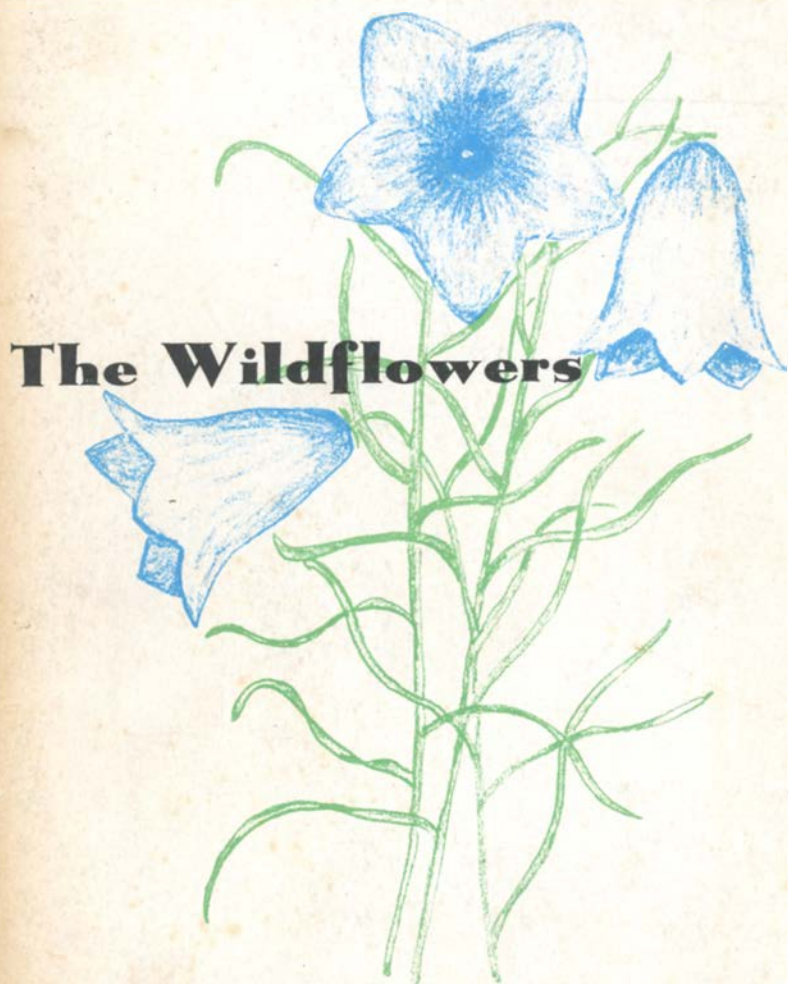


Wolf's Eye

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The Wildflowers

of Isle Royale National Park

The Wildflowers of Isle Royale National Park

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 One of the most outstanding natural features of Isle Royale National Park is the great multitude of flowering plants which adorn its more than 200 square miles of land area. Whether it be rocky shores, the forest floor, bogs and swamps, or open meadows, there is nowhere a scarcity of wildflowers. The wide variety and abrupt changes in terrain and habitat, as well as the isolation from mainland vegetational influences, has created on Isle Royale an interesting, varied, and unique flora. It is a natural resource of great inspirational and aesthetic value to the average park visitor, and a challenge to the student of nature.

This is by no means a comprehensive field guide. It does, however, include most of the wildflowers about which park visitors have shown the most curiosity in their contacts with the park naturalists. Many have been included because they are among the most widely distributed. Other somewhat less common species, such as the pitcher plant, have been included because they exhibit such curious appearance or behavior. Still others, such as the members of the orchid family, have been devoted space out of proportion to their relative abundance because they have a very high aesthetic appeal. Some flowers (for example the goldenrods, the common daisy, the black-eyed susan, the thistles, the dandelion, and the red clover) have been omitted because they are so common everywhere outside the park that most everyone is already acquainted with them.

This field guide uses a minimum of technical botanical terms. Those terms which are used are explained and illustrated in the section below entitled "PLANT ANATOMY AND DESCRIPTION OF TERMS USED". For simplicity the flowers are arranged according to broad color ranges; and within each color range the flowers are arranged by plant families.

ACKNOWLEDGEMENTS

The authors are grateful for the assistance and encouragement offered in the preparation of this field guide by Chief Park Naturalist Robert M. Linn who was a good source of encouragement and valuable suggestions, and Seasonal Naturalist Robert G. Johnson who contributed many excellent ideas and bits of information as well as encouragement.

Robert A. Janke
Nadine Janke

Rock Harbor, Isle Royale National Park

PLANT ANATOMY AND DESCRIPTION OF TERMS USED

LEAF ARRANGEMENTS

Leaves may be either simple or compound. In a **COMPOUND** leaf the blade is divided into several separate and distinct parts called leaflets. In a **SIMPLE** leaf this is not the case.



SIMPLE LEAF



COMPOUND LEAVES

The arrangement of leaves on the stem may be either **ALTERNATE**, **OPPOSITE** or **WHORLED**.



ALTERNATE



OPPOSITE

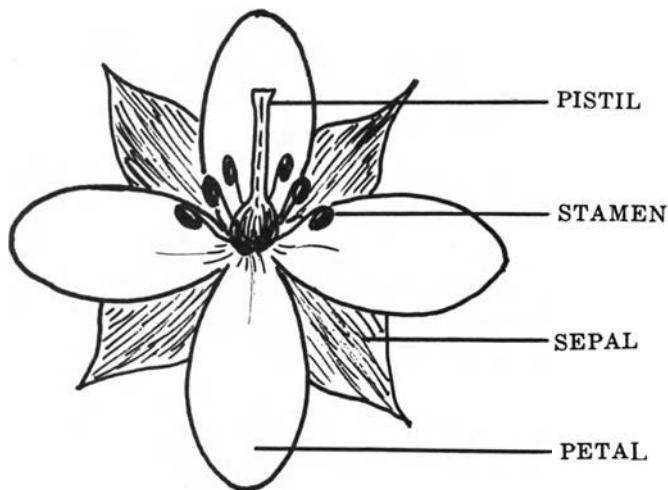


WHORLED

GENERAL FLOWER PARTS

Only the most important and conspicuous parts of a flower will be mentioned here. The outermost circle (or WHORL) of parts is the CALYX, composed of several SEPALs. These are usually green, but may also be conspicuously colored as in the iris, wood lily or the orchids. The PETALS constitute the COROLLA, another whorl of parts just inside the sepals. These are usually the showy parts of the flowers and are often white or attractively colored. Inside the petals are the STAMENS, the male sex organs, which are usually filamentary in form and which bear pollen on their tips (anthers). The PISTIL usually occupies the central portion of the flower and is the female (or seed producing) organ.

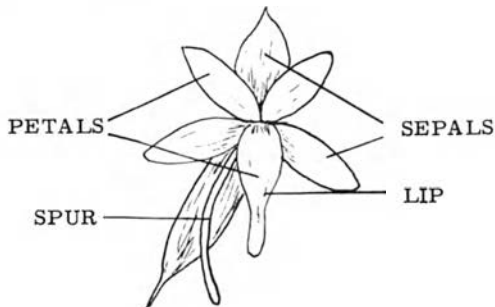
It should be emphasized that the above discussion of flower parts is somewhat simplified because there is a great variation among individual flowers in size, shape and arrangement of these various parts. In some cases a whorl of parts may be joined together. In bluebells, for example, the petals are all united into a bell-like configuration. In some flowers, like the strawberry, the flower parts are arranged in a symmetrical, radial pattern; while in others, such as the violets, this type of symmetry is absent. Furthermore, any one or more of these whorls of parts may be absent in a flower. Despite the many variations in flower form, however, the relative position of the various whorls from the outside to the center is the same for almost all flowers.



ORCHID ANATOMY

Some additional comments should be made here concerning the flower structure of the orchid family, since their anatomy is somewhat unusual, and since they are undoubtedly the most admired group of flowering plants on Isle Royale (there are about 36 species of orchids in the park).

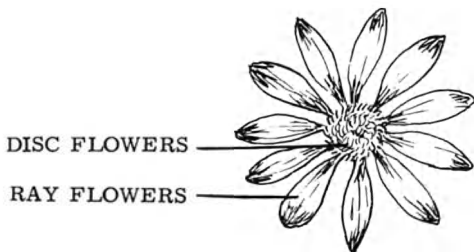
A typical orchid has 3 sepals which are frequently brightly colored and petal-like. Two of these project laterally and the third is usually upright. There are also 3 petals, two of which are lateral; the third one usually hanging downward to form the LIP. The lip may be somewhat cup-shaped or in some cases, such as in the ladyslipper orchids, it may be a large inflated sac. A curved SPUR frequently projects from under the lip. The shape and size of the lip and spur are frequently useful diagnostic features in distinguishing between closely related species of orchids.



COMPOSITE ANATOMY

In this very large and important family the arrangement of the flowers into groups produces an effect which is somewhat deceptive. What appears to be but a single flower is actually a composite of a large number of very small flowers tightly packed together into a flowering HEAD. Examples of flowers in this family are daisies, asters, goldenrods, and dandelions. The heads may be composed of two different kinds of flowers known as RAY flowers and DISC flowers. In the common field daisy the white colored, outer, ray-like elements

are the ray flowers, and the central yellow elements are the disc flowers. A close examination of one of these tiny elements will reveal that it is a separate flower in itself. Some flowering heads may be made up only of ray flowers, while others may be composed of only disc flowers.



PLANT NAMES

The scientific names (consisting of the genus name followed by the specific epithet, e.g., *Lilium philadelphicum*) and the family names are those given in the NEW BRITTON AND BROWN ILLUSTRATED FLORA OF THE NORTHEASTERN UNITED STATES AND ADJACENT CANADA, Henry A. Gleason, 1963, The New York Botanical Garden, 3 volumes. This reference has been followed because it offers a complete and up-to-date listing of scientific plant names for this area.

Each plant has been numbered chronologically as it appears in the text. These numbers are used for all cross-references and indexing rather than page numbers and are referred to as "item numbers".

NORTHERN GREEN REIN ORCHID

(Northern Leafy Green Orchid)

Habenaria hyperborea

Orchid family

Though large enough, this orchid, because of the green foliage-like color of the flowers, is easily overlooked among the grasses and sedges of swamps, bogs and lake shores. The greenish flowers have a long slender lip and a curved spur behind the lip. They are arranged in a long, slender spike at the top of a stout, leafy, upright, green stem, 1 to 2 feet high. Leaves slender, ascending (upcurved) along the stem, and becoming smaller near the top. Flowers have a pleasant, spicy fragrance. Blooms in June and July in damp areas of the park.

2

ONE LEAF REIN ORCHID*

Habenaria obtusata

Orchid family

An inconspicuous orchid easily recognized by the lone lily-like leaf at the base of the plant. The small, greenish flowers are arranged in a spike at the top of a naked stalk about 1 foot tall or less. The lip is about the same length. It blooms in July and August in the wooded areas of the park.

