# PLANTS of the Woodland Nature Trail Point Pelee National Park

### CANADA

## DEPARTMENT

## OF

NORTHERN AFFAIRS and NATIONAL RESOURCES

## P L A N T S OF THE WOODLAND NATURE TRAIL POINT PELEE NATIONAL PARK ONTARIO

by

George M. Stirrett Chief Parks Naturalist National Parks Service

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#### Table of Contents Common Day LT

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Page

Introduction	1
Πνορα	
American Elm   Basswood   Black Cherry   Black Locust   Black Walnut   Black Willow   Chestnut Oak   Cottonwood   Hackberry   Ironwood   Red Ash   Red Maple   Red Oak   Shagbark Hickory   Silver Maple   Sycamore   White Ash   White Sassafras	4456678990111234556677
Shrubs   Black Alder   Choke Cherry   Common Elderberry   Drummond's Dogwood   Fragrant Sumac   Ground Juniper   Hop-Tree   Poison Ivy   Prickly Gooseberry   Silky Dogwood   Snowberry   Spicebush   Staghorn Sumac   Strawberry Bush	189900122344556

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Cover Design of Sweet Cicely

. George M. Bulerato Chief Darks Mostrailat

#### by

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Wild Black Currant ..... 26

92.89 ···· Page	
Vines	
Carrion Flower	27
Climbing Bittersweet	27
Common Cathrier	28
Fox Grane	20
Moongood	29
Poigon Tur	20
Piyenbank Grono	30
Niverbank Grape	20
Virginia Greeper	21
wild Potato vine	32
Moggeg	
Ambluctorium	77
Ambrystegrum	22
Brachythecium	22
Purple Horn-Cap	34
Woodsy Mnium	34
Red Maple	
Horsetalls	
Common Horsetail	35
Scouring Rush	36
Slippery Eim	
rerns	
Bracken	37
Crested Wood Fern	38
Rattlesnake Fern	38
Sensitive	39
Spinulose Wood Fern	40
Choke Cherry	
Grasses and Sedges	
Downy Brome Grass	41
Junegrass	42
Loose-flowered Sedge	10
Toope-iioweien Denge	42
Herbs	
Bastard Toadflax	43
Bitter Cress	113
Bloodroot	111
Blue Cohosh	15
Plue Flog	45
Dive Verwein	42
Dive vervain	40
Bounding-Bet	47
Canada Mayilower	47
Carolina Geranium	48

Clammyweed .....

	FO
Common Chickweed	50
Common Day Lily	50
Common Milkweed	51
Common Mullein	52
Cursed Crowfoot	52
Cut-leaved Toothwort	53
Dog's-tooth Violet	53
Downy Yellow Violet	54
Duckweed	55
Dutchman's-breeches	55
Early Meadow Rue	56
Enchanter's Nightshade	57
False Solomon's-seal	57
Flowering Spurge	58
Fringed Loosestrife	58
Herb Robert	59
Hoarv Tick Trefoil	60
Jack-in-the-pulpit	60
Jewelweed	61
Large-flowered Bellwort	62
Lopseed	63
Ivre-leaved Rock Cress	63
Marsh Blue Violet	64
May Apple	65
Prickly Pear Cactus	65
Purple Rock Cress	66
Red Trillium	67
Seneca Snakeroot	67
Slender Nettle	68
Small-flowered Buttercup	69
Small Solomon is-seal	69
Smooth Vellow Violet	70
Spring Beauty	70
Spring Cross	71
Spring dress	71
Star floward False Solomonis-seal	72
Sugar-Ilowered Faibe Bolomon B-Bear.	73
Dweet offery	73
Tall Dellilower	74
Insight Cothrien	75
Upright Cauprier	75
Waterical	76
White Sweet Clover	76
White Trillium	77
Wild Bergamot	78
Wild Blue Phiox	10

#### Introduction

The plant labels found on the Woodland Nature Trail give only the common and scientific names of the plants. An additional means of identification is given here by supplying brief descriptions and notes for each plant. This system of labelled plants on the trail and descriptive notes in this pamphlet will enable you to identify the intended plant during all seasons of the year and to learn something about it.

Both the plant label and the descriptions are necessary as the labels remain in place for most of the year and during this time many changes take place in the vegetation. Some plants bloom early and then quickly disappear, others do not flower or even appear above ground until late in the season. At the time of your visit you may be bewildered and unable to recognize the plant referred to by the label unless you read about it before making identification.

Dutchman's-breeches, for instance, is a perennial plant which flowers during April but by the end of July the foliage has died and disappeared and will not be seen again until spring. If you visit the trail in April you will find no difficulty in identifying the plant from the label, in fact, once you have recognized it you will find it a very common plant in the immediate neighborhood. However. if you make your visit in late July, the stake and label will be present but no plant resembling Dutchman's-breeches will be evident and you will be baffled or else make a false identification of another plant. On the other hand, by use of the pamphlet you will look up Dutchman's-breeches on page 55 and find in reading about it that you are much too late in the season to see this plant. You are now no longer puzzled and conclude that after all the label is correct. Dutchman's-breeches is underground until next spring.

Glo	Wild Columbine Wild Geranium Wild Leek Wild Nettle Woodland Strawberry Woodland Sunflower Woolly Blue Violet Yellow Corydalis Yellow Water Crowfoot	78 79 80 81 82 83 83 83 84
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	Bloodroph	

The plants are first arranged under their growth forms, i.e., trees, shrubs, vines, mosses, horsetails, ferns, grasses and sedges, and herbs. Under each of these headings the plants are then listed in alphabetical order according to the common name on the staked label. A reference to the Table of Contents is the easiest way to find the page number for any particular plant.

The stakes bearing the plant names are generally placed immediately behind the plants, especially if the plants are small.

The descriptions are based upon the various characters as they are found in mature plants. Young plants and particularly young leaves may not be typical of fully developed specimens. Most of the characters used are those which can be seen without the aid of a magnifying glass. As each species of plant has a preferred habitat or home in which it lives best, some notes are given on habitat requirements, especially as to soil, moisture and light.

The pamphlet is not a botanical text and botanical nomenclature and usage has, in many cases, been ignored in the cause of simplicity of description and meaning.

Scientific terms have been eliminated as much as possible but a few had to be used. The meaning of these words is given in the Glossary on page 84.

The scientific names of plants and of the plant families, for the most part, are those given in Gray's Manual of Botany, Eighth Edition, 1950.

The geographical range given for each

plant is not detailed or complete but does give a general idea of the area in which the plant might be expected to occur under natural conditions if its particular habitat requirements are met.

It is estimated that about 600 species of plants grow in Point Pelee National Park. Although many of these plants are found along the Woodland Nature Trail, only 122 of them are discussed in this pamphlet, which deals with the labelled plants only.

Many of the plants discussed are found in other locations in the Park and outside it's boundaries. It is hoped that after you have become familar with them on the trail you will look for them in other places. Study their special habitat requirements and gain an insight into the role each species plays in the vegetation cover of the area. Some plants you will find are quite restricted in the place they can live under natural conditions, while others are more tolerant and get along nicely in various situations. A much greater enjoyment of the plants around you will be yours if you do these things.

The section entitled Notes are blank pages for your own notes. If you make notes your visit and your knowledge of plants will mean more to you in the future.

Two references have been mentioned in the text;-

Annotated List of Flowering Plants and Ferns of Point Pelee, Ontario, and Neighboring Districts. C.K. Dodge. Memoir 54, Canada Department of Mines, Ottawa, 1914.

The Flora of the Erie Islands, An Annotated List of Vascular Plants. Earl L. Core.

Contribution No. 9, The Franz Theodore Stone Laboratory, The Ohio State University, 1948.

## Trees

American Elm. White Elm

Ulmus americana L.

Ulmaceae (Elm Family)

Flowers: yellowish to purplish, in longstemmed clusters appearing before the leaves. Stamens and pistils in the same flower. Wind pollinated.

Leaves: alternate, with prominent straight veins, double-toothed margins, long-pointed tips and asymmetrical bases. Fruit: enclosed in a round, flat, membranous covering bearing a dense fringe of minute hairs on its margin. Bark: dark gray, rough, furrowed into ridges or flaky.

Eastern North America, Gaspe Peninsula to Saskatchewan, southward to Florida and Texas. A common tree in southern Ontario and in the Park. Under natural conditions it grows where the water table is near the surface. It was formerly a climax tree of the swamp forest on old lake beds.

It is one of the first trees to bloom and ripe fruit falls as the leaves expand. Seeds are distributed by wind.

The leaves turn yellow in the fall but usually drop before the tree makes a worthwhile display.

Basswood. Whitewood; American Linden.

Tilia americana L. Tiliaceae (Linden Family)

Flowers: in clusters on end of a stalk arising from axil of a leaf-like bract. Cream coloured, fragrant and nectar bearing. Stamens and pistils in the same flower. Flowers appear after the leaves in late June or July. Insect

pollinated. It is a good source of nectar for honey bees. Leaves: alternate, heart-shaped, unequal at base, toothed and usually without hairs. Fruit: woody nutlet remaining attached to the winged bract. Bark: dark gray, smooth, becoming scaly with age.

Eastern North America, New Brunswick to Manitoba and southward. A common tree in southern Ontario and in the Park where moisture and shade conditions are suitable.

One of the trees associated with hard maple and beech in the eastern hardwood climax forest. It is tolerant of shade and is able to reproduce from seed to some extent under forest cover. Many saplings also arise from old stumps.

Sometimes the leaves are discoloured and whitened from the feeding of a lace-bug, Corvthuca juglandis Fitch, on their under surfaces. On injured leaves this interesting insect may be seen with the naked eye, but because of its small size its beauty of structure and form are seen best through a hand lens.

Black Cherry Rum Cherry

Rosaceae (Rose Family) Prunus serotina Ehrh.

Flowers: white, in drooping clusters from new branchlets, flowers appear after the leaves in May or June. Male and female parts in the same flower. Petals broadest above the middle. Insect pollinated. Leaves: alternate, blades with long sharp-pointed tips, margin with blunt teeth, dark green above, paler on under surface. Fruit: dark red becoming purplish-black, ripe in July to September. Edible. The remains of the calyx adheres to fruit. Bark: dark reddishbrown with small but prominent light-coloured markings, smooth when young, scaly in mature trees. Inner bark aromatic.

Eastern North America, Nova Scotia to North Dakota and southward.

It is fairly common in the hardwood forests of southern Ontario. Found in the Park in suitable locations. Sometimes it is found as a shrub and in this form may easily be confused with choke cherry.

Black Locust. False Acacia; Common Locust.

# Robinia Pseudo-Acacia L. Leguminosae (Pulse Family)

Flowers: white, fragrant, in pendulous clusters in May or June after the leaves have developed. Stamens and pistils in same flower. Insect pollinated. Leaves: alternate, compound, odd-pinnated, leaflets ovate and net-veined. Fruit: dull brown pod three to four inches long containing several seeds. The pod is smooth, without hairs and margined on one side. Bark: dark brown, deeply furrowed. Branches with spines, without hairs and not sticky.

The original range of this tree was eastern North America from Pennsylvania southward. It is now naturalized from plantings from Nova Scotia, Quebec, southern Ontario and southward.

A few trees are found in the Park on the drier soil areas. The leaves turn yellow in the autumn.

## Black Walnut.

### Juglans nigra L. Juglandaceae (Walnut Family)

Flowers: greenish-yellow, in catkins, appearing with the leaves, usually in June. Sexes in separate flowers but both kinds on the same branch. Male flowers in drooping tassels, much larger than the female. Wind pollinated. Leaves: alternate, compound, pinnate with many (11-17) leaflets. Leaflets toothed on margin,

ind platile in the same flower. Flowers appear

smooth above, lower surface and stems downy. Leaf scars on small branches, notched, border of scar without a hairy fringe. Fruit: spherical with rough husk, nut furrowed, ripening in October or later. Bark: dark brown, in age deeply fissured. Pith of branches arranged in thin layers, separated by an air space, brown in colour.

Eastern North America, Massachusetts to Minnesota, southward. A common tree in southwestern Ontario and in the Park on the drier soils.

The leaves, fruit and twigs are aromatic.

The leaves turn yellow or brownish in the fall.

During most summers the trees are infested with the walnut caterpillar, Datana integerrima S. & R. They devour the leaves but "nests" of them are also seen on the trunk and branches. These spiny caterpillars are a favourite food of the black-billed and yellow-billed cuckoos.

Black Willow. Swamp Willow.

Salix nigra Marsh. Salicaceae (Willow Family)

Flowers: in catkins, male and female on separate plants, appearing at the time leaves are expanding, generally in March or April, greenish-yellow to yellow depending upon age. Wind pollinated but bees and other insects gather pollen and nectar from the flowers and may aid in pollination. Leaves: alternate, with short stems, blade elongate, pointed, without hairs except when young, dark green on both sides. margin finely toothed. Fruit: capsule with numerous seeds. Each seed with a tuft of silky hairs which acts as a parachute for the dispersal of the seeds by wind. The seeds are ripe early in the season, usually in May. Bark: black, sometimes dark purplish, flaky. Branches yellowish or golden in colour,

#### brittle but terminal portions flexible.

Eastern North America, New Brunswick to North Dakota and southward. A common tree in wet places. Most abundant in the Park along ditches which contain water for at least part of the year.

It is a tree only when fully developed and the shrub stage may be encountered.

The leaves turn yellowish-green in the fall.

Chestnut Oak. Yellow Oak; Chinquapin Oak.

## Quercus Muchlenbergii Engelm. Fagaceae (Beech Family

Flowers: male yellowish-green in hanging catkins; female enclosed in scale-like bracts, small, reddish. Both kinds on the same branch, appearing as the leaves are expanding in late May or June. Wind pollinated. Leaves: alternate, on slender stems which allow the leaves to tremble, blade not lobed, coarsely toothed with 5-13 teeth on each margin. Upper surface dark, shining, lower surface white and dull. Fruit: a globose, stemless acorn which matures the first year. Cup about one-half as long as acorn, its inner surface without hairs. The acorn is edible but not tasty. Bark: pale gray but sometimes almost white, with flat, scaly ridges. The pith is star-shaped.

Eastern North America, Vermont to southern Minnesota and southward. In Canada it is confined to the shores of Lakes Ontario and Erie. It is frequently found in the Park.

It is called chestnut oak because the leaves resemble those of the chestnut, <u>Castanea</u> dentata (Marsh) Borkh.

The leaves turn yellowish or brownish in the fall.

Cottonwood. Necklace Poplar.

