Peninsula, and is found nowhere else in the world. It grows only on small coastal limestone barrens from Watts' Point to Cape Norman. Branches lie flat on the ground, forming small mats. • Leaves are ovoid with pointed tips and down-rolled, toothless edges, and are hairless on both upper and lower surfaces. They are smooth with a shiny upper surface, and are not heavily veined. • Each spring, male and female plants produce bright red aments (catkins) that often tower above the rest of the plant. Tiny seeds are embedded in cottony filaments that increase their chances of hitching a ride away from home on the wind. • The genus name, *Salix* is the classical Latin name for 'willow tree'. The famous Harvard botanist, Merritt Lyndon Fernald, named this tiny shrub *jejuna*, meaning 'insignificant' because of its decidedly un-treelike dimensions. Indeed, its growth rate is more like that of a lichen than that of a tree. • Endemic to the Strait of Belle Isle. Endangered, found only on limestone in northwestern Newfoundland.

Smaller than most leaves

After a lifetime of growth.

Tree in name alone.

Island gentian; Gentiane des îles
Gentianopsis detonsa* subsp. *nesophila
Gentian Family (Gentianaceae)

Lapis lazuli, azure, gentian blue... what word can capture the colour of this wildflower? Its blossoms are huge compared to the rest of the plant, and they open fully only on sunny days. This species grows in coastal locations, and in good habitat it can form dense colonies. • It is a small, biennial, herbaceous plant with a rosette of leaves in its first year. In its second year it bears one or more relatively large blue flowers. The four-petalled tubular flowers are oriented upwards and open fully only on bright sunny days. They are fertilized by bumblebees and other insects. After flowering and setting seed, the plant dies. Island gentian is usually found along the coast in thin peaty soil over limestone bedrock. • *Detonsa* means 'shorn or sheared', referring to the smooth petal surfaces that are unusual in gentians. *Nesophila* means 'island-loving', referring to the distribution of the subspecies. This is an endemic subspecies that only lives around the Gulf of St. Lawrence and the east coast of James Bay. To 10 cm tall.

*Blue of summer sky,
Shining from the ground below.
Why would I look up?*

Fernald's braya; Braya de Fernald

Braya fernaldii

Mustard Family (Brassicaceae)

'Grows nowhere else on Earth'. This title applies to only a few species of NL wildflowers—and this is one of them. It grows only on limestone barrens on the northwestern coast of Newfoundland's Great Northern Peninsula. This plant is found between Bellburns and Burnt Cape, and in the Flower's Cove area it overlaps with a similar endemic species called Long's braya. Even when in full bloom, it is a very difficult plant to see because it is so rare and because it is so small. • Named for famous Harvard botanist, Merritt Lyndon Fernald, this tiny plant grows on some of the most exposed coastal limestone barrens. Its survival is threatened by the use of off-road vehicles, by development and human use of the barrens, and possibly by climate change. • Flowering stems are densely covered with short hairs. Flowers have four white petals, often with a purplish cast. As the flowers wither, seeds are borne in reddish pod-like *siliques*. • This small, herbaceous, long-lived perennial is internationally considered an Endangered species. Grows to 7 cm tall, but is often much smaller.

Some seem doomed to lose.

Events, greed, and chance conspire.

Who are we to choose?