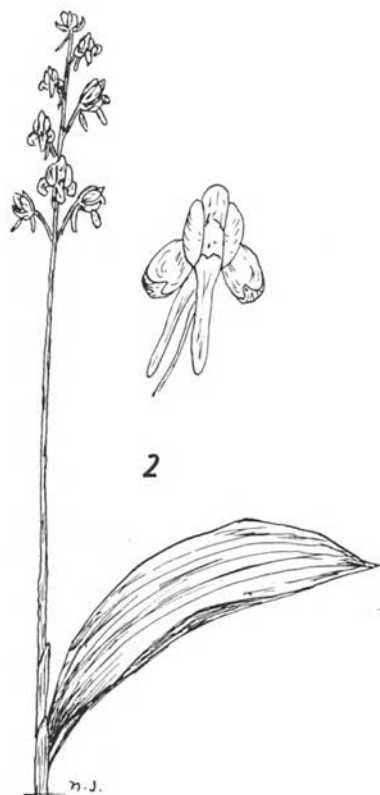
3

EARLY CORALROOT

Corallorhiza trifida

Orchid family

Similar to spotted coralroot (see item 87) but much smaller in size and considerably less showy, the color being somewhat greenish-yellow with a white lip. It is the smallest and least conspicuous of the coralroots. Blooms in June and early July in bogs and damp woods.



NORTHERN COMANDRA

Comandra livida

Sandal-wood family

Most conspicuous in late summer (August-September) when it bears brilliant, orange-scarlet berries somewhat larger than pea size along its stem. The greenish, star-shaped flowers are very small, inconspicuous, and few in number. They are seldom noticed. The fruits, however, seldom fail to catch the eye, and are an important beautifying element in many of Isle Royale's natural "rock gardens". The plant consists of a simple, upright stalk usually about 8 inches tall, bearing many slender, smooth, non-toothed leaves along its length. Found in moist pockets or crevices in rocks or in wooded areas.

5

BISHOP'S CAP

(Naked Mitrewort)

Mitella nuda

Saxifrage family

This dainty little flower is so inconspicuous that it can hardly be seen unless you stoop down for closer inspection. Upon doing so, you will undoubtedly be struck with its uniqueness. Above the more prominent greenish-white sepals (5 in number) the fine, less prominent petals form a delicate snow-flake pattern. Flowers are few in number and arranged one above the other along the top of a slender, leafless flowering stalk. Blooms in June-early July. Plant low and creeping with the hairy, wavy margined, rounded, somewhat heart-shaped leaves borne on slender stalks arising near the ground. Very common in mossy woods or moist areas.

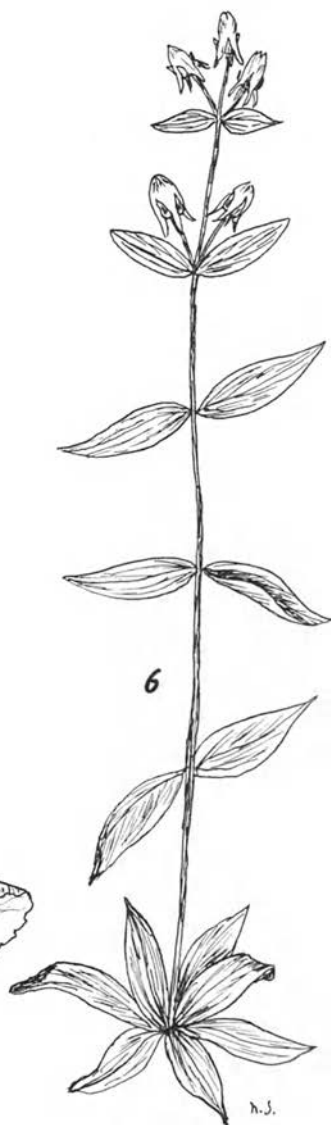
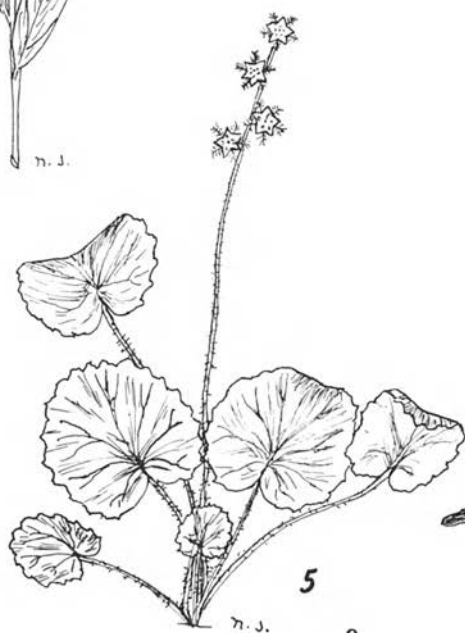
6

SPURRED GENTIAN

Halenia deflexa

Gentian family

A flower of unusual character but inconspicuous because of its greenish coloring. Though very common it is frequently overlooked. The flower has 4 petals, each equipped with a spur which projects backward along the stalk. It is colored a bronzy-green. Blooms in July and early August. Stems smooth, ridged, and twisted, $\frac{3}{4}$ to $1\frac{1}{2}$ feet tall. Leaves non-toothed and oppositely arranged on the stem. Common in moist and wooded areas.



ONE-SIDED PYROLA

(Sidebells Pyrola)

Pyrola secunda

Heath family

Easily distinguished from other Pyrolas in the park by the one-sided arrangement of the flowers on the stem. Flowers are pale green, somewhat closed cup-shaped, with a long straight pistil. Blooms in July and August. The moderately firm, spade-shaped, shiny leaf blades are longer than the leaf stalks and, like most Pyrolas, are arranged in a rosette pattern at the base of the plant. Common in wooded areas of the park.

GREEN PYROLA

Pyrola virens

Heath family

Similar to Shinleaf (see item 42) except that the flowers are greenish-white and the leaf blades are shorter, or at most equal to the leaf stalks in length. Blooms in July. Found in dry, coniferous woods. (Not illustrated.)

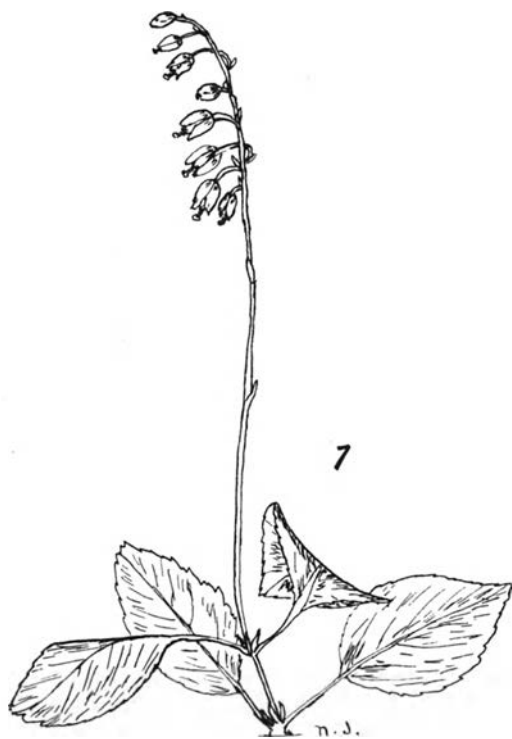
EASTERN PAINTBRUSH

(Paintedcup)

Castilleja septentrionalis

Figwort family

Flower cluster whitish or yellowish green. Each cluster when examined closely will be found to consist of elongated vase shaped flowers alternated with modified leaves (bracts) of the same color, along the top 1 - 2 $\frac{1}{2}$ inches of the stem. Blossoms in July-September. Stem upright, ridged, and from 1 - 2 feet high. Leaf blades narrow, sharp pointed, alternate, and attached directly to the stem. Very common throughout the park especially in open, dry rocky or gravelly areas.



COMMON ARROWHEAD
(Duck Potato)*Sagittaria latifolia*

Water Plantain family

Distinctive because of the unusual arrowhead shape of the leaves. Flowers white, 3 petaled, and borne in whorls of 3 on a single, leafless stalk. Blooms July through September. Leaves very variable, but mostly arrowhead-shaped with basal lobes pointing backward. Some are almost grass-like, especially when the plant is submerged in water. The fleshy rootstocks are edible and were used by the Indians for food, hence the alternate name, Duck Potato. Common in swamps, streams, or lake margins, where they grow in the water or very close to the water's edge.

WILD CALLA
(Water Arum)*Calla palustris*

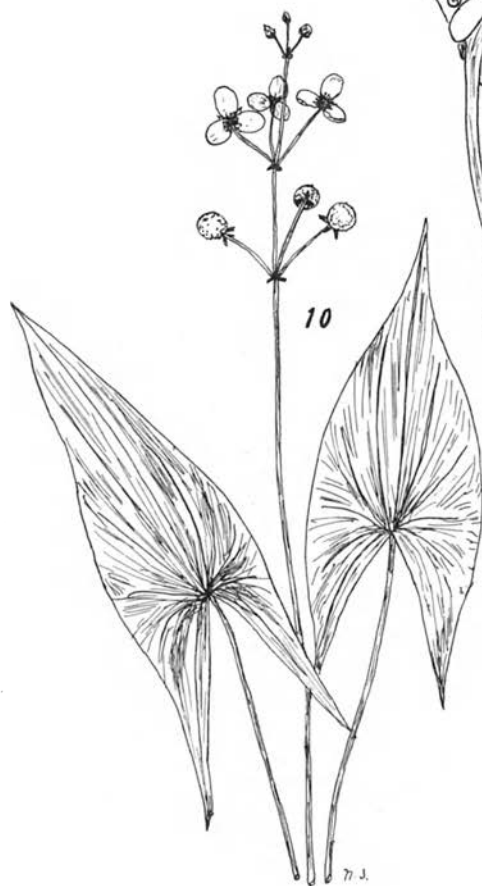
Arum family

A large white leafy hood-like structure encloses a thick, fleshy, yellow stalk containing numerous, small, greenish flowers, giving the appearance of one single large flower. Blooms in June-early July. Red berries ripen in August. Heart-shaped, lily-like leaves have long stalks which come from the base of the plant, as does the flowering stalk. Plant about $1\frac{1}{2}$ to 1 foot high. Found in swamps, bogs, and lake margins.

WILD LILY-OF-THE-VALLEY*
(Two-leafed Solomon's Seal)*Maianthemum canadense*

Lily family

Tiny white flowers densely arranged about a single upright stalk forming a cylindrical shaped inflorescence about $\frac{2}{3}$ - 2 inches long. Each flower has 4 segments. Blooms in early June and July, then produces yellow-white berries with dark spots, later turning a pale red. Single upright stems about 3 - 9 inches tall bearing 2 or 3 heart-shaped leaves. The plant has little resemblance to the true Lily-of-the-Valley of garden fame. Very common throughout the park in woods or other damp locations.



LABRADOR SOLOMON PLUME

(Three-leafed Solomon Seal)

Smilacina trifolia

Lily family

A small bog plant bearing tiny white star-shaped flowers around the top portion of the single unbranched stem. Blooms seen in June and early July; speckled berries ultimately turning a dark dull red seen in late summer and fall. Alternately arranged on the stem are 3 (occasionally 2 or 4) moderately slender, lily-like leaves which taper to a sharp point at their tips and attach to the stem like a sheath. This plant may easily be confused with the wild lily-of-the-valley; but it does not have a heart-shaped leaf, has 6 flower divisions instead of the 4 in the wild lily-of-the-valley, and usually has 3 leaves instead of the usual 2 of the other. Common in bogs and other wet places.