## Populus deltoides Marsh. Salicaceae (Willow Family)

Flowers: in drooping catkins appearing before the leaves, male and female flowers on separate trees, yellowish to brownish, changing colour as they mature. Wind pollinated. Leaves: alternate, simple, broadly triangular, margin wavy because it bears large, blunt teeth. Leafstem flattened at top. Fruit: a cottony, parachute-equipped seed. Female trees liberate myriads of these in early summer. Bark: gray, ridged and scaly. Young bark yellowish-green and smooth.

Eastern North America, central Quebec to Saskatchewan and southward. Common in the Park where conditions are suitable. It prefers a moist soil.

The leaves turn a golden yellow in the fall.

Hackberry. Sugarberry.

Celtis occidentalis L. Ulmaceae (Elm Family)

<u>Flowers</u>: greenish, in axils of leaves, appearing with the leaves in May. Both sexes on the same tree. Wind pollinated. Leaves: alternate, simple, ovate, unequal at base, tip long-pointed, margins with sharp teeth, dull green above, paler below. Fruit: berrylike, purplish-black to orange-red when ripe, edible, sweetish, sometimes with a beak, often hanging on tree until winter. Bark: grayishbrown, in most trees deeply furrowed, checkered and warty. Pith of branches chambered like that of walnut but white in colour.

Eastern North America, southern Quebec to Idaho and southward. It is not common in Canada but is one of the commonest trees in the Park. It prefers light soil which may be either dry or moist.

## The leaves turn yellow in the fall.

The dark coloured, finger-like growth on twigs and branches is called Witches' broom. This gall is caused by a mite Eriophyes sp. and a fungus Sphaerotheca phytophila. This latter organism causes a powdery mildew which grows only on twigs infested with mites. It is an example of the interdependence of organisms in nature. Hackberry tree — mite — powdery mildew — Witches' broom. Very few trees, especially if they are in the open, escape the mites and in the Park the tree may be identified by the presence of Witches' broom.

Ironwood. Rough-barked Ironwood; Hop-Hornbeam.

Ostrya virginiana (Mill.) K. Koch. Corylaceae (Hazel Family)

Flowers: small, yellowish-green in catkins. Male catkins in clusters from tips of one year old branches; female in short bract-like, single catkins on leafy shoots of the season; both kinds on same plant. Wind pollinated. Leaves: alternate, ovate, taper-pointed, margin with sharp-pointed teeth, hairless above, downy on lower surface. Fruit: a nutlet, enclosed when ripe in a bladder-like greenish or yellowish case. Bark: brownish, shreddy or scaly.

Eastern North America, Nova Scotia to Manitoba and southward. It tolerates shade and is thus able to thrive in the forest.

Although it may be numerous, it is always an under-canopy secondary tree in the climax forest in which hard maple and beech are the dominant trees.

The fruiting cluster superficially resembles the fruit of the hop plant and from this fact the tree is sometimes called hophornbeam. It is called ironwood because the wood is dense, very hard and strong. The leaves turn yellow, yellowish-green or brownish in the fall.

Red Ash. River Ash.

## Fraxinus pennsylvanica Marsh. Oleaceae (Olive Family)

Flowers: sexes on separate trees, female in clusters, pale green with some purplish shades; male in short-stalked, dense, brownish clusters. Both kinds appear before the leaves. Wind pollinated. Leaves: opposite, pinnately compound, usually with nine (5 to 9) leaflets. Stems of middle and lower leaflets winged. Blades of leaflets entire or wavy, rarely toothed, lower surface with brownish hairs. Fruit: seed with single, narrow, terminal wing extending to middle of seed, usually ripe in July but may remain on tree for a considerable time, brownish-yellow or sometimes red in colour. Bark: grayish-brown, inner bark reddish. Branches and twigs velvety brown.

Eastern North America, Nova Scotia to Manitoba and southward. It is found in low, moist soils. The tree is moderately common in the Park in suitable locations.

The leaves turn some shade of yellow or brown in the fall.

Red Cedar Red Juniper; Savin.

Juniperus virginiana L. Pinaceae (Pine Family)

Flowers: male and female usually on separate trees. Female borne at tip of branches, very small, greenish, inconspicuous; male produced in large numbers on terminal shoots, brownish to creamy-yellow. Both kinds appear very early in the spring. Wind pollinated. Leaves: evergreen, of two kinds; young leaves long, sharp-pointed and in threes; older leaves flat, blunt, alternating in pairs

79402-2

forming four-sided branchlets. Fruit: berrylike cone, maturing the first year, greenish at first, blue and often with a bloom when ripe, sweetish but resinous, often remaining on tree during winter. Bark: reddish-brown, loosening in long strips. Wood fragrant, reddish in colour.

Eastern North America from Maine to North Dakota and southward but very local within this range. It prefers sandy or gravelly dry soil and open areas.

It is one of the first plants to establish itself in abandoned fields.

It is one of the commonest and most aggressive trees in the Park. The trees here are the best growth of the species in Canada.

The larvae of a small butterfly, the olive hair-streak, Mitoura damon Cr. feeds almost exclusively on the leaves and its range is therefore confined to that of its host plant.

In the spring, about the last of May, the red cedar gall is sometimes a conspicuous object on the leaves of the tree. During moist weather these galls grow rapidly and produce jelly-like horns or processes which are a bright brown colour. The gall is one stage in the development of the apple or cedar rust fungus, <u>Gymnosporangium juniperi-virgin-</u> ianae Schw. The other stages occur on apple leaves and fruit. Both hosts are necessary for the development of the fungus.

Red Maple. Scarlet Maple; Swamp Maple.

Acer rubrum L. Aceraceae (Maple Family)

Flowers: male and female in dense, reddish clusters, opening before the leaves. The sexes are in separate clusters and usually on different trees. Wind pollinated. Leaves: opposite, palmately three-lobed, the cleft between lobes sharply angled at base, margin toothed. Blade light green above, paler below, smooth not hairy. Fruit: winged seeds in pairs, maturing very early in season, usually reddish in colour. Young fruits hairless. Bark: gray or dark brown, smooth when young becoming scaly with age.

Eastern North America, Newfoundland to Manitoba and southward. The tree prefers wet, swampy places in rich soil but will grow in upland sites with poorer soil. It sometimes produces an abundance of seed but very few saplings survive in a mature forest.

A common tree in the wetter areas of the Park forest.

The foliage usually turns scarlet, crimson or brilliant red in the fall.

Red Oak.

Quercus rubra L. Fagaceae (Beech Family)

Flowers: male greenish-yellow, in long, pubescent catkins; female greenish, in much shorter clusters close to the twigs. Both sexes on the same tree but the female flowers are situated above those of the male. This arrangement of having the tight-sitting female flowers above the longer and more numerous male flowers appears to be an attempt of the plant to insure cross-pollination, the pollen coming to the female flowers from other trees. This device is found also in other oaks and in hickories. The flowers appear after the leaves. Wind pollinated. Leaves: alternate with slender stems, the blades dark green above, yellowish-green below, pinnately lobed, each lobe bristle-tipped. Young leaves are covered with pinkish hairs which are soon lost. mature leaves are hairless or essentially so. Fruit: an acorn, maturing the second year, bitter to taste, cup flattish or saucer shaped. Bark: dark brown, deeply furrowed in

# in older trees.

Eastern North America, Prince Edward Island to Minnesota and southward. A common tree in southern Ontario and frequent in the Park on soils having a wide range of moisture.

The leaves turn various colours in the fall, they may be dull brown, bright orange or a flaming red.

One tree in the Park with a twenty-eight inch diameter, examined in 1940, was over 200 years old.

Shagbark Hickory. Shellbark Hickory.

## Carya ovata (Mill.) K. Koch. Juglandaceae (Walnut Family)

Flowers: sexes separate but on the same tree; male flowers in drooping catkins arising in three's, generally on new growth; female flowers in clusters at tip of new shoots. Flowers greenish-yellow, appearing after the leaves. Leaves: alternate, oddpinnate, usually with five leaflets. Leaflets sessile, with finely toothed margins, aromatic when crushed. Fruit: smooth, ovoid, edible nut, the husk freely splitting into four parts, ripening in October or later. Bark: gray. at first smooth but soon splitting into loose plates. The pith of young branches continuous not chambered as in walnut.

Eastern North America, southern Maine to Newbraska and southward. In Canada found only in southwest Quebec and southern Ontario. A common tree in the Park. It prefers the drier soil locations.

It is moderately tolerant of shade and reproduces well in the more open forests.

The leaves turn yellow or dull gold in autumn.

In spring, when the large buds are expanding, the numerous scales take on tints of many colours and are very attractive.

Silver Maple. White Maple; Soft Maple.

Acer saccharinum L. Aceraceae (Maple Family)

Flowers: male and female in different clusters and usually on different trees. greenish-yellow to reddish, petals absent, flowering long before leaves open. Leaves: opposite, palmately five-lobed with deep. narrow indentations rounded at base. Margins toothed, pale green above, silvery white below. Fruit: winged samara, larger than that of other maples, hairy when young, produced in large quantities and shed very early in season. Bark: gray, smooth on young trees, becoming broken and scaly.

Eastern North America, New Brunswick to Minnesota and southward. Moderately common in the Park in suitable locations.

Found most commonly on moist to wet locations. The seeds cannot stand as much desiccation as those of other maples. They germinate quickly within a few days of falling.

The leaves usually turn some shade of yellow, or yellow blotched with red in the Mewbrasks and southward. Very locally distinct

Slippery Elm. Red Elm.

Ulmus rubra Muhl. Ulmaceae (Elm Family)

Flowers: sessile clusters along twigs, stamens and pistils in the same flower, light brown in colour but in wet weather they become stained dark reddish-purple from the soluble pigments of the anthers. The flowers appear before the leaves. Leaves: alternate, straight veined, unequal at base, margin

toothed, rough and harsh on upper surface, fragrant when dry. Fruit: a winged, oval samara, papery and without fringe of hairs on margin. The fruit is shed very early in season, sometimes before leaves fully expanded. Bark: grayish to reddish-brown, furrowed into scaly ridges. Inner bark mucilaginous.

Eastern North America, southern Quebec to North Dakota and southward. Not common in the Park. It prefers a richer, more alkaline soil.

Sycamore. Buttonwood; Plane-tree.

Platanus occidentalis L. Platanaceae (Planetree family)

Flowers: male and female on same plant but in different heads and usually on different branches; each kind occurring in compact clusters, appearing as the leaves unfold, not showy. Leaves: alternate, palmately lobed with from three to seven lobes, usually heartshaped at base, coarsely wavy along margin, base of stem swollen. Fruit: many, in a ball or "button" on a slender stalk, ripening in fall but sometimes remaining on tree through winter. Bark: outer plates shedding leaving whitish, greenish or brownish blotched areas.

Eastern North America, southern Maine to Newbraska and southward. Very locally distributed in southern Ontario.

It requires abundant moisture and is therefore found mainly along streams and wet places. A frequent tree in the Park where moisture is suitable.

The leaves are often discoloured and whitened by the feeding of the sycamore lacebug, Corythucha ciliata Say. Various stages of this very small but beautiful insect may be found on the under surface of the leaves. White Ash.

## Fraxinus americana L. Oleaceae (Olive Family)

Flowers: male and female on separate trees; male flowers in dense, dark brown clusters; female in more elongate and less dense clusters; both kinds appear just before the leaves. Wind pollinated. Leaves: opposite, compound, usually seven (5 to 7) leaflets. Stems of lower and middle leaflets wingless, margins entire or sparsely toothed, blades greenish, much whiter below, under surface smooth, without hairs. Fruit: winged samara, wing rarely extending below top of seed. Bark: grayish, furrows forming diamondshaped pattern. Young twigs green and lustrous, older ones gray, smooth, without noticeable hairs.

Eastern North America, Nova Scotia to Minnesota and southward. A common tree in the Park. It prefers a rich, dry soil.

This and other species of ash have seedlings that tolerate shade and therefore are able to maintain themselves under the forest canopy.

White Sassafras.

## <u>Sassafras</u> <u>albidum</u> (Nutt.) Nees. <u>Lauraceae</u> (Laurel Family)

Flowers: showy, greenish-yellow, clustered on ends of twigs, appearing with the leaves in early May. Sexes on separate trees. Insect pollinated. Leaves: alternate, of variable form, ovate or with one or two lobes, palmately veined, yellowish-green, shining above, lighter below, sometimes with a bloom. Fruit: berry-like, dark blue, carried on end of a club-shaped, reddish stem. Ripe in autumn. Bark: green and smooth at first, later becoming mottled reddish-brown with flat ridges. Branches and twigs pale green, shining, brittle.

The foliage, twigs, bark and roots have a spicy, aromatic odour and taste. They are mucilaginous when chewed.

Eastern North America, southern Maine to Illinois, southwards. In Canada it exists only in southern Ontario, south of a line from Toronto to Sarnia.

There are several dense stands in the Park.

It prefers sandy loam in dry open situations. If the forest becomes too dense sassafras will die out. Look for it on edges of forest or in more open areas.

Sassafras tea made from the leaves and oil made from the roots and bark were articles of commerce during the time of early settlement in North America.

The leaves are multicoloured in autumn, but mostly yellow, orange and scarlet. The leaves together with the brightly coloured fruit make it an attractive tree at this season.

## Shrubs

Black Alder. Winterberry; Deciduous Holly.

<u>Ilex verticillata</u> (L) Gray. <u>Aquifoliaceae</u> (Holly Family)

Flowers: whitish-green on short stalks from axils of leaves in June or July. Petals and sepals of female flower from 6 to 8, these flowers usually solitary while male flowers are generally clustered, calyx lobes pubescent and ciliate. Leaves: alternate, deciduous, sharply pointed, margin with incurved teeth. Fruit: berry-like, red, with remains of calyx segments on its end, persists on twigs to midwinter. Bark: dark brown. Eastern North America, Newfoundland to Minnesota, southward to Georgia, Illinois and Missouri.

This shrub prefers wet places and is found in swamps and water margins throughout its range.

It is a true holly belonging to the same genus as the evergreen holly used for Christmas decoration.

### Choke Cherry.

### Prunus virginiana L. Rosaceae (Rose Family)

Flowers: white, in thick cylindrical clusters after the leaves in early May. Petals five, rounded. Insect pollinated. Leaves: alternate, ovate, short-pointed, margin with sharp teeth. Fruit: deep red, turning purplish-black when ripe, without remains of calyx adhering to stem-end, edible but astringent. Bark: dark, branches reddishbrown, inner bark not aromatic and usually with disagreeable odour.

Eastern North America, Newfoundland to Saskatchewan and southward. A common shrub or small tree of thickets, roadsides and open woods.

The leaves turn reddish in fall. The central portion of the leaf remains green long after the edges have turned, making a two coloured attractive pattern.