14

WHITE BOGORCHID

(Bog Candle)

Habenaria dilatata

Orchid family

A stately, spicy-scented bog orchid which resembles a tall white candle as it projects above the surrounding bog vegetation. The small white flowers have a lip which broadens at the base and a slender spur. They are arranged in a slender spike along the upper portion of the stem. Their fragrance suggests cloves. Blooming time is July and early August. Alternately arranged along the stem are several long, slender, grass-like leaves. Found in bogs and swamps. Not common.

15

ROUND LEAFED ORCHID*

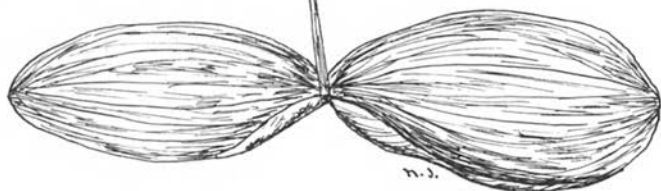
Habenaria orbiculata

Orchid family

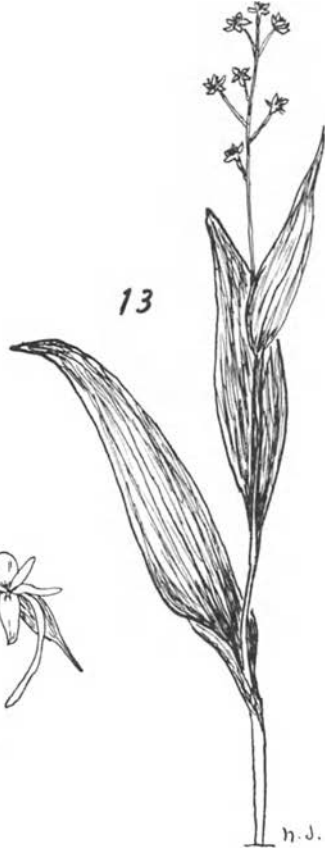
Easily recognized by the two somewhat round, shiny leaves which lie flat against the ground. Flowers greenish-white with a slender lip and a very long, slender curved spur behind the lip. Flowers arranged about the top of a tall slender stem, 1 to 2 feet high, which bears a few small scale-like leaves. Blooms in July through mid-August in moist wooded areas. Not common.



15



15



STOUT LADY'S TRESSES

(Continental Lady's Tresses)

Spiranthes romanzoffiana

Orchid family

Small white flowers in a dense, spirally arranged spike at the top of a leafless, flowering stalk. Leaves long, slender, and folded along their length, mostly stemming from the base of the plant. Blooms July-August. Very fragrant. Height about $\frac{2}{3}$ to 1 foot. Grows in rock crevices and bogs.

SLENDER LADIES TRESSES

Spiranthes gracilis

Orchid family

Closely related to the above species except very much more slender and grass-like; the white flowers less dense, more obviously spiral in arrangement, and more elongated and tubular. Blooms in July and August in open dry areas. (Not illustrated.)

BASTARD TOADFLAX

(Common Comandra)

Comandra umbellata

Sandal-Wood family

Flowers small, white, and urn-shaped, arranged in clusters at the ends of short divergent branches near the top of the stem. Blooms in June and early July. Stems slender, upright, leafy, and $\frac{1}{2}$ to 1 foot tall. Leaves smooth and untoothed. This plant is sometimes parasitic upon the roots of trees and shrubs. Very common in dry, wooded areas of the park.



DOWNY RATTLESNAKE PLANTAIN

Goodyera pubescens

Orchid family

The most distinguishing feature of this member of the Orchid family is the checkerboard pattern of light and dark in the leaves, which undoubtedly suggested the name. Flowers small and white, having a sac-like lip with a short, blunt tip. These are arranged in a dense spike at the top of a slender stem about 1 foot tall, resembling the ladies-tresses orchids. Stem bears downy hair and short scale-like leaves. Leaves form a rosette at the base of the plant. Blooms in mid-July and August, when it is frequently seen in the forested areas of the park.

20

CREEPING RATTLESNAKE PLANTAIN

(Dwarf Rattlesnakeplantain)

Goodyera repens

Orchid family

Similar to downy rattlesnakeplantain except (1) it is smaller; (2) the flower spike is one-sided; (3) the tip of the lip is longer and less blunt; and (4) the leaves are usually darker and more strikingly mottled. (Not illustrated)

21

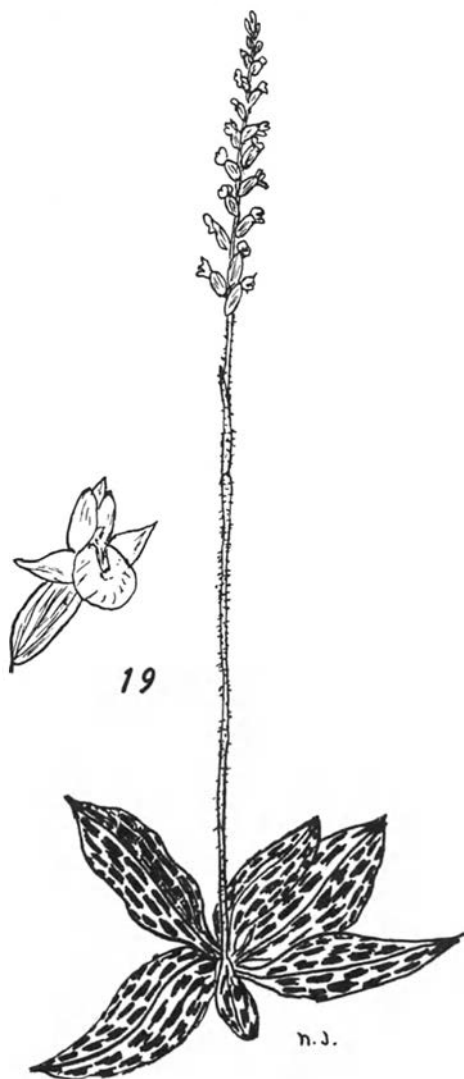
WESTERN RATTLESNAKE PLANTAIN

(Giant Rattlesnakeplantain)

Goodyera oblongifolia

Orchid family

Differs from downy rattlesnakeplantain in that (1) it is usually somewhat taller; (2) the leaves are usually unmottled, but have a white stripe along the mid-vein; (3) the spike is somewhat one-sided and (4) the lip is more elongated at the tip. (Not illustrated.)



WHITE

22

PURPLE MEADOW RUE

Thalictrum dasycarpum

Crowfoot family

An unusually tall flowering plant which lines many of the streams and lake shores of Isle Royale. Flowers white with a purple tinge, lacking petals, arranged in a many branched cluster near the top of the plant. Stems tall (3 - 4 feet high), upright and green, sometimes marked with purplish-brown. Leaves compound with 3-lobed, blue-green leaflets. Blooms in July and early August. Common in damp open locations.

23

MEADOW ANEMONE

(Canadian Anemone)

Anemone canadensis

Crowfoot family

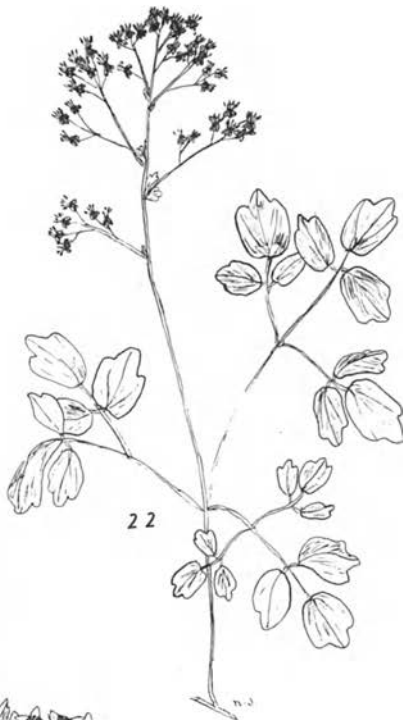
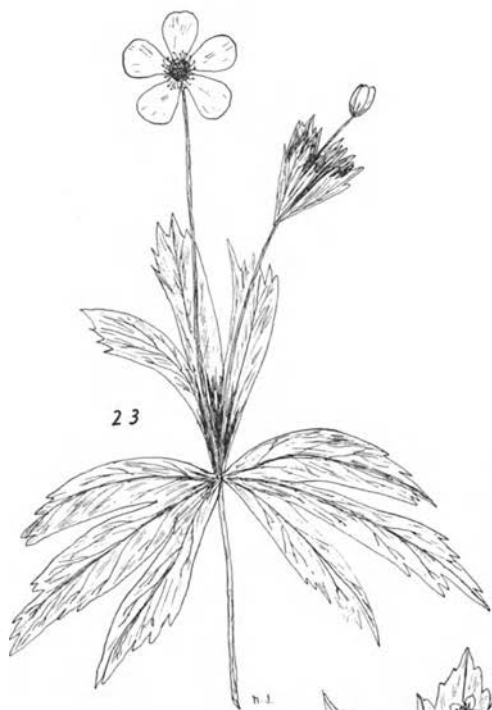
Flowers have 5 large, white, petal-like sepals which are separate and rounded at their ends. They are borne at the ends of the branches. Blooms in May through early August. The plant stands about 1 to 2 1/2 feet high and bears large, sharply toothed, deeply incised leaves. Found in moist woods. Not common.

24

VIRGIN'S BOWER

Clematis virginiana

An attractive plant which often climbs over other plants on wet banks or swampy areas of the park. Flowers greenish-white with 4 petal-like sepals, no petals, and many conspicuous stamens or pistils. They are arranged in dense, rather flat-topped clusters. Blooms in August, and in October a spherical shaped cluster of plumed, one-seeded fruits may be observed. The compound leaves have 3 dark green lobed or coarsely toothed leaflets. Not abundant.



GOLDTHREAD*
(Canker-root)*Coptis trifolia*

Crowfoot family

A delicate, solitary, little white flower of the deep woodlands. It has 5 to 7 white, petal-like sepals and many tiny filament-like petals which together with the numerous stamens and pistils give a somewhat furry appearance to the center of the flower. From the base of the plant emerge the slender, upright, leafless flowering stalk as well as the leaf stalks with 3 wedge-shaped, 3-toothed leaflets at their tips. Blooms in May through early July. The bright yellow, spreading, underground stems (rhizomes) have astringent properties and have been used in the past for medicine. Their color has given rise to the name "Goldthread" for this plant. Found in deep woods or bog margins, especially in acid soil. Very common.