Common Elderberry. Common Elder

### Sambucus canadensis L. Caprifoliaceae (Honeysuckle Family)

Flowers: small, white, fragrant, in flattopped clusters on ends of twigs, blooms in late June or early July. Insect pollinated. Leaves: opposite, pinnate with 5 to 11 leaflets.

Fruit: purplish-black, edible and often made into wines and pies. Bark: gray, branches scarcely woody, with large, white pith.

Eastern North America, Nova Scotia to Manitoba and southward. It prefers moist open areas but is sometimes found in other situations. A common shrub.

It tends to be short-lived but readily reproduces by stolons and in this manner maintains itself in any given situation.

Birds are very fond of the berries.

Leaves and stems have a rank smell when bruised.

Drummond's Dogwood. Rough-leaved Dogwood.

Cornus Drummondi Meyer. Cornaceae (Dogwood Family)

<u>Flowers:</u> creamy-white in open clusters in May or later. Insect pollinated. <u>Leaves:</u> opposite, ovate with long tips, harsh or rough above, densely hairy below. <u>Fruit:</u> white when ripe, on purplish-red stalks. <u>Bark:</u> gray, bitter to taste, pith of one to two year old branches brownish, very rarely white.

Eastern North America, southern Ontario, Illinois to Nebraska, south to Mississippi and eastern Texas. Confined to Essex and Norfolk counties in Ontario.

It prefers damp woods and thickets.

Fragrant Sumac Lemon Sumac; Canada Sumac.

Rhus aromatica Ait. Anacardiaceae (Cashew Family)

Flowers: creamy-white to yellowish in crowded, short-stemmed clusters, appearing before the leaves in May. Insect pollinated. Leaves: opposite, with three short-stemmed leaflets, the middle one and sometimes the other leaflets dentate especially above the middle. Fruit: berry-like, in clusters, covered with long, reddish hairs, ripening in early summer, persistent, remaining on twigs sometimes during winter or even to spring. Bark: dark brown.

Eastern North America, southwestern Quebec to Kansas and southward.

It prefers dry, sandy or gravelly soils in open situations. Very common in the Park, along beaches, open fields and edges of woods. It is a vigorous pioneer plant, invading disturbed areas and acting as a sand-binder.

The leaves and twigs are pungently fragrant when bruised. Not poisonous.

Ground Juniper. Common Juniper.

Juniperus communis var. depressa Pursh. Pinaceae (Pine Family)

Flowers: greenish in small catkins in axils of leaves in early spring, male and female flowers on separate plants. Wind pollinated. Leaves: spine-tipped needles in whorls of three, concave above with two confluent white bands, evergreen. Fruit: a berry-like cone, blue-black with a white bloom. Matures during third season.

Eastern North America, Newfoundland to Alberta and southward. Dry, sandy and rocky soils. Quite common in the Park in open, dry situations.

A low, stiff branched, prickly shrub sometimes forming large mats. There is a tree form but so far as known it does not occur in the Park.

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### Hop-tree. Shrubby-trefoil; Stinking-ash; Wafer-ash.

#### Ptelea trifoliata L. Rutaceae (Rue Family)

Flowers: small, greenish-white, fragrant, in terminal clusters appearing after leaves, usually in June. Insect pollinated. Leaves: alternate, each with three leaflets. Leaflets ovate, pointed, middle one with longest stem, margins smooth. Fruit: in a cluster, each seed surrounded by whitish wafer-like membrane, ripening in July or August. Bark: reddishbrown, shining, later turning gray and rougher.

Eastern North America, southwestern Quebec to Nebraska and southward. It prefers sandy or gravelly soil.

It is common along beaches and open places in the Park. This stand is the largest and best growth of the species in Canada.

Although the flowers are considered fragrant, the leaves and bark contain a malodorous volatile oil.

The larvae of the giant swallow-tailed butterfly, <u>Papilio</u> cresphontes Cr., feed on this plant and sometimes may be found on the shrubs in the Park. This butterfly is a southern species, rarely found in Canada. Among its other host plants are the orange tree and prickly ash which are also members of the Rue family.

Poison Ivy. Three-leaved Ivy.

Rhus radicans L. Anacardiaceae (Cashew Family)

Flowers: small, greenish-white, in axillary clusters in May or June, later than leaves. Insect pollinated. Leaves: alternate, leaflets three, each on a short stem, the middle leaflet with longest one, variable in form, usually ovate, sharp-pointed, margin smooth or toothed. shiny, dark green. <u>Fruit</u>: waxy, white, smooth berries in clusters. <u>Ripe</u> in fall but may remain on plant through winter and even into spring. <u>Bark</u>: smooth, gray, brownish, sometimes reddish.

It is found throughout southern Canada and the United States except on the Pacific Coast. It prefers dry sandy areas but will grow almost anywhere. Very abundant in the Park.

The leaves turn orange or scarlet in autumn.

Poison ivy is typically a low growing, woody shrub, with numerous stems arising from underground rootstocks. It is, however, variable in form and may grow into a stout, climbing vine which may ascend to the top of high trees and other supports. It attaches itself by aerial roots.

The sap causes a distressing skin eruption in most people coming in contact with it.

#### Prickly Gooseberry.

## <u>Ribes</u> <u>cynosbati</u> L. <u>Saxifragaceae</u> (Saxifrage Family)

Flowers: greenish-yellow in clusters of one to three, opening with leaves in late April or early May. Insect pollinated. Leaves: alternate, palmately three-lobed, pubescent, almost velvety beneath, margin with coarse somewhat bluntish teeth. Fruit: a berry, purplish-brown, with long, stiff prickles. Edible. Stems: with spines at nodes.

Eastern North America, New Brunswick to Alberta and southward to West Virginia, Missouri and New Mexico. It grows on a wide variety of soils in light woods and thickets and sometimes even in pasture lands. Frequent in the Park.

The leaves usually appear earlier than those of any other shrub. It blooms before the wild black currant with which it might be confused.

## Silky Dogwood. Pale dogwood.

Cornus oblique Raf. Cornacea (Dogwood Family)

Flowers: creamy-white in open clusters in late May or June. Insect pollinated. Leaves: opposite, with tapering, narrow base and gradually taper-tipped to apex, dark green, smooth above, whitish below with inconspicuous pubescence. Leaf stems long and thin, often allowing leaves to arch or droop. Fruit: blue when ripe in August or later. Bark: brownishgray, bitter, pith brownish.

Eastern North America, New Brunswick to North Dakota southward to New England, Kentucky and Oklahoma. Swamps and damp thickets. Common in the Park in suitable situations.

# Snowberry.

Symphoricarpos albus L. Caprifoliaceae (Honey - suckle Family)

Flowers: clusters on short stems, in axils of upper leaves in spring, bell-shaped, white, pinkish on outside. Insect pollinated. Leaves: opposite, rounded, thin, soft, on short stems, margins smooth or wavy. Fruit: round, white, spongy berry with two seeds when ripe, a dark spot on its end. Berries often remain on twigs into winter. Bark: shreddy. The brown pith has a hollow centre.

Quebec to British Columbia and Alaska, southward to Virginia in east, westward to Colorado.

It prefers light soils such as sands and gravels. Fairly common in the Park, especially on west beach and in open woods where it often acts as a sand-binder. Spicebush Wild Allspice; Feverbush; Benjaminbush.

# Lindera Benzoin (L) Blume. Lauraceae (Laurel Family)

Flowers: honey-yellow, fragrant, in almost stemless clusters in April before the leaves. Male and female flowers usually on separate plants. Wind pollinated. Leaves: alternate on grooved stems; blade large, tapering at each end, pinnately veined, thin, soft, smooth, with entire margins, marked by tiny resinous dots. Fruit: berry-like, somewhat elongated, red, smooth and glossy, maturing in July and later. Bark: dark brown, smooth.

Eastern North America, southwestern Maine to Iowa and southward. In Canada southern Ontario, south of a line drawn from Toronto to Sarnia.

Found only in damp or wet woods. Common in the Park.

The foliage and bark are aromatic.

Staghorn Sumac. Velvet Sumac.

Rhus typhina L. Anacardiaceae (Cashew Family)

Flowers: greenish-white in dense terminal clusters in late spring. Though each flower is sometimes complete, male and female flowers are usually in separate clusters, the male cluster being considerably the larger. Insect pollinated. Leaves: alternate, compound with 11-31 leaflets. Leaflets with toothed margins, paler beneath. Fruit: in dense, club-like clusters, covered with velvety red hairs. Bark: dark brown, branches and stems of leaves covered with velvety hairs, wood orange coloured.

Eastern North America, Gaspe Peninsula to Minnesota and southward. Dry, sandy or gravelly soil in open habitat. Very frequent in the Park.

A pioneer plant and one of the first shrubs to grow in disturbed, open areas. It sometimes grows to tree size.

The leaves turn a dull red or a brilliant crimson in the fall.

Strawberry Bush. Running Strawberry Bush.

Euonymus obovatus Nutt. Celastraceae (Stafftree Family)

Flowers: greenish-yellow, small, solitary in axils of leaves, in early May. Insect pollinated. Leaves: opposite, on thin stems, oval with blunt end, thin, dull, margins with small teeth. Fruit: enclosed in three-lobed. spiny capsule which splits when ripe, exposing orangecoated seeds. Bark: smooth, greenish, young branches four-angled.

Eastern North America. New York to Illinois. south to Tennessee and Missouri.

It will grow in either dry or wet woods and thickets. Common in damp woods in the Park.

The plant is low and trailing, hardly ever more than one foot high. The branches root freely, giving rise to leafy twigs from such rooted areas. The fruits and capsules are highly coloured like those of the climbing bittersweet, to which it is related.

Wild Black Currant.

Ribes americanum Mill. Saxifragaceae (Saxifrage Family)

Flowers: many-flowered, drooping clusters, yellowish, downy, tubular and fragrant, appearing with the leaves in May. Insect pollinated.

Leaves: alternate, three to five lobed, sometimes the lobes are deeply cut, margin with double-pointed teeth, upper surface and to some extent lower surface with yellow resinous dots, both surfaces somewhat hairy. Fruit: black, smooth, edible berry crowned by shrivelled calyx. Stem: without spines at nodes.

Eastern North America, New Brunswick to Alberta and southward.

Open woods and thickets on various soils but prefers them moist. Common in the Park. It blooms later than prickly gooseberry.

Vines

Carrion Flower. Jacob's-ladder.

Smilax herbacea L. Liliaceae (Lily Family)

Flowers: small, greenish-yellow, in rounded clusters from axils of leaves in May, male and female flowers separate. Flowers carrion-scented. Insect pollinated. Leaves: alternate, netveined but with a few parallel veins, pale and whitened, often downy. Fruit: a rounded cluster of berrries, greenish at first, dark blue with bloom when ripe. Stems: annual, smooth, not prickly, angled. Plant climbs by tendrils which arise from axils of middle and upper leaves.

Eastern North America, New Brunswick to Manitoba and southward.

Sandy or rich soil in open woods and thickets.

Climbing Bittersweet. Shrubby Bittersweet.

Celastrus scandens L. Celastraceae (Staff-tree Family)

Flowers: small, greenish, in clusters at ends of twigs in May or June. Leaves: alternate, pointed, finely toothed, smooth

79402-3

above and below, yellow-green in colour. Fruit: clusters of berry-like, orange-coloured capsules which split open exposing the red or scarlet pulp which surrounds the seeds. Fruit remains on twigs sometimes into winter. Bark: smooth, gray or brown, new branches green and shiny at first.

Eastern North America, Quebec to Manitoba and southward. Common in southern Ontario and in the Park.

It grows in all types of soils in either dry or moist situations. It is found in open woods, thickets, roadsides and many other situations. However, it grows best in light shade.

It climbs by twining. The end of the stem swings in a circular motion until a support is reached, then it twines or spirals upward around the support. It may injure trees and other plants by constriction, cutting off the flow of sap.

The showy, brilliantly coloured fruit clusters are often gathered and dried for winter decoration.

Common Catbrier. Horsebrier; Greenbrier.

Smilax rotundifolia L. Liliaceae (Lily Family)

Flowers: greenish-yellow to bronze in colour, in many flowered globular clusters from axils of leaves, in May or later. Male and female flowers separated. Insect pollinated. Leaves: alternate, thickish, green on both sides, lustrous, net-veined but with a few parallel veins. Fruit: a round berry, blue-black when ripe and generally with a bloom. Stems: perennial, woody, greenish, angled, bearing flattened prickles. Tendrils numerous.

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Eastern North America, Nova Scotia to Illinois and southward.

In either moist or dry woods and thickets. Not common in the Park.

#### Fox Grape.

#### Vitis Labrusca L.

Vitaceae (Vine Family)

Flowers: minute, greenish, fragrant, in clusters, a cluster or a tendril usually opposite each leaf on flowering stems, blooms in late May or June. Insect pollinated. Leaves: heart-shaped at base, blade as broad or broader than long, generally with two lateral lobes, margin irregularly toothed, upper surface densely hairy at first, becoming smooth, green and wrinkled, lower surface with whitish to rusty velvety pubescence even when mature. Fruit: in clusters made up of 20 or fewer purple-black, sweetish grapes with little or no bloom, mature in August or later. <u>Bark</u>: after first year shreddy and loosening from stems and branches, pith brown.

Eastern North America, Maine to southern Michigan, southward to Georgia and Kentucky.

Wet or dry open woods and clearings.

This species may climb the highest trees but more usually it trails rather than climbs.

It is the parent of some of the cultivated grapes, such as the Concord variety.

The tendrils by which grapes climb are generally considered specialized stems, each tendril is usually opposite a leaf but with no leaf below it. Tendrils contract into springlike spirals, either before or after they find a support. If the spiral is formed after the

79402-31/2

support is reached. it is of some use to the plant in keeping the stem close to the support and acting as a coiled spring, easing the stress when plant is forcibly moved by wind or other agency.

Moonseed. Yellow Parilla; Yellow Sarsaparilla.

Menispermum canadense L. Menispermacea

(Moonseed Family)

Flowers: creamy-white, small, in axillary clusters, sexes in separate flowers, blooms in June and July. Insect pollinated. Leaves: alternate, long-stemed, stem inserted near edge at base; blades large, three to seven angled or lobed, often purplish above, pale and downy below. Fruit: a cluster of berries. black, with bloom, one-seeded, the seed flat and crescent-shaped (hence name moonseed). Bark: dark green or brownish, downy, especially at joints, stems round and slender. Although classed as a woody vine, the plant at times may be herbaceous.

Eastern North America, southern Quebec to southern Manitoba, southward to Georgia and Arkansas.