RED BANEERRY
(Doll's Eyes)*Actaea rubra*

Crowfoot family

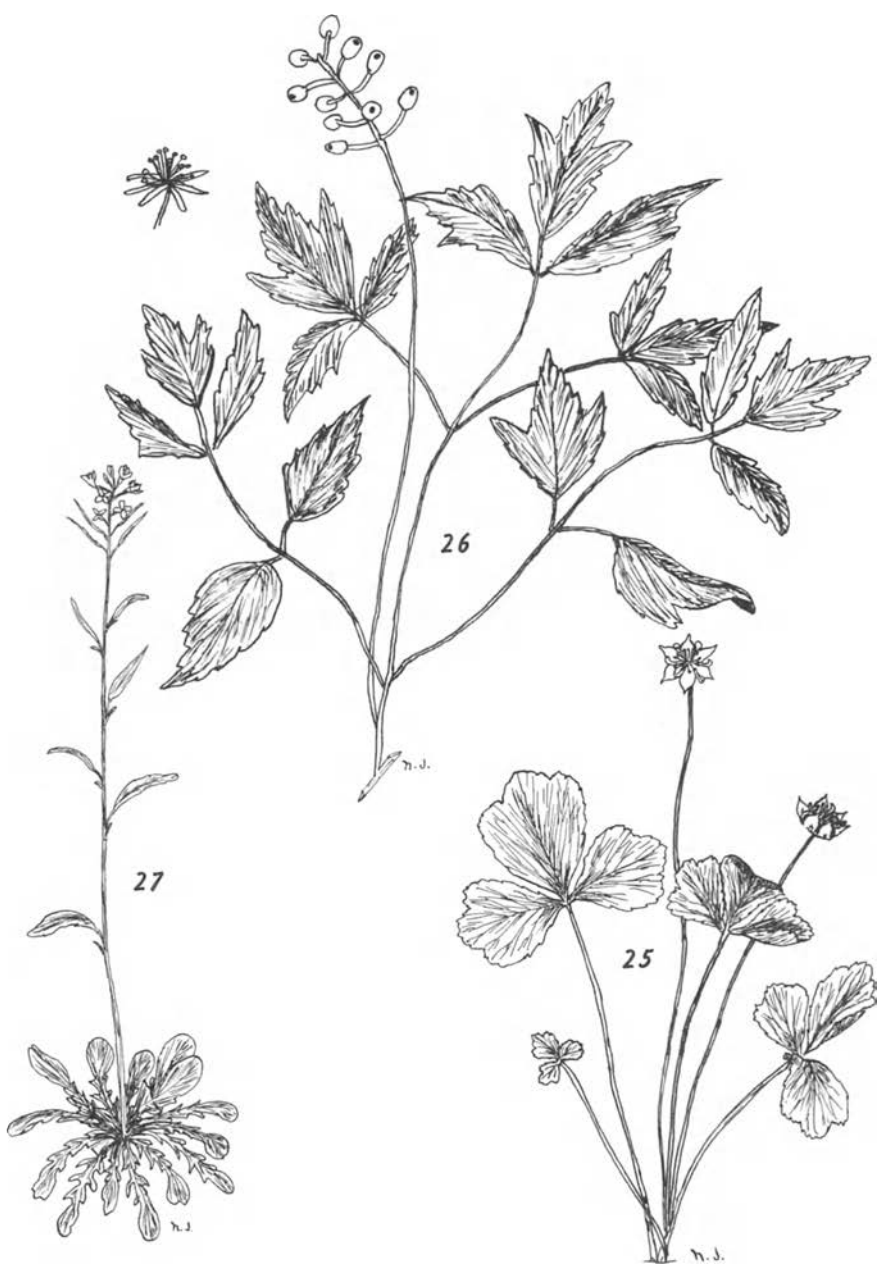
The large, dense clusters of shiny, red berries on this plant are probably unexcelled in beauty by those of any other plant in the park. The dense clusters of tiny, white flowers bearing many stamens and later the clusters of slightly elongated berries are borne on a single naked stalk arising near the lower portion of the plant. Flowers bloom in June-early July; berries ripen in August and September. The latter have a black "eye" on the outside end. They are poisonous. A variation of this species bears "enameled" white berries, but is otherwise similar. Leaf stalk branched, bearing compound leaves with 3 to 5 coarsely toothed and lobed leaflets. Plant somewhat shrubby in appearance. Common in wooded areas throughout the park.

LYRE LEAF ROCKCRESS

Arabis lyrata

Mustard family

Flowers small, white, 4-petaled (in a cross formation), arranged in a cluster at the top of an upright, leafy stalk up to 1 foot tall. At the base of the plant is a rosette of incised, lyre-shaped leaves. Stem leaves slender, toothed, and usually widest near the tip. Fruiting pods about 1 inch long, slender, and string-bean-like. Blooms in June and early July. Most commonly found in rock crevices.



DRUMMOND ROCKCRESS (Tall Rockcress)

Arabis drummondii

Mustard family

A tall upright plant frequently seen towering above the other vegetation in its rocky or gravelly habitat. The 1 to 1½ foot, unbranched stem bears a cluster of tiny, white, cross-shaped flowers which eventually become very slender upright pea-pod-like fruits. Blooms May through early August. The fruits are typically observed while the plant is still flowering. The long, tapered leaves along the stem clasp the latter and frequently have 2 ear-like lobes extending behind the points of attachment. Commonly found along rocky shores or in open fields.

ROUNDLEAF SUNDEW

Drosera rotundifolia

Sundew family

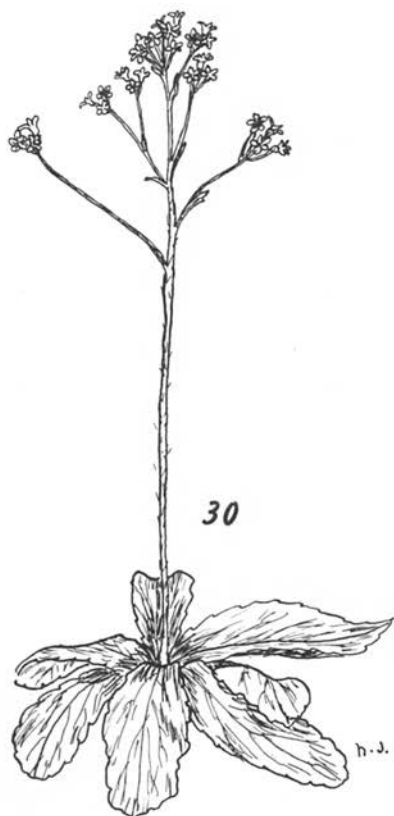
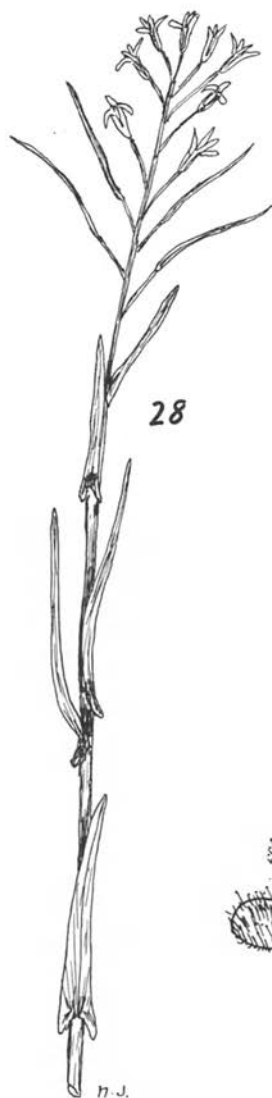
Like many of the bog plants, the interest of the sundew lies in the leaves rather than the flowers. Not only are they beautiful to look at, but the fact that they trap and consume insects makes them somewhat dynamic among plants. The tiny, almost circular leaf blades have many long, fine, red hairs and they exude tiny droplets of a clear liquid at their tips, giving the plant its name. With these mechanisms the insect is attracted, trapped and assimilated. The leaves are attached in a rosette pattern at the base of the plant and usually hug the ground. The naked flowering stalks are a few inches tall and bear small, white, usually 5-petaled flowers in a one-sided, spike-like arrangement. Blooms in July and August. Found mostly in bogs.

EARLY SAXIFRAGE (Virginia Saxifrage)

Saxifraga virginensis

Saxifrage family

Tiny star-like white flowers with 5 petals and 10 conspicuous yellow stamens are grouped in small, dense clusters at the terminus of several slender stems, ½ to 1 foot tall. The latter are branched near the top. Blooms June - early July. Leaves are fleshy and form a rosette at the base of the plant. Most commonly found in rock crevices.



THREE-TOOTHED SAXIFRAGE (Threebristle Saxifrage)

Saxifraga tricuspidata

Saxifrage family

The clusters of white flowers, usually dotted with red or orange, are strikingly beautiful especially when seen against their usual background of rock. The short basal portion of the stem creeps along the ground somewhat and bears a very crowded cluster of dusty green, fleshy or leathery leaves each of which is terminated by three teeth. The longer upright portion of the stem ($1/2$ to 1 foot tall) bears only a few scale-like leaves along its length and the flowering cluster at the top. It is not common on Isle Royale, but many specimens may be observed in bloom in July at Scoville Point.