It is found in open woods and in moist places such as stream banks, sometimes common in hedge rows. Common in the Park.

This is usually not a conspicuous plant as it climbs over low vegetation or fences.

The plant is poisonous. The fruits look like grapes and people have died from eating them.

Poison Ivy

See page 22 under Shrubs.

Riverbank Grape. Frost Grape.

Vitis riparia Michx. Vitaceae (Vine Family)

Flowers: minute, greenish, fragrant, in clusters intermittently along flowering stems. none opposite each third leaf, blooms in May or later. Insect pollinated. Leaves: alternate. heart-shaped at base, two or more lobed. margins coarsely and sharply toothed and with a fringe of hairs, apex long, sharp, upper and lower surface green. with few hairs on either side. Fruit: in clusters, crowded, black with dense bloom, at first acid but sweetish when ripe. Bark: shreddy and loosening from stems after first year, pith brown.

Eastern North America, Quebec to Manitoba, southward to New Brunswick. Texas and New Mexico.

Found along riverbanks and in thickets, open woods and open sandy areas. Fairly common in the Park.

It may at times be a stout, high-climbing vine but on poor soil, such as a sand dune, it becomes a zigzagged dwarf.

There is one variety which has petioles and lower surface of leaves densely covered with hairs. It is found on sand in the Great Lakes area but has not yet been recognized in the Park.

Virginia Creeper. Woodbine; Five-leaved Ivy.

Parthenocissus quinquefolia (L.) Planch. Vitaceae (Vine Family)

Flowers: small, greenish, in irregular clusters on ends of branches of flowering stems, blooms in June, July or later. Insect pollinated. Leaves: alternate, compound with three to seven but usually five distinct leaflets. Each leaflet with a stem, blades pointed, margin coarsely toothed, smooth and practically without hairs. Fruit: several round, somewhat flattened berries in a cluster, greenish at first, later blue-black with bloom. ripening in August or much later. Bark: smooth with in the Park is the best in Canada.

light coloured areas, large specimens furrowed. Pith white. Some or all of the branched tendrils with adhesive discs on their ends.

Eastern North America, southern Maine to Minnesota, southward to Florida, Texas and Mexico.

Fence rows, open woods and sometimes fields. It prefers light soils. Common in the Park.

There are a large number of varieties, some of them having escaped from cultivation.

The leaves, leaf stems and fruiting branches turn red in the fall. It is sometimes brilliantly coloured.

The plant is sometimes a high climbing vine ascending tall trees or other supports.

Wild Potato Vine. Old-Man-of-the-Earth; Indian Potato.

Ipomoea pandurata (L.) G.T.W. Mey. Convolvulaceae (Morning-glory Family)

Flowers: large, showy, like a morningglory, white with purple in throat, tube sometimes tinged with purple. Blooms in late July and August. Insect pollinated. Leaves: alternate, large, heart-shaped, with long stems, margin smooth, without teeth. Fruit: a straw-coloured capsule with from four to six hairy seeds. Bark: smooth, often purplish, stems frequently forking.

Eastern North America, Connecticut to Illinois, southward to Missouri and Kansas.

The plant prefers dry soil in open or partly shaded fields. Very common in some of the open areas in the Park and along farm hedge-rows.

It is very rare in Ontario and the stand in the Park is the best in Canada. The plant twines and trails rather than climbing to any height. There are no tendrils and the stems themselves find supports to spiral around.

The plant is a perennial with a vertical storage root like a very large, branched sweet potato. The stems die down each year. The root is edible and was formerly used by the Indians as food.

## Mosses

No Common Name.

## Amblystegium varium (Hedw.) Lindb. Hypnaceae

(Hypnum Family)

Capsule: large, curved, contracted under mouth when dry, cap blunt, stalk reddish at base, pale yellow or dark throughout. Fruiting in spring. Leaves: variable in size and shape, small, narrowed to sharp-point, margin entire or toothed, straight or slightly curved, base of leaves sometimes growing down sides of stem. Leaves crowded on stems. Growth habit: stem creeping, irregularly branched, forming variable sized mats, bright green to dark or even yellowish, male and female on separate plants. Habitat: moist, shaded places, sometimes even in water.

A cosmopolitan species. Common in the Park in damp woods.

It has been estimated that the moss carpet in the forest holds four times as much water as the dead leaf carpet. This moss and many others are found on forest floors. They are important' water conservers.

No Common Name.

Brachythecium acutum (Mitt.) Sullv. Hypnaceae (Hypnum Family)

<u>Capsule</u>: short, thick, nodding, brown to chestnut in colour, not contracted below mouth when dry, stem often rough. <u>Leaves</u>: densely and equally arranged around stem, sharply-pointed, margins almost in straight lines, toothed or entire, usually with lengthwise folds. <u>Growth habit</u>: stems creeping, freely branching to form glossy yellow or greenish loose mats or tufts. Male and female on different plants. <u>Habitat</u>: usually swampy, wet woods.

A cosmopolitan species occurring in many parts of the world. Common in wet woods in the Park.

Purple Horn-Cap Moss. Purple Horn-toothed Moss.

<u>Ceratodon</u> <u>purpureus</u> (Hedw.) Brid. <u>Ditrichaceae</u> (Ditrichum Family)

<u>Capsule</u>: inclined to horizontal position when mature, conical, short-beaked, furrowed, teeth purple, stems and capsules purplish-red. Fruiting in early spring. <u>Leaves</u>: lance-shaped, keeled, vein extending to or beyond apex, margin wavy and reflexed. Growth habit: in low, close, velvety mats, perennial, male and female on separate plants. <u>Habitat</u>: on soils of low moisture content, <u>especially</u> in open, sandy areas, sometimes found on moving sands where mats act as soil collectors and stabilizers.

A cosmopolitan species found in many parts of the world. Common in the Park.

Woodsy Mnium Moss. Pointed Mnium Moss.

<u>Mnium cuspidatum</u> (L) Leyss. <u>Mniaceae</u> (Mnium Family)

<u>Capsule</u>: oval, pendulous, cap conical, blunt, outer teeth yellow, inner ones orange, stem and capsule greenish or pale. <u>Leaves</u>: of various forms but all sharp-pointed, finely toothed on upper two-thirds only, terminal leaves on male plant in a rosette. Growth habit: stems branching forming broad mats, green or yellowish-green in general colour, perennial, male and female plants in same clusters. <u>Habitat</u>: usually in moist, shaded locations such as moist woods.

Found in Europe and North America, throughout southern Canada and the United States. Common in the Park.

#### Horsetails

Common Horsetail. Field Horsetail; Meadow Horsetail.

# Equisetum arvense L. Equisetaceae (Horsetail Family)

Method of fruiting: reproduction by spores produced in yellow coloured, longstemmed, blunt-tipped cone on end of fertile stem. Leaves: all horsetails have the leaves reduced to small scale-like structures surrounding each joint and lying flat against the stem. thus forming a sheath around it. Stems: conspicuously jointed, annual and of two kinds; the fertile stems are tan-coloured, usually unbranched and bear cones. They appear early in spring. After spores are liberated the stem dies and disappears; sterile stem green with many whorled branches, appearing late in season after fertile stems have mostly disappeared. Glass-like deposits limited to small areas. Roots: perennial, from underground, branching and creeping, tuber-bearing stems. The stem and not the true root make up the largest part of the underground structure.

Widely distributed throughout the world. In North America, Greenland to Alaska and southward. Common in the Park.

Waste places, fields, railroad embankments and light woods. It prefers damp, sandy soil.

The brownish coloured, fertile stems are

one of the first plants to appear in the spring.

Variable in many characters, such as size, colour and form.

Horsetails were much commoner in past geological times and our species are but remnants of a vast assemblage. They were part of the forest which died and decayed to form our present coal beds. They are related to the ferns and club-mosses.

Scouring Rush. Rough Horsetail.

Equisetum Hyemale L. Equisetaceae (Horsetail Family)

Method of fruiting: reproduction by spores borne in a dark coloured, sharp-pointed cone on end of fertile stem. Leaves: greatly reduced to very small scale-like structures surrounding stem at each joint. Stem: the cone-bearing and sterile stems resemble one another, both are conspicuously jointed, perennial and evergreen. They rarely branch, their colour is dark green with lighter bands of gray and the central cavity is two-thirds the diameter of the stem. Roots: from a perennial, branching, underground rootstock.

Found in many parts of the world. In North America, Newfoundland to Alaska and southward. Common in the Park.

It is found generally in low, moist situations.

Horsetails have varying amounts of a glasslike deposit of silicon dioxide on their stems making them stiff and rigid. The scouring rush has the entire surface covered except for small areas through which the plant breathes. Because of this deposit the stems of the plant were formerly used for scouring pans and kettles and thus it was called scouring rush. The stems have also been used as a fabric in hand weaving for making table mats, lamp shades and other articles.

## Ferns

Bracken. Brake; Pasture Brake.

#### Pteridium aquilinum (L.) Kuhn. Polypodiaceae (Fern Family)

Method of fruiting: spores produced in rolled-up margins of some of the leaflets, spore cases at first silvery becoming brownish. July or later. Spores are rarely developed. the plant multiplying mainly by shoots from the rootstock. Leaves: (fronds) annual, dark green, large and robust, triangular, thrice-cut the first division dividing the frond into three nearly equal parts, stalk usually long, stiff, brownish or black, the leaf generally held horizontally to ground surface. Rootstock: perennial, extensive, creeping, forking, dark brown and hairy, giving rise to fronds at intervals. Growth habit: stems and fronds may be from three to six feet or more in height and so numerous that they often exclude other vegetation. They are produced all season. Fronds are killed by first frost. The plant is variable in form and structure and several varieties have been given names.

Cosmopolitan. In North America, Newfoundland to Alaska and southward.

Usually in dry open woods and clearings on many soil types. It requires full sun to halfshade. Often found in areas disturbed by fire or other means.

The fiddleheads are edible. These appear in early summer.

The specific name, which means eagle, has been derived from the wing-shaped fronds or, according to other authorities, from the arrangement of the dark woody bundles in the stem. When seen after cutting in a transverse direction they are supposed to resemble the spread of an eagle.

Crested Wood Fern. Crested Shield Fern.

Dryopteris cristata (L.) Gray. Polypodiaceae (Fern Family)

Method of fruiting: spore cases attached to small veins placed midway between margin and midvein on upper leaflets of fertile leaves. Leaves: (fronds) lance-shaped, widest above middle then tapering to tip, twice-cut, leaflets widely spaced, usually held on a horizontal plane, stems greenish and somewhat scaly. Two kinds of leaves, both having the general characters given above but easily identified in the field. The fertile leaves bear spores and are taller, more erect, narrower and are not evergreen. The sterile leaves do not bear spores and are shorter, half erect, somewhat broader and are evergreen. Rootstock: perennial. stout. dark brown, bearing many scales and bases of old stems. Growth habit: a stout, scaly clump from which leaves of irregular heights arise, leaflets relatively few, giving a ladderlike effect, general colour green or blue-green.

Europe and North America. Newfoundland to Alberta and southward.

In wet swampy woods in sun or shade. Common in the Park.

Rattlesnake Fern. Grape Fern; Succulent Rattlesnake Fern.

Botrychium virginianum (L.) Sw. Ophioglossaceae (Adder's-tongue Family)

Method of fruiting: spores in globular cases arranged in double rows on fine branches at end of long stem. Spore case and spores bright yellow when ripe toward end of May or later. Leaves: (fronds) usually a single, triangular, bright green, lacy, thrice-cut, sessile leaf from the top of the main stem. The fertile shoot also arise from this point. Stem: smooth, round, somewhat fleshy, often reddish at base. Rootstock: perennial, short, fleshy and somewhat tuberous with numerous tangled roots. Bud for next season exposed by sheath at base of stem. Growth habit: usually one stem from each rootstock. The plant does not form fiddleheads although the stalk is curved when coming through ground.

Europe, Asia, North America. Prince Edward Island, South Dakota to British Columbia and southward.

In shaded areas of deciduous woods and thickets. Common in the Park. It soon disappears in bright sun.

The group to which this fern belongs are called grape ferns because the clustered globular spore cases somewhat resemble a bunch of grapes.

Sensitive Fern. Bead Fern.

Onoclea sensibilis L. Polypodiaceae (Fern Family)

Method of fruiting: spores produced in bead-like pods on numerous branches at end of long, naked stem. This is the fertile leaf. Pods at first greenish, dark brown when ripe. The fertile leaf with its bead-like pods often remaining intact over winter. Leaves: (fronds) spore bearing and sterile leaves strikingly unlike each other. Fertile leaves described above under fruiting. Sterile leaf broad, triangular, leathery, light green, once-cut, leaflets opposite one another and thus in pairs, margins wavy, the veins forming a fine network within leaflets. Stems long and usually naked, yellowish. Rootstock: perennial, stout, creeping and branching, brown. Growth habit: relatively few leaves, the greenish, sterile ones usually long-stalked and much larger than the fertile ones.

Asia and North America. Labrador to Manitoba and southward.

Usually in low, moist, open grounds in sun or shade. Seen often along roadsides. Common in the Park.

No one knows why it is called sensitive fern, unless it is because it is so sensitive to frost. The first frost usually kills the leaves.

Spinulose Wood Fern. Florist's Fern; Fancy Fern; Spinulose Shield Fern.

Dryopteris spinulosa (O.F. Muell.) Watt. Polypodiaceae (Fern Family)

Method of fruiting: spore bearing fruitdots in scattered rows on underside of leaflets, spore cases kidney-shaped or rounded, maturing quickly and disappearing. Leaves: (fronds) broadly lance-shaped, slightly tapering to base, evergreen or half evergreen, thrice-cut, lacy, smallest leaflets distinctly toothed. Stem: brownish, coarse, very chaffy shorter than blade. Rootstock: perennial, thick, covered with old leaf stems and scales. Growth habit: a crown or circle of several leaves from the more or less upright rootstock. A clump-forming fern rather than an extensively spreading one.

Cosmopolitan. In North America throughout the forested areas.

Dry to wet woods and thickets. Common in the Park.

This fern is common in nearly every woods in southern Ontario. It has so many varieties and forms that it is difficult to give characters that will identify it under all circumstances.

#### Grasses and Sedges

Downy Brome Grass. Downy Chess; Cheatgrass.

Bromus tectorum L. Gramineae (Grass Family)

Flowers: perfect, many, in a large, open, drooping, somewhat one-sided, branched, terminal cluster. Greenish or purplish, flowering in late May to July. Wind pollinated. Leaves: alternately from nodes of stems and therefore two-ranked, like most grasses. Sheaths closed and hairy, blades narrow, flat and hairy on both sides, tapering to sharp point. Stems: branching at base, hollow. Fruit: a furrowed seed armed with a single, straight, long, stiff beard or awn. The beard attaches itself to animals and the seed is distributed in this manner. Habit: annual, somewhat tufted, rapidly growing but short-lived, general colour green when young, yellow or brownish when mature. Throughout life it may show a more or less purplish cast.