WILD STRAWBERRY*

Fragaria virginiana

Rose family

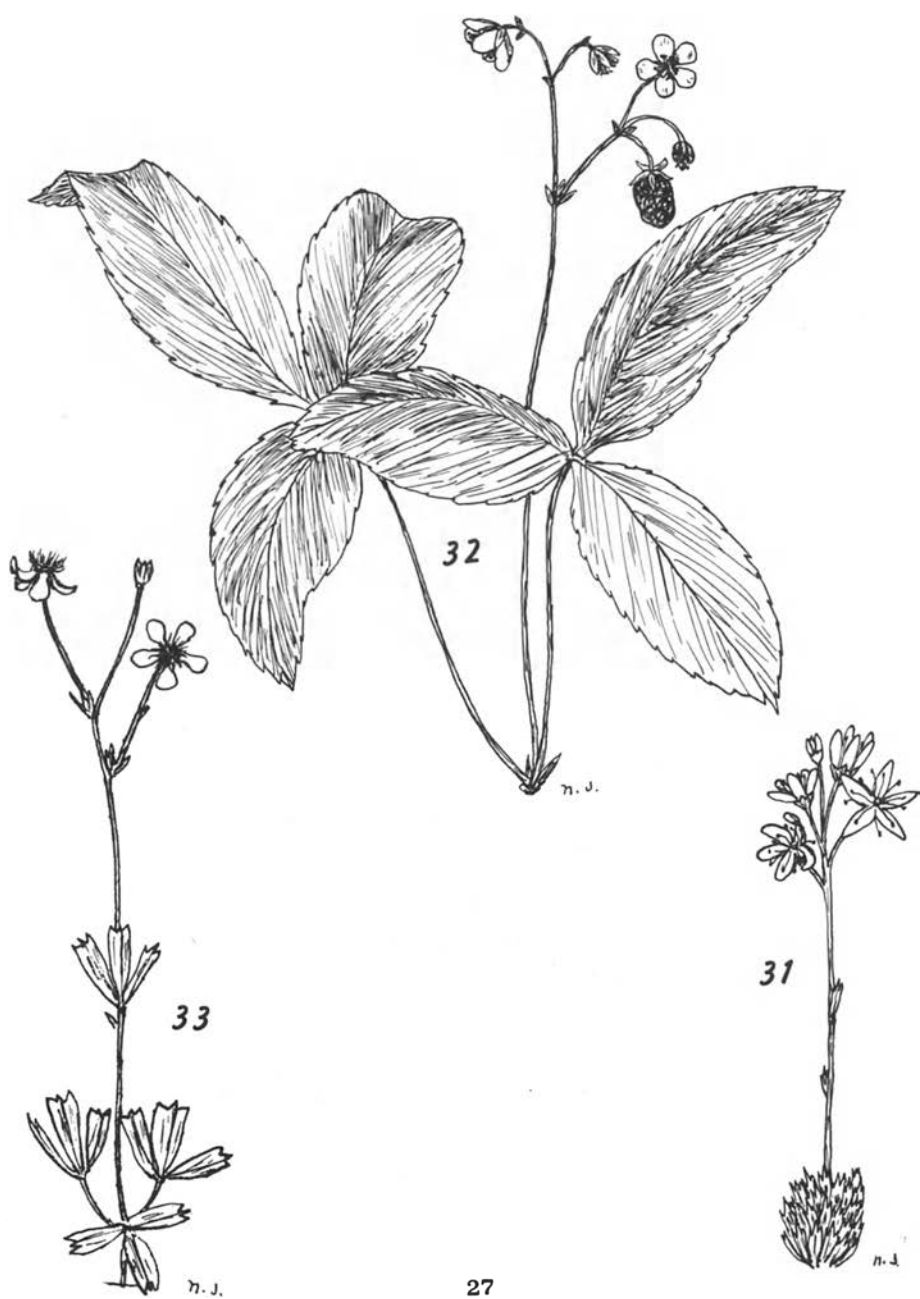
This plant bears one of the most delicious of all wild fruits. Flowers are white, about $1/2$ inch in diameter. Blooms from June-mid July, fruiting in July. Leaves compound, each consisting of three coarsely toothed leaflets borne on slender stalks which arise from the base of the plant, as do the flowering stalks. New plants arise from runners which creep along the ground surface. A very common plant, especially in open fields, rock crevices, and lightly wooded areas.

THREE-TOOTHED CINQUEFOIL*

Potentilla tridentata

Rose family

Small white flowers with many conspicuous stamens. Flowers borne in loose clusters at the top of the upright flowering stems. Blooms in July and August. Plant from $1\frac{1}{2}$ to 10 inches high bearing compound leaves with three leaflets. Each leaflet has 3 teeth at its tip, hence the name. One of the most common flowers to invade rock crevices.



DEWBERRY
(Dwarf Raspberry)

Rubus pubescens

Rose family

More conspicuous and better known in the fruiting stage than in flower. The moderately small, pink to white flowers are rarely more than three in number. Petals number 5 to 7. The green sepals bend downward away from the petals. The blooms appear from June through mid-July. In late July and August the deep purplish red, raspberry-like fruit is displayed. The latter is sweet, juicy, and edible but does not separate from its receptacle as does the common wild raspberry. The plant is a very low shrub, seldom more than 8 inches tall. It has compound leaves each usually consisting of 3 leaflets with sawtooth margins. Common in moist woodlands and swamps.

WESTERN THIMBLEBERRY
(Salmon Berry)

Rubus parviflorus

Rose family

A northern shrub bearing cup-shaped white flowers about 1 inch in diameter with 5 petals and 5 sepals. Blooms from late June through July. Fruit bright red, raspberry-like, fitted loosely to its dome-shaped receptacle like a red cap perched upon a man's head. It is easily removed from the receptacle. The edible fruit, relished by some but distasteful to others, is highly prized for home-made jam. It matures from August through early September. The shrub is upright and much branched, varying from 2 to 5 feet tall. Leaves very large, maple-like, usually 5 lobed with very prominent veins. Probably the most common shrubby ground cover in the park. Found almost everywhere except on Passage Island where it is absent.

CREAM PEAVINE
(Cream-colored Vetchling)

Lathyrus ochroleucus

Bean family

Flower bonnet-shaped, similar to the garden variety of sweet pea, in blending shades of white and yellow. They are arranged in flat clusters along the flowering stem. Blooms in early summer. Plant a low trailing vine with tendrils at the ends of the compound leaf stalks. Compound leaves bearing several smooth, toothless, bristle-tipped, light green leaflets arranged along the leaf stalk. Flowers develop into pods resembling miniature garden peas. Found in open wooded areas.



WILD SARSAPARILLA

Aralia nudicaulis

Ginseng family

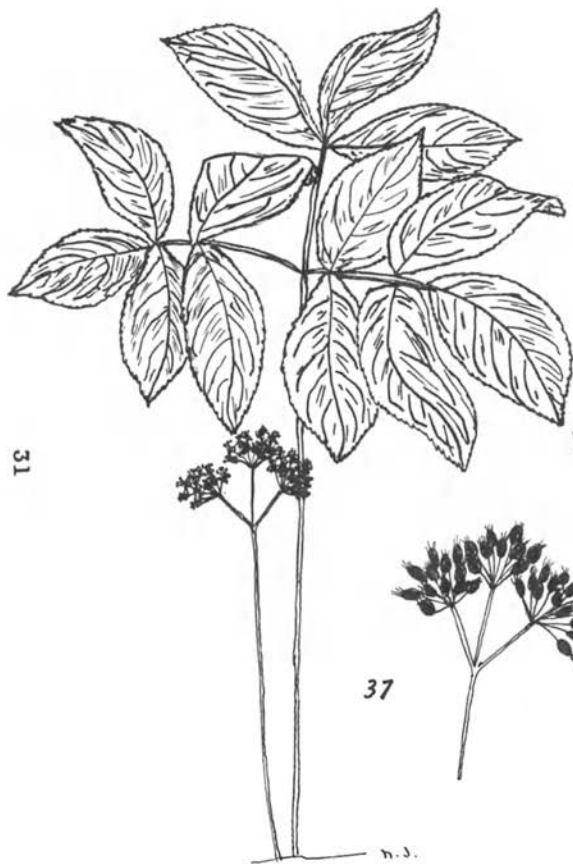
The very small flowers have greenish-white reflexed petals and conspicuous stamens. They are borne in a somewhat globe-shaped group at the end of each branch of the main flowering stalk. Blooms June - early July. Purplish black berries may be seen from late July through September. The flowers and leaflets are borne on separate stalks both arising from a short stem which barely arises above the ground. The leaf stalk, though it may appear otherwise, actually bears only one compound leaf having three branches, each of which in turn bears several leaflets. The flowering stalk is somewhat hidden by the latter and hence frequently goes unnoticed. The aromatic roots of this plant are frequently used as a substitute for the true sarsaparilla of beverage fame. Occurs in large continuous patches in the wooded areas of the park. One of the most common ground covers.

AMERICAN DEVILSCLUB

Oplopanax horridum

Ginseng family

The appearance of this shrub on Isle Royale is truly remarkable, for it appears nowhere else in the United States east of the Rocky Mountains. The entire plant is profusely armed with sharp prickles and anyone who ventures to walk through a thick stand of these would appreciate the plant's name. The small, five-petaled, greenish-white flowers are in dense clusters near the top. They bloom in June. The stem is from 3 to 9 feet tall and it, as well as its branches, are beset with many prickles. The leaves are large, palmately lobed, and quite prickly on the veins of the under side. Found only near Blake's Point, on Passage Island and in small patches on a few of the islands in the Rock Harbor area. Prefers rocky habitats.



COMMON COW PARSNIP

Heracleum lanatum

Parsley family

Probably one of the most conspicuous flowering plants on Isle Royale because of its size, large leaves, and large dense white flower clusters. Each small flower has 5 deeply notched petals of irregular size, in an arrangement called an umbel in which all of the flowering stalks originate from the same point at the end of a common stalk forming a flat-topped cluster. The umbel arrangement is characteristic of the Parsley family. In the cowparsnip the above mentioned umbels are in turn arranged in umbels, forming what is called a compound umbel. Blooms in July. Stem tall, hollow, ridged, and hairy. Leaves compound with three leaflets, each of which is large and deeply lobed. Very common throughout the park, particularly in damp locations.

40

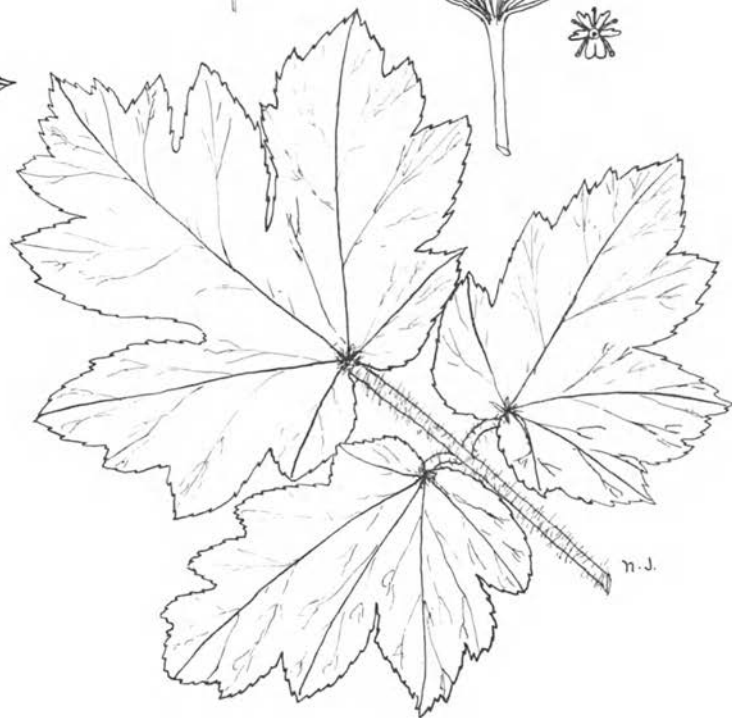
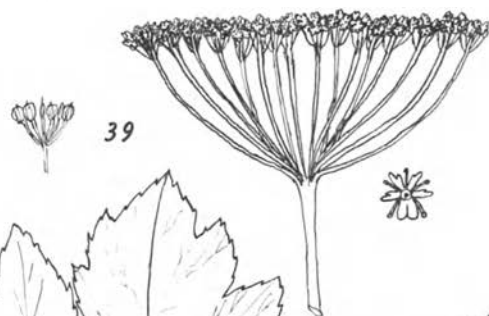
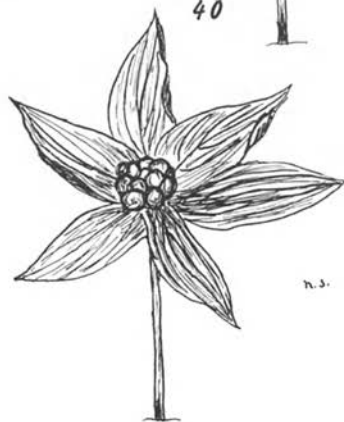
CANADA DOGWOOD

(Bunchberry)

Cornus canadensis

Dogwood family

What appears to be a single white flower is actually a cluster of tiny greenish-yellow flowers surrounded by 4 white leaves (which resemble petals), the white leaf arrangement being about 1 1/2 inches in diameter. Blooms June - July. Bright red cluster of berries (hence the colorful common name) mature in late July through September. Plants low, upright, 3 - 9 inches tall. Leaves usually in whorls of 6 on the blooming plants, 4 on the non-blooming ones. Ribs curved and nearly parallel to the leaf margins. The floor of much of Isle Royale's forest is spotted white with these flowers in early summer and spotted brilliant red with the berries in late summer. They form massive displays and are one of the most common flowers in the park. Prefer cool, damp habitats.