Europe, introduced into North America where it was first recorded about 1894. It has spread widely from Quebec to British Columbia and southwards.

It prefers open, sandy areas but may be found on heavier soils. It is a very progressive plant and one of the first grasses found after an area has been disturbed by fire or other agency. Under such conditions it acts as a soil cover and sand-binder.

The plant is new to the flora of the Park, where it is now common and covers many dry, open areas. It was not recorded by Dodge in his surveys during 1910 and 1911 (1914) and it was not listed by Core in 1948 as being present on Pelee or adjacent islands.

It creates a fire hazard, studies on western grasslands showing that it is about five hundred times more likely to burn than the native grasses and other plants that it replaced.

The beards are prickly and a nuisance to both man and animals.

Junegrass. Kentucky Bluegrass; Speargrass.

Poa pratensis L. Gramineae (Grass Family)

Flowers: many, in a small branched. terminal cluster, some of the branches distinctly compressed. Early May or later. Male and female in same flower, greenish or sometimes the whole cluster has a purplish tinge. Wind pollinated. Leaves: stem leaves alternate, sheath somewhat keeled, blade narrow, parallel, soft, flat or sometimes folded, with boatshaped tip. Basal leaves in tufts. longer than those of stem but otherwise similar. Both kinds dark green. Stem: erect, round or only slightly compressed, not two-edged, hollow. Fruit: seed small, without awns and free. Habit: a low tufted perennial with a smooth, creeping rootstock which produces many stolons. A tough. vigorous, sod-forming grass.

Europe and eastern North America, introduced into other sections.

This is the standard pasture grass cultivated in humid eastern North America. Common everywhere.

## Loose-flowered Sedge.

Carex blanda Dew. Cyperaceae (Sedge Family)

Flowers: in leafy spikes on fertile stems, male and female on same stem but in different groups, female group above but close to the lower whitish male flowers. Blooms in early May. Wind pollinated. Leaves: three ranked around stem or basal in tufts; sheath closed, blades green or yellowish-green, flat and shortpointed. Stem: short, three-angled, solid. Fruit: a cluster of light-coloured, broadly rounded seeds. Habit: annual, with fibrous roots; low and tufted with many basal leaves and a few fertile stems bearing the spikes of flowers or seeds.

North America, southern Quebec to North Dakota and southward.

In moist areas of open woods and thickets, usually on lighter soils. Common in the Park.

Herbs

## Bastard Toadflax.

## <u>Comandra</u> <u>Richardsiana</u> Fern. <u>Santalaceae</u> (Sandal-wood Family)

Flowers: small, whitish or greenish, in small somewhat flat clusters at ends of stems, blooms from May to August. Leaves: alternate, lance-shaped or rounded, sessile, yellowishgreen, not paler beneath, many on a stem. Stems: smooth, upright, sometimes branched. Fruit: globular seeds. Root: elongate, freely branching, perennial. Habit: usually a low tufted plant growing in patches.

Eastern North America, Newfoundland to Manitoba and southward.

Dry sandy or gravelly soils containing lime. Common in the Park.

The roots are sometimes parasitic on those of other plants.

Bitter Cress. Pennsylvania Bitter Cress.

## Cardamine pensylvanica Muhl. Cruciferae (Mustard or Cress Family)

Flowers: very small, white, in more or less terminal clusters. Petals and sepals four, flowers sometimes tinged with purple. May or later. Leaves: alternate, those on stems deeply cut into opposite segments, terminal leaflet usually the largest one, blades blunt. Stem: simple or much branched from a rosette of leaves, the rosette not always evident; stiff hairs at base. Fruit: a slender pod with seeds in a single row. Root: slender, biennial or perennial. Habit: usually a single, simple or branched stem from a rootstock. In water the plant may recline or trail.

North America, Labrador to British Columbia and southward. Common in the Park.

In moist shaded places. It sometimes grows in ponds and other water.

A substitute for watercress.

Bloodroot.

# Sanguinaria canadensis L. Papaveraceae (Poppy Family)

Flowers: showy, large, white, on end of a leafless stalk in April and May. Leaves: alternate from underground stem; in mature plants a broad, lobed, gray-green leaf appears with each flowering stem, at first leaf is tightly rolled around flower, later leaves grow rapidly and overtop the fruit. Stem: perennial and underground, creeping and branching, thick, with brilliant orange-red juice. Both the flower and leaf stalks arise directly from underground stem; both may be pinkish or reddish in colour. Fruit: a narrow capsule pointed at both ends and containing several crested seeds. Roots: not extensive and secondary to the underground stem. Habit: one flower and one leaf at one place but underground stem is so extensive that parts of plant above ground usually appear as colonies.

North America, Quebec to Manitoba and southward.

Usually in deciduous woods and especially associated with hard maple and beech climax forest. Formerly common in the Park. At present a few scattered patches left.

One of the first wild flowers in bloom in the spring.

Blue Cohosh. Papooseroot.

#### Caulophyllum thalictroides (L.) Michx. Berberidaceae (Barberry Family)

Flowers: several, in a terminal cluster on end of a naked stem, yellowish-green to bronze, flowering before leaf completely developed. April and May. Leaves: a single, compound leaf to each flowering stalk. The leaf is divided into threes, three times (sometimes another much smaller leaf is found just below the flowers). Leaflets thin and lobed, quite large and oblong when mature. Fruit: each flower produces two round, blue, berry-like fruits which are generally covered by a bloom. Roots: perennial, creeping and matted. Habit: a single naked stem arises in spring and bears near its end the flower cluster and a single compound leaf. The whole plant is smooth and covered with a bloom. especially when young.

Eastern North America and east Asia. New Brunswick to southern Manitoba and southward.

In deciduous woods. Common in the Park in denser woods.

Blue Flag. Larger Blue Iris; Poison Flag. Iris versicolor L. Iridaceae (Iris Family)

Flowers: large, showy, bluish-violet variegated with yellow, green and white, on end of a round, smooth, sometimes branched, flowering stem which over-tops the leaves. Mid-May and later. Leaves: flat, sword-like, pale green, sometimes purplish at base. Fruit: a large, bluntly three-angled capsule containing many dark brown seeds, sometimes persists over winter. Roots: tuber-like rootstocks usually near ground surface, perennial.

Eastern North America, Labrador to Manitoba and southwards, at least as far as West Virginia.

Marshes, meadows and wet open woods. Common in the Park in suitable locations.

It has been noticed that plants in dense woods generally fail to flower.

## Blue Vervain. Wild Hyssop.

Verbena	hastata	L.	Verbenaceae	(Vervain
				Family)

Flowers: very small, tubular, violetblue, in a terminal narrow spike; flowering stems bearing spikes, usually branched. The plant starts blooming in July and continues until frost. Spikes may be found with seeds at bottom, flowers in middle and buds at the top. Leaves: opposite, on short stems, blades lance-shaped with long, sharp points, margins sharply toothed, pubescent; rarely some leaves three-lobed at base and resembling the outline of an arrow-head (hastate) hence specific name of plant. Stems: erect, stiff, rough, hairy, four-sided, usually branched especially near top. Fruit: dry capsules separating into four nutlets. Roots: perennial.

North America, Nova Scotia to British Columbia and southward.

Moist or dry fields and thickets. Common in the Park in more open areas and edges of marsh.

## Bouncing-Bet. Soapwort.

# Saponaria officinalis L. Caryophyllaceae (Pink Family)

Flowers: in fairly dense clusters from axils of leaves; individual flowers, large, showy, pink or rose coloured, with five parts to both calyx and corolla, petals notched. July and later. Leaves: opposite, rounded or elongate, tapering at base, smooth. Stems: stout, smooth, thick jointed. Fruit: a small capsule which is four-toothed at top and bears many seeds within. Habit: a stout perennial, usually growing in patches. The bright green leaves appear in May or June but the flowering stalks do not appear until July.

This plant is a native of Europe which has escaped from gardens and become naturalized in eastern North America. It is a weed in many fields and waste places. Very common in the Park. On the sandy beaches it acts as a sand-binder.

The flowers are sometimes double. There is also a variety with white flowers which is more fragrant than the pink variety. The fragrance is usually noticeable only at night. The sap is mucilaginous and forms a lather when mixed with water hence the name soapwort.

Canada Mayflower. False or Wild Lily-of-the-Valley; Two-leaved Solomon'sseal.

Maianthemum canadense Desf. Liliaceae (Lily Family)

Flowers: very small, white, fragrant, each with four segments (two sepals, two petals) and conspicuous stamens, a cluster of several borne at top of flowering stem. May. Leaves: usually a single large leaf lying on ground and two to three leaves on flowering stem, all somewhat heart-shaped at base, smooth, glossy and pointed. Stem: slender, angled, often zigzag. Fruit: a cluster of pale red berries which are speckled with greenish-brown. Habit: the slender creeping and branching underground stem is perennial. The flowering stems appear in patches. Stemless plants bearing one leaf directly from the rootstock are common in the colonies.

A northern plant occurring from Labrador to Manitoba and southward to Pennsylvania, or on mountains to Tennessee.

In woods on a variety of soils. Common in the Park in drier forest areas.

# Carolina Geranium.

<u>Geranium</u> <u>carolinianum</u> L. <u>Geraniaceae</u> (Geranium Family)

Flowers: four to twelve flowers in a terminal cluster, each one-third to one-half inch across, pale magenta or whitish, petals five. May and later. Leaves: palmately three to five cleft but not divided, with grayish glandular hairs. Fruit: a beaked capsule, beak hairy and glandular. Habit: annual or sometimes a biennial; stems sometimes with many branches.

Eastern North America, Massachusetts to Illinois, southward to Florida and south California.

Dry woods, fields and waste places. Not common in the Park.

A geranium with much smaller flowers than the wild geranium. Separated from herb Robert by the divided leaves of that species. Clammyweed.

# Polanisia graveolens Raf. Capparidaceae (Caper Family)

Flowers: clusters of small, yellowishwhite, stalked flowers from axils of leaves, petals notched at apex, calyx and stalks of stamens purplish, July and later. Leaves: alternate, each with a stem and three leaflets. Fruit: a long, sessile, turgid, many-seeded, somewhat compressed capsule. Habit: annual, a branching, sticky, pubescent herb with a strong smelling, disagreeable odour.

Eastern North America, Quebec to Manitoba and southward to Oklahoma.

Sandy and gravelly shores, especially around the Great Lakes. Common in the Park along beaches and sometimes in open fields.

Cleavers. Bedstraw; Spring Cleavers.

Galium Aparine L. Rubiaceae (Madder Family)

Flowers: tiny and white, in small branched clusters from axils of leaves, each of the smallest flowering stems bears one to three flowers. May and later. Leaves: in whorls of six to eight around stem, lance-shaped, tapering at base, bristle tipped and with coarse hairs along margins. Stem: weak, four-angled, barbed on the angles. Fruit: globular, twinned, bristly. Habit: annual, stem weak and generally reclining, the plant is so covered with small but stout spines and prickles that it feels harsh and will cling to clothing.

Eurasia and North America. Newfoundland to Alaska, southward to Florida and Texas.

In woods and thickets. Very common in the Park.

Common Chickweed.

50

Common on one officiation

Stellaria media (L.) Cyrillo. Caryophyllaceae (Pink Family)

Flowers: small, white, singly or in two's or three's from axils of leaves. Petals deeply cleft, sometimes wanting; sepals longer than petals, hairy and white margined. Early May but may be in bloom during any month. Leaves: opposite, oval and pointed, lower and middle ones with distinct stem. Fruit: an oval capsule containing many rough-surfaced seeds. Habit: annual or sometimes perennial, a soft, smooth plant with many branches, sometimes growing erect but more often matted or trailing. The hairs of the stem are arranged in definite lines.

A cosmopolitan plant found in many parts of the world. In North America a troublesome weed. Very common in the Park.

Common Day Lily. Orange Day Lily.

Hemerocallis fulva L. Liliaceae (Lily Family)

Flowers: a cluster of three to fifteen on end of a leafless stem, trumpet-shaped, large (4 to 5 inches) and tawny-orange in colour. July or later. Leaves: basal, linear and keeled. Fruit: a three-angled capsule bearing within several black rounded seeds. Habit: rootstock perennial, branching, forming dense colonies of persistent plants.

Eurasia, introduced to gardens in North America and from these it has spread and become naturalized.

Roadsides, waste places and especially around old dwellings or where these have been. Common in the Park. The individual flowers are short-lived and do not last much longer than a day, hence the name of the plant. Seeds are rarely developed, the plant spreading by the creeping rootstock. The bright green patches of leaves are conspicuous long before flowering time.

51

Common Milkweed. Silkweed.

# Asclepias syriaca L. Asclepiadaceae (Milkweed Family)

Flowers: in dense clusters in axils of upper leaves, purplish but sometimes greenish or even white, fragrant. July and later. Leaves: opposite, large, broadly elliptical, thick, velvety especially beneath, midrib prominent and sometimes reddish. Fruit: large plump pointed pods filled with flat seeds, each of which bears a silky tuft of long white hairs. Habit: creeping and spreading from a stout, perennial rootstock, stems stout and usually unbranched.

Eastern North America, New Brunswick to Saskatchewan and southward to Georgia and Kansas.

Dry fields and open waste places, especially on lighter soils. Common in the Park.

The new shoots are edible and used like asparagus.

The plant is the larval food of the monarch butterfly and the adult of this species, as well as other butterflies and insects, frequent the blossoms.

The larvae of the milkweed borer live in the stem. The adult is a stout reddish beetle bearing several black spots. They may frequently be seen on milkweed plants during the summer.

## Common Mullein. Flannel-plant. Verbascum thapsus L. Scrophulariaceae (Figwort Family)

Flowers: yellow, many, in a dense cylindrical spike. June and later. Leaves: those on stem alternate, large, felted both sides, sessile. The leaf stem occurs as a ridge down the main stem; basal leaves in a rosette, whitish-green. Fruit: a globular capsule containing many seeds. Habit: biennial, a rosette of leaves formed the first year, the leafy, stout, unbranched, flowering stem growing from the centre of rosette during spring of second year.

Europe, introduced and naturalized in North America.

Usually on dry sandy or gravelly soil in fields and waste places. Common in the Park.

The dead, tall, stout stems persist for at least a year.

Cursed Crowfoot. Celery-leaved Crowfoot; Ditch Crowfoot.