WOODNYMPH
(Ono-Flowered Pyrola)*Moneses uniflora*

Heath family

This jewel of the forest floor bears but a single, nodding flower on a slender stalk about 5 inches tall. The bloom is creamy-white, waxy, and star-shaped (six-pointed), with symmetry as perfect as a snowflake. The pistil is very prominent. It can be distinguished from the starflower (item 45) with which it might be confused by its thicker, more waxy, and more rounded petals. Blooms in July - August. The thin, shiny, somewhat rounded leaves are in whorls near the base of the plant. Found mostly in shady woody habitats.

SHINLEAF
(Waxflower Pyrola)*Pyrola elliptica*

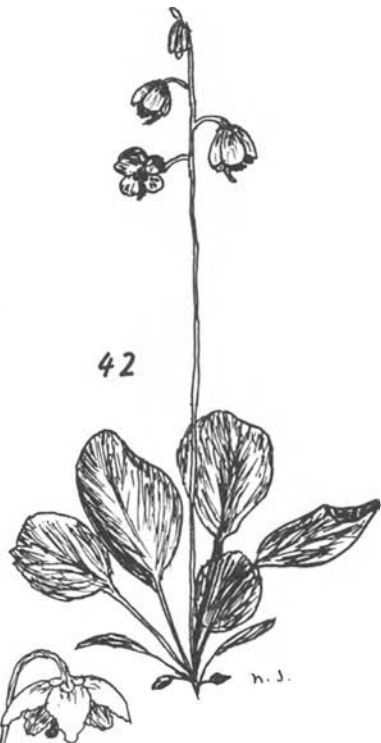
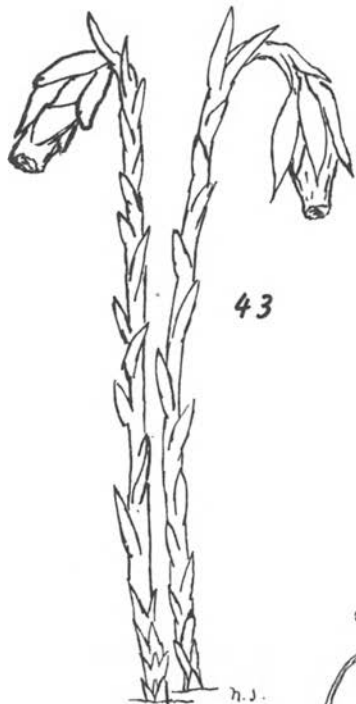
Heath family

The nodding, cup-shaped, cream-white flowers are arranged spirally around the top of a slender, naked stalk. The curved pistil projects considerably beyond the 5 petals and the stamens are reclined. Flowers very strongly and pleasantly scented, much like lilac. Blooming time early July - early August. At the base of the flowering stem is an irregular rosette-like leaf arrangement, the thin, somewhat oval-shaped leaf blades exceeding the leaf stalks in length. Total plant height from 6 - 10 inches. Common in wooded areas.

INDIAN PIPE
(Ghost Pipe)*Monotropa uniflora*

Heath family

A ghostly appearing plant of the deep forest floor. All parts of the plant are translucent white in color. The lone flower at the top of a short, fleshy, upright, scaly stem nods in such a way that the plant appears like a pipe. Lacking green chlorophyll, it is unable to manufacture its own food and hence is dependent upon other plants or decayed material for nutrition. Several stems frequently grow in clusters from a common mass of tangled roots. Blooms late July - early September. In fruiting, the nodding position is abandoned in favor of an upright one.



LABRADOR TEA*

Ledum groenlandicum

Heath family

An unusual bog shrub with clusters of small, white, 5-petaled, star shaped flowers arranged in dense, somewhat rounded clusters at the ends of the branches. Height of the shrub is about 1 to 2 1/2 feet. Branches somewhat sprawling. The evergreen leaves are truly singular and beautiful, as are many leaves of members of the Heath family. Their texture is like a soft, high-quality leather, the edges are nearly rolled under, and the color is a deep rich green. The underside is coated with a dense, white, wooly mat on the new leaves, the color becoming orange-brown as the leaves mature. The use of the leaves in the brewing of a tea accounts for the name. Found in most bogs and in other damp locations throughout the park. Blooms in June and early July.

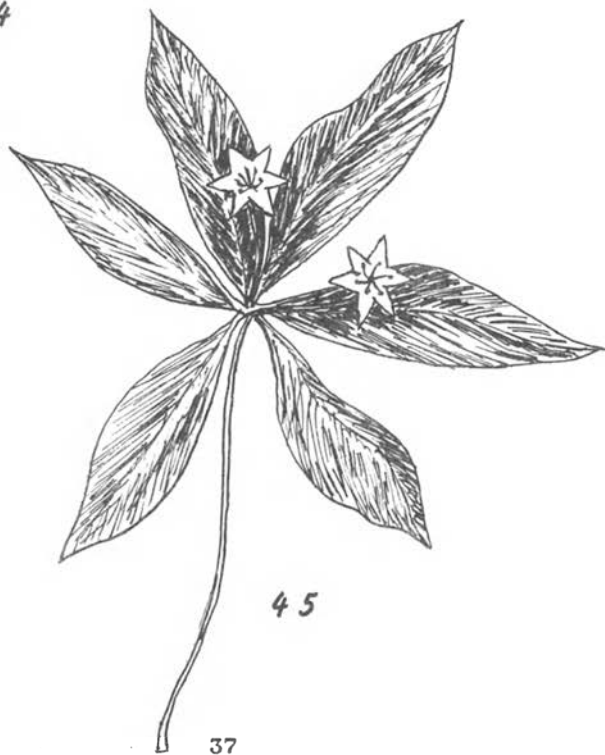
45

AMERICAN STARFLOWER

Trientalis borealis

Primrose family

The visitor who is unfamiliar with this delicate little white flower would surely name it Starflower at first glance. The flower, whose petals form a sharply pointed, 6 to 7 pointed star on a very slender stalk, blooms from about June through mid-July. The plant consists of an upright stem bearing a whorl of leaves a few inches from the ground from which the flowering stalks arise. Total height varying between 3 and 9 inches. Can be distinguished from the Canada Dogwood (which also has star-shaped white flowers above a whorl of leaves) by the fact that the latter flower forms a 4 pointed star and its leaves, like most Dogwoods, have curved ribs more or less parallel to the leaf margins. Common in woods and moist places throughout the island.



BOG BUCKBEAN

(Common Bogbean)

Menyanthes trifoliata

Gentian family

Found growing primarily in the floating sedge mats of bogs, this plant is an eye-catcher because of the exquisitely beautiful bearded white flowers which it bears in early summer. The five white petals, bearded with shiny white hairs, are joined at the base to form a somewhat trumpet-shaped flower. The flowers are borne in a heavy cluster at the end of a stalk which averages 6 inches in length. The compound leaves, each bearing 3 smooth, toothless, elliptic-shaped leaflets are borne on long stalks from the base of the plant. These leaves, suggestive of those of a bean plant, account for the plant's name.

UPRIGHT BINDWEED

(Dwarf Morning-glory)

Convolvulus spithameus

Morning-Glory family

A spot of white catching the eye of the visitor in open sunny areas of the park frequently turns out to be this member of the Morning-glory family. Unlike most of its relatives, this bindweed usually stands up under its own power. Flowers white, funnel-shaped, usually occurring singly. Blooms July and August. Leaves heart-shaped and blunt. Prefers dry open areas.

TURTLEHEAD

Chelone glabra

Figwort family

The elongated, white, two lipped flower, somewhat resembling the head of a turtle, is responsible for this plant's common name. Upper lip hood-like; lower lip faintly pink tinged, 3 lobed, and slightly downward drooping. Flowers in a dense spike near the top of the 1 to 3 foot tall, upright, smooth stem. Leaves dark green, slender, sharp-pointed, sharply toothed, and oppositely arranged. Blooms in late July through September along stream banks, lake shores, or swamps.



NARROW LEAF COWWHEAT

Melampyrum lineare

Figwort family

Flowers white, yellow-tipped, long and tubular shaped, resembling a fish with its mouth open. Although one of Isle Royale's most common plants, it goes frequently unnoticed because its flowers are small and inconspicuous, few in number, and somewhat hidden among the leaves. Flowers develop in the axils of the leaves from July to early September. Plants upright, about 4-11 inches tall. The long, gradually tapering leaves are oppositely arranged on the stem, the uppermost sometimes exhibiting sharp teeth or small lobes near the base. Common in rock openings, clearings and dry wooded areas.

50

FLAT TOP ASTER

(Tall Flat-Topped White Aster)

Aster umbellatus

Composite family

The flowering head is similar to that of the bigleaf aster except that the color is white (see item 101). The heads are arranged in a flat-topped group at the top of a tall, usually 3-4 foot, leafy plant. The leaves are slender and gradually taper to a point at both ends. Most common in moist woods and swamps.

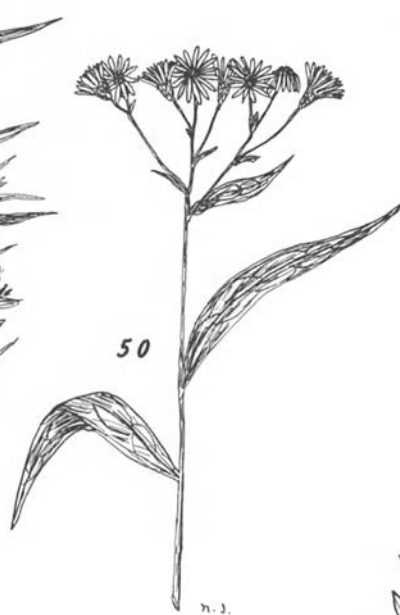
51

FIELD PUSSYTOES

Antennaria neglecta

Composite family

The small dull white, rayless flowering heads are grouped in a small cluster at the top of a single, upright flowering stalk, the latter bearing a few scale-like leaves and usually standing less than 1/2 foot tall. The larger leaves stemming from the base of the plant are slender; the broadest part being near the tip. Blooms in early spring in open fields and rocky areas. A similar species, *Antennaria plantaginifolia* is taller, has larger leaves and blossoms somewhat later in the year.



PEARLY EVERLASTING*

Anaphalis margaritacea

Composite family

Flowering head dense, pearly white, and arranged in tight clusters at the terminus of the upright stems. Blooms July to September. Stem usually 1 - 2 feet high, covered with a heavy coating of soft white down, and very leafy. Leaves long and slender, pale dusty green on top, downy white beneath. Even without its blossoms, this plant is set apart from its neighbors by the copious amount of white down all over the stem and leaves. The name, everlasting, refers to the blossoms which hold their color and form for many months — even through the winter. One of the park's most prolific plants, occurring mainly in open dry areas and rock crevices.