Ranunculus sceleratus L. Ranunculaceae (Buttercup Family)

Flowers: numerous in upper branches, small, pale yellow, petals about equalling the sepals in length. May and later. Leaves: variable in size and shape but all lobed or divided; basal leaves with long stems, fleshy; upper stem leaves sometimes only slightly divided, of normal thickness and with shorter stems. Fruit: in short, cylindrical heads, individual seed-like fruits with short beaks and corky bases. Habit: annual or shortlived perennial, a fleshy, smooth, branching plant from a definite crown, the stems thick and hollow. Eurasia and North America. Newfoundland to Alaska, southward to Florida and California.

In or near pools, marshes, wet meadows. Common in the woodland pools in the Park.

Cut-leaved Toothwort. Pepperroot.

Dentaria laciniata Muhl. Cruciferae (Mustard or Cress Family)

Flowers: in terminal clusters, large, showy, purplish or white, flowering stems hairy, April or May. Leaves: usually three in a whorl below flower clusters, with short stems and blades that are deeply three-cleft and deeply toothed. Fruit: a long flat pod with a long beak. Hablt: perennial, from a fleshy, yellowish-brown, jointed rootstock.

Eastern North America, Quebec to Minnesota, southward to Florida and Kansas.

Woods and partly open clearings. Common in the Park.

One of the early maturing woodland plants. The rootstock has a pleasant pungent taste.

Dog's-tooth Violet: Fawn Lily; Yellow Dog'stoothed Violet; Yellow Adder's-tongue.

Erythronium americanum Ker. Liliaceae (Lily Family)

Flowers: large, six segmented, nodding and usually singly on flowering stem, segments spreading and recurred when mature, yellow, paler yellow within, often spotted near base. Stamens conspicuous, brown to black depending on age. March or April. Leaves: two basal leaves sheathing the stem of the flower. Blades flat, smooth, shining and often blotched with purplish-brown. Young non-flowering plants have only one leaf. Fruit: a rounded capsule containing many seeds. Habit: perennial and stemless, from a deeply buried bulb which develops underground off shoots, the plant therefore usually found in colonies.

Eastern North America, New Brunswick to Minnesota, southward to Georgia and Oklahoma.

Woods and moist grounds. Common in the Park in suitable locations.

One of the earliest and best known of our wildflowers.

Downy Yellow Violet. Hairy Yellow Violet Viola pubescens Ait. Violaceae (Violet Family)

Flowers: from axils of upper leaves, large, bright yellow, purple-veined and with a short spur. Leaves: stem leaves alternate, broadly oval, blunt-tipped, comparatively rough and veiny, margin with 15 to 33 teeth on each half, pale green, lower surface pubescent; basal leaves none or sometimes one; new leaves densely hairy and soft. Fruit: an oval, whitewoolly capsule. Habit: perennial, from a stout rootstock, stems usually only one with few leaves on lower half, covered with soft hairs even when mature.

Eastern North America, Maine to South Dakota, southward to Tennessee and Missouri.

Deciduous woods. Common in the Park.

Often confused with smooth yellow violet.

Duckweed.	Duck's-Meat.	ntvig sin	
Lemna spp.	Lemnaceae	(Duckweed	Family)

Habit: minute green discs floating free on water and when plentiful forming a green scum-like covering over it. These are the smallest and simplest of the flowering plants, consisting of a tiny disc called a frond which is without stem or leaves but sometimes has roots. New individuals arise from the cleft on the edge of the frond. Flowers are usually three in number, arising from the cleft but are rarely produced.

There are several species and two or more of them may be present on the same water. One species is star-shaped. Another common duckweed belongs to the genus Spirodela. It has a rounded frond, with from 6 to 18 roots and is purple coloured on underside.

Fairly cosmopolitan in temperate and tropical regions. Labrador to British Columbia and southward.

In quiet waters, especially pools and ponds. Common in woodland pools in the Park.

Dutchman's-breeches.

# Dicentra Cucullaria (L.) Bernh. Papaveraceae (Poppy Family)

Flowers: two to ten irregular sac-like, nodding, short-stemmed blossoms toward end of arching flowering stem. The two largest petals sac-like and expanded into long divergent spurs thus forming a V-shaped flower (breeches). Corolla white tinged with yellow or pink, tip distinctly darker yellow. Early April or May. Leaves: three-parted, each division dissected into fine segments giving a lacy appearance, smooth, bluish-green, paler beneath. Fruit: an oblong capsule containing several seeds. Habit: flower stems and leaves arise from crowded mass of grain-like tubers and thickened leaf bases, perennial. The flower and leaf stems may be tinged with pink.

North America, Gaspe Peninsula to North Dakota, southward to Georgia and Missouri. Also in Oregon and Washington States.

Woods and thickets. Common in the Park.

One of the first wildflowers to bloom making its best showing in April. In the Park the leaves die and disappear by the end of May.

Early Meadow Rue. Quicksilver-Weed.

Thalictrum dioicum L. Ranunculaceae (Buttercup Family)

Flowers: in terminal, airy, drooping and axillary clusters, male and female on separate plants. Male flowers with long purplish sepals, long pendulous stamens and yellow anthers. Female flowers smaller, sepals green or purple, stigma purple. May. Leaves: alternate, one to three compound leaves below the flowers, leaflets each with a short stalk, blades roundish with wavy margins, thin, delicate and pale green, barely expanded at flowering time. Fruit: small, furrowed, elliptical and short-pointed nutlets which are ripe in late May or June. Habit: perennial, from a stout root-stalk, the stems smooth.

Eastern North America, Maine to North Dakota, southward to Georgia and Alabama.

Moist woods, ravines, roadsides. Common in the Park.

## Enchanter's Nightshade.

## <u>Circaea</u> <u>quadrisulcata</u> (Maxim.) Franch. and Sw. Onagraceae (Evening Primrose Family)

Flowers: small, white, in terminal, flattish, elongate clusters, individual flowers on short stems, each with two notched petals and two sepals. June and later. Leaves: opposite, oval, pointed, on slender stems, margin wavy or toothed, dark green above. Fruit: small, bur-like, with stiff, hooked hairs, three to five (usually four) corrugations on each side. Habit: perennial, from a stout, spreading, sucker-producing rootstock, stems erect and branching.

Eastern North America, Nova Scotia to North Dakota, southward to Georgia and Missouri.

Woods and thickets. Common in the Park. In many areas it is the dominant plant in the woods after sweet cicely has largely disappeared.

Our plant is the variety canadensis (L.) Hara. Canadian enchanter's nightshade.

False Solomon's-seal. False Spikenard.

<u>Smilacina racemosa</u> (L.) Desf. Liliaceae (Lily Family)

Flowers: creamy-white, in dense, manyflowered, terminal clusters, each flower on a very short stem, sepals and petals shorter than the stamens. May and later. Leaves: alternate, sessile or lower ones with short stems, broadly oval, pointed and with prominent veins, green. Fruit: a group of berries, greenish at first, later dark red, speckled with purple, aromatic. <u>Habit</u>: perennial, from a thick rootstock, stem erect, stiff, zigzag, somewhat angled and leafy.

Quebec to British Columbia, southward to Georgia and Arizona.

Woods, thickets and edges of fields. Very common in the Park.

#### Flowering Spurge.

Euphorbia corollata L. Euphorbiaceae (Spurge Family)

Flowers: white, in terminal, many branched widely spaced, open clusters, the flower stems subtended by small, leaf-like appendages. The true flowers are very small, greenish or yellowish and grouped within the five, white, conspicuous petal-like bracts. July and later. Leaves: alternate or scattered along stem, sessile, bright green, smooth and oblong. There is a whorl of several leaves at top of stem below the branching flower stems. Fruit: a three-lobed, round capsule, each lobe containing one smooth, oval, sparingly pitted seed. Habit: perennial, from a deep root, stems one to several, erect, branched above and often spotted.

Eastern North America, New York to Minnesota, southward to Florida and Texas.

Dry, open woods, clearings and fields, especially on sandy soil. Formerly quite common in the Park, now much restricted.

This plant is found in Canada only in extreme southern Ontario. The two best stations for it are the Park and on the sandy soil immediately northwest of Sarnia.

Fringed Loosestrife.

Lysimachia ciliata L. Primulaceae (Primrose Family)

Flowers: large, showy, yellow, nodding, on

long slender stems, singly or in small groups, from axils of leaves, petals five, each with a sharp-pointed outer margin. June and later. Leaves: opposite, oval, pointed, rounded at base and borne on a long stem which is covered with fringes of long hairs; blades pinnately veined, margin hairy. Fruit: a many seeded, rounded capsule usually with a short beak. <u>Habit</u>: perennial, from a slender rootstock, stems one or several, branched and leafy.

Quebec to British Columbia, southward to Florida, Texas and Colorado.

Moist woods, thickets and streambanks.

In July the plant is dominant and conspicuous in the moist woods in the Park.

Herb Robert. Stinking Cranesbill.

# Geranium Robertianum L. Geraniaceae (Geranium Family)

Flowers: in clusters from axils of upper leaves, usually two on each of the smaller flower stems, rose to reddish-purple and sometimes white in colour, often with three whitish lines on petals. May and later. Leaves: divided into three to five distinct leaflets, which are further lobed and toothed, giving the foliage a fern-like appearance. The terminal leaflet is stalked. The leaves are sometimes tinged with red. Fruit: an awn-tipped capsule about one inch long, beak smooth. Habit: small, annual or biennial, with somewhat hairy, reddish coloured stems. The plant has a disagreeable odour, especially when bruised.

Eurasia, North Africa and North America. Newfoundland to Manitoba and southward only to Maryland and Illinois.

In woods and other partly shaded areas.

This is one of the most abundant plants on the forest floor in the Park. The young plants are conspicuous as early as April and come into full bloom early in May. It is one of the plants which gives off a rank or woodsy odour as you walk through it. The smell is more noticeable when plants are moist.

Hoary Tick Trefoil. Hoary Tickseed; Hoary Tickclover.

Desmodium canescens (L.) D.C. Leguminosae (Pulse Family)

Flowers: purple, pink or rarely white, turning greenish at maturity; in elongated, terminal clusters from axils of leaves, clusters sometimes branched and usually hairy. July and later. Leaves: alternate, each on a stem bearing three leaflets which are green, rough and hairy, the terminal leaflet oval, gradually blunt-pointed. round at base. lateral leaflets narrower. One or two small, leaf-like bracts (stipules) at base of leaves, these oval, pointed and almost lobed at base on one side. Fruit: a flat pod of one to six distinct angular divisions which break apart at maturity, surface covered with hairs and minute hooked bristles allowing it to adhere to animals. Habit: perennial, from a very deep, brownish root, stems upright, stout. usually much-branched and hairy.

Massachusetts to Nebraska, southward to Florida and Texas.

Dry sandy woods and fields. Fairly common in the Park, especially in dry open areas.

Jack-in-the-Pulpit. Indian Turnip.

Arisaema triphyllum (L.) Schott. Araceae (Arum Family)

Flowers: yellow, tiny, borne on the base of a long fleshy club which is surrounded by a hooded sheath. The flowers cannot be seen unless the sheath is destroyed, only the top portion of the club is visible within that portion of sheath left open by hood; hood and sheath green, purple or striped. May and later. Leaves: one to three, each with long stem and three leaflets, usually longer than the flowering stem. Fruit: a fleshy head bearing several to many bright red or scarlet oval berries. Habit: perennial, from a thick tuber-like rootstock which has a sharp acid taste.

Eastern North America, New Brunswick to Manitoba, southward to Tennessee and Kansas.

Moist woods, streambanks and thickets. Common in woods in the Park.

There are three species found in eastern North America, these hybridize with one another and thus there are many variations in the plants. Our species should more properly be called Arisaema atrorubens (Ait.) Blume, A. triphyllum now being restricted to eastern coastal portion of the United States.

Jewelweed. Spotted Touch-me-not; Snapweed; Silverleaf.

### <u>Impatiens capensis</u> Meerb. <u>Balsaminaceae</u> (Touch-me-not Family)

Flowers: showy, orange or reddish with crimson spots, somewhat the shape of a cornucopia ending in curved spur, each on a slender, pendant stem. Clusters of two to four flowers from axils of leaves. June and later. Leaves: alternate, on short stems; blades oval, pale green, underside lighter and sometimes with a bloom, margin toothed. Fruit: an oblong capsule containing several oval, ridged seeds. When ripe and the moisture content sufficient, the capsule explodes when touched throwing seeds a considerable distance. Habit: annual, with succulent, watery, smooth, generally branching stems, these sometimes tinged with purple.

Newfoundland to Alaska, southward to Florida and Oklahoma.

Wet swampy woods and roadsides. Very common in the Park.

As the plant is an annual it develops from seeds each spring and therefore blooms rather late in the season. The plants in the Park are generally about two inches high the middle of May. They grow rapidly and become a dominant plant, covering other plants or their remains by late June or July.

Large-flowered Bellwort.

Uvularia grandiflora Sm. Liliaceae (Lily Family)

Flowers: one to few at ends of stems (later they appear to arise from axils), showy, yellow, drooping, bell-like but narrow, with six twisted and elongate segments. May and later. Leaves: alternate, oval and pointed, base clasping and surrounding stem, undersurface usually with whitish pubescence. Usually only one or two leaves below main fork of stem. Fruit: a blunt, three-lobed capsule containing few seeds. Habit: perennial, from a short thick rootstock, stems forking, leafy above and surrounded by a sheath below.

Quebec to North Dakota, southward to Georgia and Oklahoma.

Rich woods and thickets. Common in drier woods in the Park.

# Lopseed.

# Phryma Leptostachys L. Phrymaceae (Lopseed Family)

Flowers: small, opposite along a slender terminal spike, flowers placed at right angles to stem, purplish or pink. July or later. Leaves: opposite, bright green, thin, oval, Iong-pointed, coarsely toothed, lower leaves with stems, upper one sessile. Fruit: oblong, ribbed, with long slender hooked teeth at end, abruptly deflexed or lopped along stem, hence name lopseed. Habit: perennial from a taproot, stems slender, branching, somewhat four-sided, sometimes hairy.

New Brunswick to Manitoba, southward to Florida and Texas. Also found in Asia.

Woods and thickets. Common in the Park.

Spikes may be found with the horizontally placed flowers near end and with nearly mature drooping fruits lower down. The marked change in direction of axis from flower to fruit is well marked and this character alone will identify the plant.

The only plant of the family found in eastern North America.

### Lyre-leaved Rock Cress.

<u>Arabis</u> <u>lyrata</u> L. <u>Cruciferae</u> (Mustard or Cress Family)

Flowers: white, several to many in a terminal cluster which elongates as plant matures, individual flowers upward-pointing when in bloom, sepals four, yellowish; petals four, generally pure white but may be pink or purple tinged. May and later. Leaves: basal leaves in a rosette, blades elongate, lobed to resemble a lyre or the end shaped like a spatula, hairy or smooth; stem leaves scattered, alternate, of various forms, usually linear and tapering at base. Fruit: a long, flattish, erect pod with one row of seeds in each division. Habit: biennial or perennial, stems one to several, much branched and hence plant tufted, lower portions of stems may be hairy.

Vermont to Minnesota southward to Georgia and Missouri, also in northern Alberta.

Dry sandy and gravelly soils. Common in the Park along sandy beaches and in open dry fields.

Marsh Blue Violet. Hooded Violet.

Viola cucullata Ait. Violaceae (Violet Family)

Flowers: ordinary flowers showy, blue or violet, usually darker toward centre, often carried higher than leaves; cleistogamous flowers long and slender, numerous, on erect stems, capsules green, seeds becoming black. May and later. Leaves: long-stemmed, oval to heart-shaped, apex rounded or pointed, with wavy margins, not hairy except when young. Fruit: That derived from ordinary flowers Is a many seeded oval capsule. Capsules from cleistogamous flowers described above. Habit: perennial, stemless leaves and flowering stems from a fleshy thickened rootstock.

Newfoundland to Minnesota, southward to Georgia, westward to Nebraska.

Wet meadows, woods, thickets and swamps. Not too common in the Park.

This species is difficult to separate from woolly blue violet. It is called hooded because

four, generally pure white but may be pink on

the inrolled young leaves form a hood-like arrangement around new shoots.

May Apple. Mandrake: Wild Jalap.

# Podophyllum peltatum L. Berberidaceae (Barberry Family)

Flowers: large, nodding, fragrant and solitary from the fork of stem beneath leaves. Petals waxy, creamy-white, stamens yellow. May and later. Leaves: two, large, 3 to 7 lobed, umbrella-like Teaves on flowering stem. Flowerless stems terminated by a large 5 to 9 lobed leaf. The leaf stem has its insertion toward centre of leaf, away from margin (peltate). Fruit: large, fleshy, berry-like, greenish at first, yellowish when ripe, edible, sweetish. Habit: perennial, from a thick, creeping, underground stem, both the flowering and flowerless stems are stout and if exposed to sun, pinkish.

Quebec to Minnesota, southward to Florida and Texas.

Dry shaded woods, thickets and edges of fields. Common in the Park.

The plants form colonies and where large ones are found it overshadows other low vegetation. The shoots and expanding leaves are attractive about the middle of April but they do not come into full bloom until about the middle of May. Fruit ripens in August or later. The roots are poisonous.

Prickly Pear Cactus Indian Fig.

Opuntia humifusa Raf. Cactaceae (Cactus Family)

Flowers: showy, large, sessile, on margins of newer segments of plant, bright yellow often with reddish centre. July and later. Leaves: very small, scale-like and deciduous, rarely

noticed and unimportant to appearance of plant. Fruit: a club-shaped, green or dull purple, julcy, edible berry. Stem: the stem forms the main body of the plant, its segments fleshy, flattened, roundish and jointed to one another, pale to deep green and often with whitish bloom, sometimes branching and generally prostrate; bristles in scattered groups, reddish-brown, and spines mostly near margins of segments. <u>Roots</u>: fibrous and branching, the plants thus forming small patches or even large clumps.

Massachusetts to Minnesota, southward to Georgia and Missouri.

Dry sandy or rocky areas. Common in the Park in open areas, now more restricted than formerly.

It surprises many people that a true wild cactus is present in eastern Canada. It is one of the plants that has wandered north by river valleys since the last glacial period.

## Purple Rock Cress. Drummond's Rock Cress.

Arabis Drummondi Gray. Cruc

Cruciferae (Mustard or Cress Family)

Flowers: in a close, upright, terminal cluster, petals pink or white, twice as long as sepals. May and later. Leaves: those of basal rosette long, narrow, sometimes spatulate, not hairy except on stems; stem leaves numerous, long and narrow, base partly clasping stem, smooth, not hairy and often whitish as if a bloom was present. Fruit: a long, narrow, flattish, usually erect pod with two rows of seeds in each cell. Habit: plant comes from a fibrous root, generally only one unbranched leafy stem from a rosette of basal leaves. The leaves, flowers and fruits are erect, giving the plant a tall, straight and narrow appearance. It is a biennial.

Labrador, northern Alberta to British Columbia, south to Delaware, Illinois and California.

Gravelly, sandy and rocky areas. Common in the Park along beaches and open dry fields.

A northern species not listed by Dodge in 1914 as occurring in the Park. It is now also found on some of the nearby Lake Erie Islands, but not yet reported from Pelee Island (Core).

Red Trillium. Purple Trillium; Ill-scented Wake-robin.

Trillium erectum L. Liliaceae (Lily Family)

Flowers: large, terminal, short-stemmed, dark red or purplish-brown, petals and sepals spreading when fully opened. Flower unpleasantly scented. April and later. Leaves: a whorl of three sessile leaves at summit of stem, blades ribbed and net-veined. Fruit: an oval, somewhat six-lobed, reddish berry. Habit: perennial, from a tuber-like brown rootstock, stems one to several, stout.

Gaspe Peninsula to Michigan, southward to Georgia.

In woods or thickets. Common in the Park.

Seneca Snakeroot. Senecaroot; Mountain Flax.

Polygala Senega L. Polygalaceae (Milkwort Family)

Flowers: crowded in a long narrow, cylindrical, terminal spike, white, tinged green. May or later. Leaves: alternate, sessile, oval, pointed, leaves on lower stem much smaller, sometimes even scale-like. Fruit: a small plump capsule bearing one pubescent seed in each division. Habit: perennial, from a woody creeping rootstock, stems several, sometimes branched above.

Quebec to Alberta, southward to Georgia and Arkansas.

Dry, gravelly, sandy or rocky soils. Common in the Park in dry, open areas.

Slender Nettle. Tall Nettle.

Urtica gracilis Ait. Urticaceae (Nettle Family)

Flowers: greenish, in long, stringy, forking clusters from axils of leaves, male and female flowers in separate clusters. June and later. Leaves: opposite, on slender stems, blades usually long and narrow, rounded at base, three to seven veined, sharply toothed, dark above, paler beneath, stipules at base of leaf stems distinct. Fruit: small, nutlike and held erect on stem. Habit: perennial, stems tough, hollow, ridged and usually unbranched. The whole plant sparingly armed with stinging hairs.

Newfoundland to Alaska, southward to West Virginia and Oregon.

Rich damp soils, woods, thickets and stream banks, Common in the Park.

The plants are usually just beginning to emerge by middle of April, by early June they are tall and conspicuous, covering large areas to exclusion of other plants.

# Small-flowered Buttercup. Kidney-leaved Buttercup.

## Ranunculus abortivus L. Ranunculaceae (Buttercup Family)

Flowers: small, yellow, few to many, in upper branches, petals small and usually shorter than sepals. May and later. Leaves: variable in size and shape; basal leaves on long stems, blades kidney-shaped with scalloped margins, somewhat fleshy; stem leaves without stems or having very short ones, blades cleft. Fruit: seed-like nutlets in rounded head, Individual seeds smooth, lustrous, not corky. Habit: annual, from a slender fibrous root, stems erect, branching, smooth, not fleshy.

Labrador to British Columbia and southward.

Damp woods and meadows. Common in the Park in suitable places.

<u>Small Solomon's-seal</u> Two-flowered or Smooth Solomon's-seal.

## Polygonatum biflorum (Walt.) Ell. Liliaceae (Lily Family)

Flowers: greenish or greenish-yellow, bell-shaped, nodding or hanging from axils of leaves, usually two (1 to 5) in a group. May and later. Leaves: alternate, sessile; blades oval, pointed, flat, smooth on both sides, green above, whiter below. Fruit: dark blue or nearly black globular berries with a bloom. Habit: perennial, from a creeping, knotted rootstock, stems naked below leafy above, arching, sometimes zigzag.

Connecticut to southern Michigan, west to Nebraska, south to Florida and Texas.

Dry or moist soils in woods and thickets. Common in the Park.

Smooth Yellow Violet.

Viola pensylvanica Michx. Violaceae (Violet Family)

Flowers: large, lemon yellow, sometimes purple veined, from axils of upper leaves, spur very short. April and May. Leaves: alternate, those of stem broadly ovate, mostly pointed, margin with 8 to 15 teeth on each half, thin, deep green, hairy when expanding but soon with very few hairs; basal leaves one to three on long petioles, generally present at flowering time. Fruit: an oval capsule, densely covered with hairs or hairless. Habit: perennial, from a stout rootstock, stems usually several giving a tufted appearance to plant, hairy when young but soon becoming practically hairless.

Eastern North America, Connecticut to Minnesota, southward to Georgia and Oklahoma.

Moist woods and thickets. Fairly common in woods in the Park.

Spring Beauty. Narrow-leafed Spring Beauty.

Claytonia virginica L. Portulacaceae (Purslane Family)

Flowers: showy, pink or white with deeper pink veins, five to nineteen flowers in a loose, terminal cluster, the flowering stem elongating as plant matures, opening only in sunlight. Late March or April and later. Leaves: stem leaves opposite, usually only one pair, blades long, narrow, tapering at both ends, somewhat thickish; basal leaves if present long and narrow, otherwise similar to those of stem. Fruit: an oval, three to six seeded capsule. Habit: perennial, from a thickened tuber, two to many flowering stems, rarely with branches, a low growing and sprawling plant. Quebec to Minnesota, south to Georgia and Texas.

Moist woods, thickets and clearings. Common in the Park.

One of the first wildflowers to bloom and eagerly looked for each spring.

Spring Cress. Bulbous Cress.

Cardamine bulbosa (Schreb.) B.S.P. Cruciferae (Mustard or Cress Family)

Flowers: white, several to many in a terminal cluster, the four greenish sepals edged with white; petals four, white and much larger than sepals. April, May and later. Leaves: stem leaves scattered, alternate, sessile, rounded, margin entire or wavy, the lower leaves may have short stems; basal leaves oval or heart-shaped, on long stems. Fruit: a long slender pod narrowed at both ends. Habit: perennial, from a bulb-like rootstock, stems usually one. simple or branched, smooth, not hairy.

Quebec to South Dakota, southward to Florida and Texas.

Moist woods, thickets and streambanks or even vernal pools. Not too common in the Park.

Squirrel Corn. Turkey Corn.

Dicentra canadensis (Goldie) Walp. Papaveracea (Poppy Family)

Flowers: several near end of arching flowering stem, individual flowers, shortstemmed, nodding, irregular, the two largest petals sac-like with short rounded spurs forming a more or less heart-shaped base. White or greenish-white, sometimes tinged with pink or purple, slightly fragrant. April and May. Leaves: three-parted, each section

further divided to form a lacy pattern, smooth, greenish-blue, much lighter on lower surface. Fruit: an elongate capsule bearing several seeds. Habit: perennial, leaves and flowering stems from numerous, yellowish, small, grain-like tubers. The spreading roots bear numerous grain-like swellings, these look somewhat like Indian corn and from this fact the plant obtains its name. The foliage has died and the plant has disappeared by end of May.

Eastern North America, Quebec to Minnesota, southward to Tennessee and Missouri.

Woods and shaded locations. Very scarce in the Park.

The plant resembles Dutchman's-breeches but in that plant the flowers have much longer and more divergent spurs to the corolla. It does not have the grain-like tubers along its root system.

Star-flowered False Solomon's-seal.

<u>Smilacina</u> <u>stellata</u> (L.) Desf. <u>Lilliaceae</u> (Lily Family)

Flowers: creamy-white, in open, fewflowered, terminal clusters, each flower on a fairly long stem, sepals and petals longer than stamens. May and later. Leaves: alternate, long and tapering, sessile and sometimes clasping stem, light green sometimes with whitish bloom. Fruit: greenish berries with six black stripes, or entirely black. Habit: perennial, from a slender, extensively creeping and branching rootstock, stem usually erect, arching and very leafy.

Newfoundland to British Columbia and southward to Virginia, Arizona and California. Also occurring in Europe. Usually in moist soil, especially in sands and gravels. Very common in the Park in light woods, edges of fields and along beaches.

The extensively creeping rootstock makes the plant an efficient sand-binder.

Sweet Cicely. Anise-root; Smooth Sweet Cicely.

Osmorhiza longistylis (Torr.) D.C. Umbelliferae (Carrot Family)

Flowers: small, white, numerous, in open branched clusters at ends of stems. May or later. Leaves: alternate, with or without stems, blades divided at first into three branches, which are again divided, ultimate leaflets oval, sharply toothed, only slightly hairy. Fruit: about one inch long, black, spindle-form, concave on one side, ribbed, adorned with bristles which catch in clothing. Habit: perennial, from a deep carrot-like root which is aromatic, sweet and tastes like anise; stems stout, widely branched and leafy.

Gaspe Peninsula to Alberta, southward to Virginia and Oklahoma.

Woods, thickets and clearings. Very common in the Park.

In the drier woods in the Park it is the dominant herbaceous plant in many areas for part of the year. The leaves unfold in April and by mid-May the plant is in full bloom and blankets many sections of the woods. By the end of July the leaves and stems are dead and rapidly disappear.

Illustrated on the cover.

Tall Bellflower. American or Star Bellflower.

Campanula americana L. Campanulaceae (Bluebell Family)

Flowers: large, showy, blue to violet, sometImes white, solitary or clustered in axils of upper leaves. The inflorescence forms a long, leafy, terminal spike. Individual flowers on short stems, bell-shaped, the corolla flattened and widely open. The style is yellowish, long, upturned and curved. Blooms in July or later. Leaves: alternate, lance-shaped, pointed at both ends, margin finely toothed, lower leaves broader and with stems, upper leaves sometimes sessile. Fruit: a short, ribbed capsule crowned by five Fingerlike projections (calyx lobes). Habit: annual, stem tall and rarely branched.

New York State to Minnesota, southward to Florida and Missouri.

Moist, usually open woods and thickets. Very common in the Park.

As the plants have to grow from seeds each spring, they are not large or conspicuous until late July from then on for a time they are one of the striking plants on the woodland trail.

Twisted Stalk. Sessile-leaved Twisted Stalk.

Streptopus roseus Michx. Liliaceae (Lily Family)

Flowers: bell-shaped, rose or purple, hanging singly or in pairs from the axils of leaves, each flower on a slender, hairy stem which is bent or twisted near its middle, hence the name twisted stalk. May or later. Leaves: alternate, sessile or sometimes clasping stem, pointed, corrugated, many-veined, green on both sides, margins with hairs. Fruit: bright red globose berries. Habit: perennial, from a creeping rootstock, stems stout, straight or generally with forking and sometimes zigzag branches, with stout hairs.