COMMON YARROW
(Milfoil)*Achillea millefolium*

Composite family

Small white flowers occur in very dense flat-topped clusters at the terminus of an upright hairy stem. Blooms throughout the summer and early fall. Aromatic. Leaves much incised, feather-like and alternately arranged. The plant's common name, milfoil, means thousand leafed, and it does indeed appear to have a thousand leaves. Along with harebells and 3-leafed cinquefoil, it is one of the first of the common flowering herbs to invade barren rock crevices. Also very abundant in fields, clearings and dry woods.

WHITE RATTLESNAKE ROOT

Prenanthes alba

Composite family

Flowering head tubular, drooping, purplish-white in color and arranged in dense clusters near the top of the stem. Blooms in August and September. The smooth, upright, purple tinted stem is 2 to 4 feet tall. The deep green leaves are variable in form but mostly deeply divided, often three lobed, and coarsely toothed. Found in open wooded areas.



YELLOW

55

BLUE BEAD LILY

(Yellow Clintonia)

Clintonia borealis

Lily family

Two to several greenish-yellow, nodding, bell-shaped flowers grow near the tip of a long slender stalk about $\frac{2}{3}$ to 2 feet high. Typical lily-like leaves originate from the base of the plant. Blooms in June through early July. The plant was named after DeWitt Clinton, former governor of New York State. In August it forms large bead-like berries with a striking deep blue color, thus giving rise to the other name, blue-bead lily. A flower of the north and very suited to Isle Royale's cool, moist climate. Very common in woods or moist locations in the park.

56

YELLOW LADY SLIPPER*

Cypripedium calceolus

Orchid family

A rather rare but very conspicuous orchid of exquisite beauty. Like the moccasin flower, a large portion of the bloom consists of a large, golden yellow, sac-shaped lip. The sepals and petals are bronzy and the latter are somewhat twisted. The flowers are slightly fragrant. Blooms in June and July. Stems 1 to 2 feet high, upright, bearing several slender lily-like leaves. Found in bogs or moist woods.

57

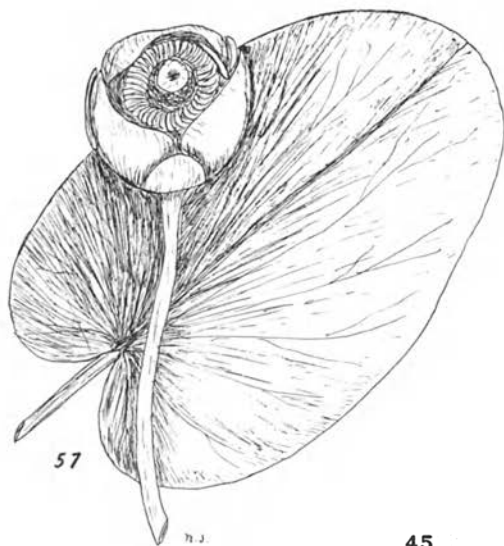
YELLOW POND LILY

(Spatterdock)

Nuphar variegatum

Water Lily family

A common water plant with a bright yellow cup-shaped flower, with large stamens and pistils compressed together in rows within. Blooms throughout the summer. The heart-shaped leaves, untoothed and smooth, are attached by stout hollow stalks and float on the water's surface. They are a food much prized by the moose. Found in ponds and along lake margins throughout the park.



MARSH MARIGOLD

Caltha palustris

Crowfoot family

Patches of these showy yellow flowers brighten many of the park's swamps in early summer and are especially beautiful when appearing against a background of the fern-like horsetails which frequently accompany the Marshmarigold. Flowers lack petals but have 5 to 9 brilliant yellow, petal-like sepals. Stems thick and hollow; leaves large and heart-shaped. Sometimes eaten as greens. Common in swamps, along stream banks or in other wet locations.

BARREN STRAWBERRY

Waldsteinia fragarioides

Rose family

Flowers small, bright yellow, 5-petaled, bearing many stamens. Several are grouped together at the top of an almost naked flowering stalk which arises from the base of the plant. Blooming time is June and early July. Compound leaves consist of 3 wedge-shaped leaflets at the end of a long, slender stalk also arising near the ground. Although this plant resembles the common wild strawberry, it lacks the highly prized, fleshy fruit of the latter. Thus, it is named the barren-strawberry. Common in a variety of habitats but prefers acid soil.

SHRUBBY CINQUEFOIL

(Bush Cinquefoil)

Potentilla fruticosa

Rose family

An attractive, low (about 1 to 2 feet high), dense shrub beautifully adorned with bright yellow strawberry-like blossoms about $\frac{3}{4}$ -inch in diameter. Flowers are in small clusters at the branch terminus. They bloom throughout the summer. Stems are woody, their surfaces being light brown and shreddy. The leaves are compound, each usually consisting of 5 very narrow leaflets arranged somewhat like the fingers of a hand. The latter are coated with white silky hairs which impart a silvery sheen to their surface. Most frequently found in rock crevices and gravel beaches along the Lake Superior shores. Not very abundant.



SWAMP CANDLE
(Swamp Loosetrife)*Lysimachia terrestris*

Primrose family

This plant truly gives the appearance of yellow candles in the swamp. The yellow, star-like flowers are arranged in a slender, tapered, spire arrangement along the top of the stem. Blooms in July and August. Stem upright, slender, sparingly branched and leafy. Leaves long, slender, sharp-pointed and oppositely arranged. Any distortion observed in the flowers, or any bulb-like growth observed on the stem is probably due to a virus which commonly infects this plant. Very common in swampy areas.

GREAT MULLEIN
(Flannel Plant)*Verbascum thapsus*

Figwort family

A tall upright plant typically seen towering above the surrounding vegetation in dry, rocky areas or open fields. Remarkable for its overall velvet coating of hair giving it a dusty green appearance. The tall, stout, unbranched stem bears a spike of flowers at its crown only a few of which bloom at any one time. Blooms July through September. The large, sharp-pointed, stalkless leaves decrease in size toward the top of the stem.

BUSH HONEYSUCKLE

Diervilla lonicera

Honeysuckle family

The yellow or yellow-orange tubular flowers flare into 5 lobes. They appear in groups of from one to a few near the terminus of the branches. Blooms July and August. Plant a low, woody, upright shrub about 1 to 2 feet high. It bears oppositely arranged leaves (typical of the Honeysuckle family) which are about 1 inch broad and taper gradually to a very sharp point. A very common shrub in open dry clearings or rocky areas.



BALSAM GROUNDSEL
(Ragwort)*Senecio pauperculus*

Composite family

Flowering heads deep yellow, the rays squared and notched at their tips. Blooms June through August. The stem is upright, tall, and slender, bearing stalked, toothed leaves at the base and stalkless, incised leaves above. Found in dry, rocky, open or lightly shaded areas. Very common.

CANADA HAWKWEED

Hieracium canadense

Composite family

Flowering heads yellow and dandelion-like with outer rays rectangular, fringed and arranged in loose clusters at the top of the stem. Blooms July through September. Stem hairy, upright, unbranched, about 1 to 2½ feet tall, with somewhat slender, pointed, sparingly-toothed leaves arranged alternately along the stem. Common in dry open areas.



Lilium philadelphicum

Lily family

Flowers varying from lemon yellow to orange to scarlet. What appears to be 6 identical petals are really 3 sepals and 3 petals, as a closer inspection will reveal. Petals and sepals both narrowed to a stalk at the base and spotted inside near the base with a deep purplish brown. Flowers bell shaped, occurring in numbers of from one to a few at the top of the stem. Stamens and pistils prominent. Blooms July and August. Plant upright and from 1 to 1½ feet tall. Leaves narrow with veins paralleling the leaf axis, occurring in whorls but occasionally singly. Few flowers in the park produce such vivid splashes of color as do these in the open fields and dry rocky ridges.

EASTERN COLUMBINE

Aquilegia canadensis

Crowfoot family

This plant closely resembles the cultivated variety. The flower has 5 elongated, reddish, sac-shaped petals which extend backward along the stem and terminate in long curved spurs. The five yellow-green to reddish appendages which spread outward and somewhat forward, are the sepals. The flower nods so that the spurs point upward and the sepals downward. Blooming time in June and early July. Stems slender and branched, about 1½ to 2 feet high. Leaves compound, each containing 3 leaflets with somewhat rounded lobes. Found mostly in dry rocky areas. Not too common.

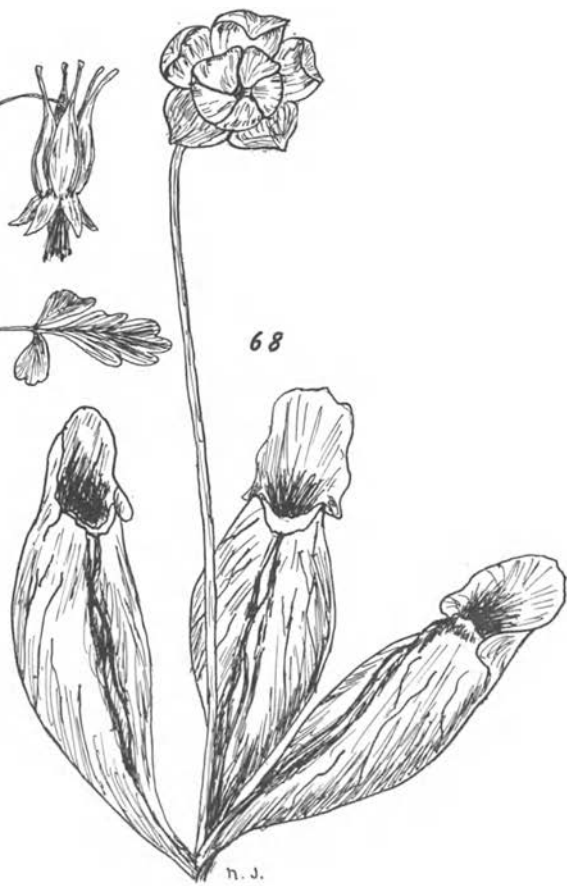
PITCHERPLANT

(Sidesaddle Flower)

Sarracenia purpurea

Pitcher-plant family

The pitcherplant is an interesting oddity among plants which seldom fails to excite the curiosity of the observer. Not only does the plant have strange flowers and leaves, but to add to its peculiarity it is insectivorous. The lone nodding flower borne at the end of a long, sometimes bent stem (about 1 foot high) is brownish-red and has a large greenish umbrella-shaped pistil at its center. Blooms in July to August. The leaves radiating out from the base of the plant are shaped like curved pitchers, are strongly keeled on one side, and are green to purple with red veining in an intricate design. The pitchers hold rainwater in which insects are drowned and absorbed as nutrition for the plant. Hairs matted downward on the inside leaf surface discourage the insects escape. Found mostly in bogs throughout the park.