Labrador to Manitoba, southward to Georgia and Kentucky.

Woods and thickets. Common in the Park. Upright Catbrier. Upright Smilax. Smilax ecirrhata (Engelm.) S. Wats. Liliaceae

(Lily Family)

Flowers: small, greenish or greenishyellow, in a spherical, many-flowered head borne at end of long stem; some or all of the flower heads borne from bladeless bracts below leaves or higher on stem from axils of leaves. May and later. Leaves: alternate. on very long stems from upper portion of main stem, blades oval, rounded at base, pointed. usually with short spine-like apex. net-veined but with 5 to 9 principal longitudinal veins. thin, pale beneath especially when young. Fruit: round clusters of black or blue-black three-seeded berries. Habit: annual, stem erect, not climbing, greenish, without prickles. tendrils none or a few on upper part of stem. Some plants bear a whorl of leaves at the summit, in this case individual leaves are larger and broader.

Southern Ontario to South Dakota, southward to Tennessee and Missouri.

Open woods and thickets. Frequent in the Park.

Waterleaf. Appendaged Waterleaf.

Hydrophyllum appendiculatum Michx. Hydrophyllaceae (Waterleaf Family)

Flowers: large, showy, in few to many flowered, loose, branched, terminal clusters; corolla short, funnel form, petals purple to blue or more usually lavender to white, short appendages between bases of calyx segments. May or later. Leaves: basal leaves with long stems, blades divided into 5 to 7 oval,

irregularly toothed segments; stem leaves alternate, on short stems, blades large, usually five-lobed, lobes rounded, toothed or pointed. Fruit: a spherical capsule with one to four seeds. Habit: biennial, stems weak, branched, the whole plant rough-hairy, sometimes sticky above, the calyx and flower stems are especially hairy. The leaves are sometimes blotched like a watermark with paler green.

Ontario to Minnesota, south to Tennessee and Kansas.

Rich open woods and thickets. Very common in the Park.

The plants begin to disappear in late July. Often mistaken for the wild geranium.

White Sweet Clover. White Melilot.

Melilotus alba Desr. Leguminosae (Pulse Family)

Flowers: small, white, fragrant, borne in a many-flowered, sometimes one-sided, terminal spike. July and later. Leaves: alternate, each consisting of a stem and three leaflets, leaflets oval, narrowed at base, margins finely toothed. Fruit: a one-seeded, oval, smooth pod. Habit: Diemnial, the stems are smooth, tall and branching. The leaves are rather distantly placed and the flower spikes are numerous.

Native to Europe and Asia, introduced and naturalized in North America.

Cultivated for hay, green manure and as a honey plant.

It grows wild along roadsides, fields and waste places. Common in the Park.

White Trillium Large-flowered Trillium.

<u>Trillium grandiflorum</u> (Michx.) Salisb. <u>Liliaceae</u> (Lily Family) Flowers: large, terminal, white with yellow coloured anthers within the tube. The single blossom is held erect on a short stem arising from a whorl of leaves. In maturity the petals become pink. April and May. Leaves: three in a whorl at end of stem, blades oval, pointed, gradually rounded at base, ribbed and net-veined. Fruit: a globose, somewhat six-angled, black berry. Habit: perennial, from a brown tuber-like rootstock, stem stout, unbranched and bearing three leaves at its summit. Young plants have only one leaf.

Nova Scotia to Minnesota, south to Georgia and Arkansas.

Rich woods and thickets. Formerly common in the Park, now very scarce.

The Provincial flower of Ontario, protected by law throughout the Province.

# Wild Bergamot.

Monarda fistulosa L. Labiatae (Mint Family)

Flowers: showy, lavender, pink or purple, rarely white, in dense, solitary clusters from axils of leaves or terminating stem; corolla two lipped. July and later. Leaves: opposite, with short stems, blades narrowly oval, pointed, rounded at base, margins sharply toothed, gray-green in colour and with spreading hairs on veins on underside. Fruit: an oval capsule containing four seed-like nutlets. Habit: perennial, stems one to several, square, upright or branching above, whole plant roughish to the touch and aromatic.

Quebec to Saskatchewan, south to Georgia and Texas. In Ontario the plant is confined to the southern region.

Dry fields, thickets and clearings. Common in the Park. usual sufferences a bakaran a usak veder a bakaran a bakaran bauan

## Wild Blue Phlox.

Phlox divaricata L. Polemoniaceae (Phlox

Family)

Flowers: showy, in loose, terminal clusters, light blue to purple, sometimes white. The individual flower is tubular but the lobes of the corolla expand, forming a broad open face to the flower, each petal is notched. May and later. Leaves: opposite, those on flowering shoots narrowly oblong and pointed; those on non-flowering stems oval and not so pointed. Fruit: an oval capsule. Habit: perennial, the non-flowering stems are prostrate or decumbent, sometimes rooting; the flowering stems are upright with rather remote pairs of leaves. The stems are finely pubescent and sometimes sticky.

Quebec to Michigan and Illinois, southward to South Carolina and Alabama.

Damp or dry open woods. Very Common in the Park, especially along wooded sides of stom: Skow Its Cwo main road.

It makes a worthwhile display when in full bloom. Sometimes cultivated.

## Wild Columbine.

Aquilegia canadensis L. Ranunculaceae (Buttercup Family)

Flowers: large and showy, scarlet, red and yellow, nodding, borne singly on ends of branches. The petals are produced backward to form five large, hollow, straight spurs, each

ending in a small knob. The stamens are prolonged beyond the corolla and are vellow. like the inside of the corolla tube. May and later. Leaves: thrice-divided, the leaflets oval with wavy margins, thin, light green. paler beneath, the lower stem leaves and basal leaves with stems, upper leaves sometimes sessile. Fruit: a five-lobed capsule tipped by long, spine-like processes; it is manyseeded and held upright on plant. Habit: perennial, from a stout rootstock, stems erect and branching. smooth.

Quebec to Saskatchewan, south to Georgia and Tennessee.

Open woods, thickets and slopes, especially rocky areas. Common in the Park along roadsides and in open woods.

Wild Geranium. Spotted Geranium; Spotted Cranesbill.

Geranium maculatum L. Geraniaceae (Geranium Family)

Flowers: a terminal cluster of two to five blooms, large,  $1'' - 1\frac{1}{2}''$  across, rosy or pale purple, petals five, longer than sepals, calyx woolly at base. May and later. Leaves: stem leaves opposite, short-stalked, broad, hairy, deeply lobed into three to five segments but not divided enough to be a compound leaf. spotted with white or brown but these maculations usually show only on the older basal leaves. Fruit: long slender-tipped beak enclosing the many seeds. Pubescent but not glandular. Habit: perennial from a thick crowned rootstock, stems hairy and often much branched.

Eastern North America, Maine to Manitoba. southward to Tennessee and Kansas.

In open hardwood forests. Not common in the Park.

A plant of moist shaded areas but it also requires sunlight to explode the ripe beak. The sides of the beak suddenly release themselves and curl toward the end, this throws seeds a considerable distance. The other members of the Geranium family found on the trail also release their seeds in this manner.

#### Wild Leek.

Allium tricoccum Ait. Liliaceae (Lily Family)

Flowers: many, in a ball-shaped umbel on end of long stem, white or greenish-white, July and later. Leaves: appearing directly from the underground bulb, large, long and narrow, tapering at both ends, fleshy, bright, green. Fruit: a deeply three-lobed capsule, seeds globular, smooth and black. Habit: perennial, from onion-like bulbs, these clustered on short rootstocks, thus forming colonies of plants. The leaves appear in April and the fact that they are bright green and in patches makes them a noticeable plant at this time of the year. The leaves wither and completely disappear before the flowers appear. The plant has an odour and flavour of onion.

New Brunswick to Minnesota, southward to Georgia, Illinois and Iowa.

Rich woods and bottomlands. Common in the Park.

# Wood Nettle.

Laportea canadensis (L.) Wedd. Urticaceae (Nettle Family)

Flowers: greenish, in long, branched, loose, axillary clusters, male and female flowers in

separate clusters. June and later. Leaves: alternate, on long slender petioles subtended by stipules, blades usually large, heart-shaped, thin, pointed, sharply-toothed, with three principal nerves. Fruit: small, oval, flat, nutlike, reflexed on a short margined stem. Habit: perennial, stem stout and erect. The whole plant bristly with stinging hairs.

Quebec to Manitoba, southward to Florida and Oklahoma.

Moist woods. Common in the Park.

Woodland Strawberry. European Wood Strawberry.

Fragaria vesca L. Rosaceae (Rose Family)

Flowers: white, one to nine in an open branched cluster, flowering stem hairy and usually taller than the leaves. May and June. Leaves: directly from crown, consisting of a hairy stem bearing three leaflets, these dark green, strongly veined above and coarsely toothed. Fruit: a conical fleshy edible berry, seed-like achenes not imbedded in flesh. Habit: perennial, from one to several crowns, the plant reproduces by numerous runners which root at intervals.

Newfoundland to Michigan, southward to West Virginia. It is native to Newfoundland and Quebec but introduced from Europe to other areas.

Woods, openings and clearings. Common in the Park.

The parent of several of our cultivated strawberries, especially of the ever-bearing type. Escaped from cultivation in some areas.

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tuations.

<u>Woodland Sunflower</u>. Rough Sunflower. <u>Helianthus divaricatus</u> L. <u>Compositae</u> (Composite Family)

Flowers: heads showy, disc and ray flowers both yellow, heads few in number at summit of stem or on tips of branches. July and later. Leaves: opposite, sessile or nearly so, oval, with rounded base and tapering point, margins toothed, prominently three-veined, rough above, hairy below. Fruit:a thick, oblong, somewhat angled seed. <u>Habit</u>: perennial from long creeping rootstock, stems generally branched.

Maine to Saskatchewan, southward to Georgia and Arkansas.

Dry open woods, edges of field and thickets. Common in the Park.

## Woolly Blue Violet.

Viola sororia Willd.

Violaceae (Violet Family)

Flowers: ordinary flowers showy, blue or violet, carried on about same level or sometimes higher than leaves; cleistogamous flowers numerous, short and ovoid, on prostrate, buried stems which arch later, capsule purplish, seeds dark brown. May and later. Leaves: long-stemmed, ovate to heartshaped, round or somewhat pointed, dark green, thickish, with 21 to 52 prominent teeth on each margin, leaf stems and lower surface of expanding leaves densely hairy. Fruit: a many seeded, oval capsule. Habit: perennial, from fleshy thickened rootstock, stemless.

Quebec to South Dakota, southward to North Carolina and Missouri.

Moist meadows, slopes, woods and fields. Common in the Park. Yellow Corydalis. Yellow Fumewort; Pale Corydalis.

#### Corydalis flavula (Raf.) D.C. Papaveraceae (Poppy Family)

Flowers: small, pale yellow in a terminal cluster, corolla irregular and spurred. April and May. Leaves: basal and stem leaves finely dissected into linear or oblong pointed segments, pale green and glaucous. Fruit: a linear capsule drooping on long stem, seeds many. Habit: biennial, stems lax, low, leafy and branching.

Connecticut to Minnesota, south to Tennessee, Louisiana and Kansas.

Sandy or rocky soils in open woods, thickets and shorelines. Fairly common in the Park.

Yellow Water Crowfoot. Yellow Water Buttercup.

# Ranunculus flabellaris Raf. Ranunculaceae (Buttercup Family)

Flowers: large, golden yellow. one to seven on thickish, sometimes branching, terminal portion of stems; petals much longer than sepals. May and later. Leaves: variable in form and size, submerged leaves divided into many fine, sometimes almost thread-like, flat segments; stem or aerial leaves alternate. three to five lobed, lower ones with stems. upper ones sessile, distance between leaves rather remote. Fruit: many seed-like fruits in a rounded head; each seed compressed, with long beak and a corky winged margin. Habit: roots are small and fibrous but the stem is elongate. stout, smooth, hollow and leafy. It produces many stolons, and roots at the joints. The form and shape of the plant depends upon whether or not it is submerged, partly submerged or terrestrial. It grows equally well in all situations.

North America, New Brunswick to British Columbia, southward to Kansas and California.

Quiet waters in woods or along shores. Common in the pools in the big woods of the Park where it usually makes a brilliant showing in late May or early June.

# Glossary

- Achene. A dry hard fruit with a close-fitting envelope surrounding a single seed.
- Anther. The sac-like portion of the flower which produces and holds the pollen. It is carried on end of stamen.
- Awn. A bristle-shaped appendage or long hair attached to certain kinds of seeds.
- Axil. The angle formed between the leaf and the stem of a plant.
- Blade. The expanded portion of a leaf.
- Bloom. Surface dust, usually whitish and sometimes waxy, found on fruits or leaves.
- Bract. A leaf-like structure, usually placed below a leaf or flower.
- Capsule. In flowering plants the seed case; in mosses the case containing the spores.
- Ciliate. With fringed or marginal hairs.
- Cleistogamous. Used to describe a flower which never opens, fertilization taking place within the bud.

Climax.	The plant community which, in a given area, perpetuates itself indefinitely.
Complete.	Said of a flower that has all of the floral organs present.
Compound.	Divided into segments.
Deflexed.	Bent away from or directly downwards.
Globose.	Globular, spherical, round.
Node.	The joint of a stem; a solid constriction or knob-like enlargement of a stem.
Ovate.	Egg-shaped.
Ovoid.	Having the outline or shape of an egg, said of solid structures such as fruits.
Palmate.	Shaped like the hand, with fingers or lobes radiating from a central point.
Peltate.	Shield-shaped, with stem attached to lower surface.
Petiole.	The stem of a leaf.
Pinnate.	With parts arranged like those of a feather.
Pubescent	. Covered with fine hairs.
Samara.	An indehiscent winged fruit.
Sessile.	Without stem or stalk.
Spore.	A reproductive cell which functions like a seed. They are usually very small and sometimes microscopic in size. Found in mosses, horsetails, ferns and other non-flowering plants.

- Stipule. A small leaf-like structure found at the base of a leaf or flowering stem. They usually grow in pairs.
- Stolon. A runner or sucker. A slender shoot developing a bud and roots at its end.

## Notes

Achene. Globular, apherical, round.



ALL PLANTS AND ANIMALS, AND OTHER NATURAL FEATURES OF THIS PARK ARE PROTECTED AND PRESERVED FOR ALL WHO MAY COME THIS WAY. PLEASE DO NOT REMOVE OR DAMAGE THEM.