JEWEL WEED
(Spotted Touch-Me-Not)*Impatiens biflora*

Touch-me-not family

Flower orange with reddish spots, trumpet-shaped and suspended somewhat like an ornament hanging from a Christmas tree. Blooms from late July through September. The flowers are diffusely scattered throughout the leafy, freely branching plant whose height varies from 2 to 5 feet. When the mature fruiting capsule is touched, the seeds are explosively expelled, a behavior which accounts for the common name, "touch-me-not". Found along streams, swamps and lake margins.

DOUGLAS' HONEYSUCKLE
(Limber Honeysuckle)*Lonicera dioica glaucescens*

Honeysuckle family

A twining or somewhat sprawling shrub bearing yellow to orange-scarlet trumpet-shaped flowers in clusters which stem from the center of a cup shaped terminal leaf. Blooms in June and early July. Produces a salmon colored berry in August and September. Leaves untoothed and oppositely arranged. Found in rocky, dry locations. Somewhat common.



ROSE MANDARIN

(Rosy Twistedstalk)

Streptopus roseus

Lily family

Flowers purplish-pink, bell-shaped and usually singly suspended beneath the leaves on a slender "twisted" stalk. Blooms in June and early July; bright red, somewhat 3-lobed berries mature in August and hang like earrings from the stem. Flowers and fruit frequently unseen unless one looks underneath the gracefully downcurving branches. Leaves stalkless, parallel ribbed and sharp pointed. Plant usually from 1 to 2 feet high. Found in moist woods. Common.

MOCCASIN FLOWER*

(Pink Lady Slipper)

Cypripedium acaule

Orchid family

One of the largest and showiest of the orchid family, easily recognized by the large bulbous sac which is about $1\frac{1}{2}$ to $2\frac{1}{2}$ inches long and forms the lip of the flower. The solitary pink flower grows at the top of a naked stalk about $\frac{1}{2}$ to $1\frac{1}{2}$ feet tall. Two lily-like leaves arise from the base of the plant. Found blooming in early summer in wooded areas of the park. Not common.

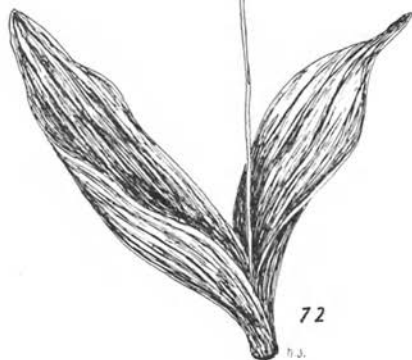
PALE CORYDALIS

(Rock Harlequin)

Corydalis sempervirens

Fumitory family

A flower outstanding for its unique shape and equally unique and beautiful combination of colors. Flowers elongate sac-shaped, attached to the stalk at the side of the "sac" near the bottom, with the open end hanging somewhat downward and flared. The color is pale rose, tipped with bright yellow. Flowers somewhat scanty arranged near the almost naked ends of the branches. Blooming time is June and July. Plant about 1 to 2 feet high, pale dusty green, bearing divided and deeply incised leaves. Seed pods erect, slender and string-bean-like. The name, corydalis, is from the Greek, meaning crested lark. Not too common. Most frequently found in dry rocky crevices.



PRICKLEY ROSE

Rosa acicularis

Rose family

Flowers pink, somewhat saucer-shaped, about 1 to 1½ inches in diameter. Blooming time July and August. The fruits, known as hips, are tomato red, somewhat pear-shaped, and one-seeded. They appear in late summer. Plant shrubby, very prickly throughout, about 1 to 2 feet tall. Leaves compound with approximately oval-shaped, toothed leaflets. Very common throughout the park in open fields and rocky areas.

FIREWEED

Epilobium angustifolium

Evening Primrose family

The vivid pink-to-magenta, spire-like floral arrangement atop this tall upright plant is an impressive display of color in open or lightly shaded areas. The flowers have 4 round, somewhat stalked, petals and 4 darker colored, slender sepals. They are arranged spirally around the top of the stem. Blooms in July and August. The 3 to 6 foot, upright, reddish stems bear slender, toothless, willow-like leaves, alternately arranged. Frequently one of the first plants to invade a burned area, it is appropriately named fireweed. Moderately common throughout the park.

COMMON PIPSISSEWA
(Prince's Pine)*Chimaphila umbellata*

Heath family

The sweet scented, waxy flowers are cream tinged with pink, and each bears a large green pistil in its center. They are arranged in clusters at the top of a long slender red stalk. Blooms in late July to early September. Grows low to the ground from underground stems. Leaves evergreen, very shiny and waxy, thick and leathery and are arranged in circles (whorls) about the low stem. Probably no other foliage in the park exceeds in beauty the leaves of the pipsissewa. Common in dry woods throughout the park.



PINK PYROLA

(Alpine Pyrola)

Pyrola asarifolia

Heath family

Similar to Shinleaf (see item 42) except that the flowers are pink and the leaves somewhat circular or heart-shaped, shiny and thicker than the latter. Blooms in July through early August. (not illustrated)

BOG LAUREL

(Bog Kalmia)

Kalmia polifolia

Heath family

An exceedingly handsome shrub of the bogs with dense clusters of showy pink saucer-shaped flowers with 5 pointed lobes forming at the branch terminals. Stems branched, 2-edged, about 1 to 2 feet tall. Contributing greatly to the beauty of this shrub are the highly glossy evergreen leaves which are very noticeably whitened on the undersides. The leaf margins are toothless and considerably rolled backward. Very common in bogs where they often form a beautiful and intense display in June and early July.

BEARBERRY

(Kinnikinnick)

Arctostaphylos uva-ursi

Heath family

A low plant which creeps along the ground with small pinkish-white lantern-shaped flowers in small clusters at the ends of the branches. Bright red berries form in late summer. Short prostrate leafy branches come from horizontal underground stems. Leaves shiny, leathery, toothless, about $\frac{3}{4}$ inch long and very numerous. This plant is one of the first to invade the bare rock areas of the park. Common in dry open areas.

19



80

BLUEBERRY

Vaccinium angustifolium

Heath family

Few people would fail to recognize this low shrub in late summer because of the sweet, delicious berries that it bears. In early spring the small flowers are pink and lantern-shaped. The stems are woody and densely branched, usually not exceeding $1\frac{1}{2}$ feet high. The leaves are moderately slender, untoothed, and somewhat pointed at both ends. A very common shrub in dry, rocky, open areas.

81

SPREADING DOGBANE

Apocynum androsaemifolium

Dogbane family

A shrub-like plant with conspicuously red stems and branches bearing clusters of small, pink, bell-shaped, fragrant flowers at their ends. The leaves are smooth, toothless, and oppositely arranged on the stems. The beautifully colored dogbane beetle is frequently found in association with this plant. It grows in the dryer, somewhat more open areas of the park such as on the Greenstone Ridge. Blooms in early summer.

82

TWINFLOWER

Linnaea borealis

Honeysuckle family

Flowers pink, elongated bell-shaped, 5-lobed, about $\frac{1}{2}$ inch long, nodding, and occurring in pairs at the terminus of a slender stalk about 2 to 4 inches high. Blooms July and August. Leafy stems creep along the ground from which the upright flower-bearing stalks arise. Leaves somewhat leathery, shiny, round and shallowly and sparsely toothed mostly near the tip. Widely acclaimed as a favorite among park visitors because of its delicate beauty. Forms massive carpets in woods and damp locations. One of the park's most common flowers.



n. d.

n. s.

SKUNKCABBAGE

Symplocarpus foetidus

Arum family

Although the summer visitor rarely sees the flower of this early bloomer, the unusually large, thick stalked, veiny leaves never fail to catch his eye in the swampy areas. If he is not already familiar with this plant it certainly will arouse his curiosity. The flowering spike, called a spadix, is very fleshy, the flowers themselves being small and lavender colored. A greenish-yellow leaf-like structure, called a spathe, streaked and blotched with purple, envelops the spadix. The spathe's top folds down like a hood over the top of the spadix. Blooms in early spring. The leaves which arise directly from the ground are rolled into an upright cylinder at blooming time. Later they develop into very large heart-shaped leaves which resemble those of rhubarb. The name, skunk cabbage, refers to the foul odor emitted by the plant when broken, especially in the spring. Can be seen in almost every swamp.

BLUE-EYED GRASS

Sisyrinchium angustifolium

Iris family

A plant easily mistaken for a grass and growing in a similar environment, but bearing near the top a few rather attractive, symmetrical, blue flowers. The flower appears to have 6 identical divisions, but only 3 of these are petals while the others are sepals. Each of the divisions has a bristle-like tip. The center of the flower is marked with a six-pointed star. Blooms in July and early August. Stems flat, winged, and between $1\frac{1}{2}$ and $1\frac{1}{2}$ feet tall. Leaves very narrow and grass-like. Inhabits fields, thickets and rock crevices.



83



84

WILD IRIS

(Blue Flag)

Iris versicolor

Iris family

A large showy flower having three large, somewhat drooping, violet-blue sepals with darker colored veins and with yellow coloring near their base, and 3, less conspicuous, upright, violet-blue petals. Flowers borne either at the top of a stout, upright stalk, 2 to 3 feet high, or on one or more branches therefrom. Blooms June and July. Leaves long, slender, grass-like, up to about 1 inch wide. Common in swamps or along lake shores.

PURPLE FRINGED ORCHID*

Habenaria psycodes

Orchid family

A very conspicuous and showy flowering cluster, narrowly cylindrical in shape and bearing purple flowers distinguished by the unusual 3-lobed fringed lips. Blooms in July and early August. Flowers borne at the top of a single upright stalk about 1½ to 3 feet high and bearing slender grass-like leaves which clasp the stem. Found in swamps and other damp locations. Not common.

SPOTTED CORALROOT

(Summer Coralroot)

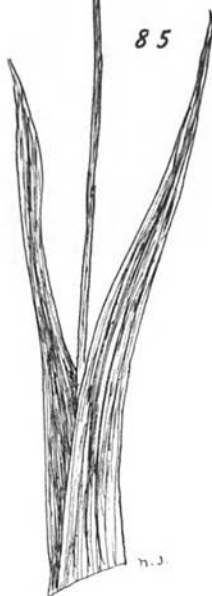
Corallorhiza maculata

Orchid family

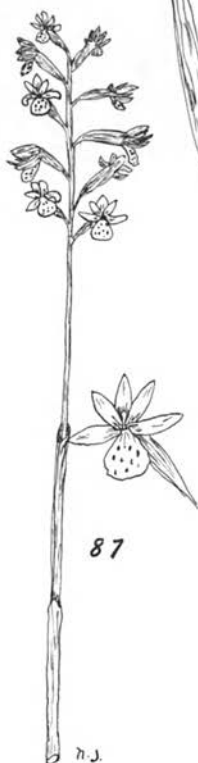
Like all of the coralroots in the park, this orchid is entirely lacking in green chlorophyll and derives its sustenance entirely from decaying material in the soil. The flowers are bronzy-purple with a white downward hanging lip spotted with purple. They are arranged in a spike at the top of the stem. The latter is bronzy, upright, unbranched, leafless and about 1 foot tall. It bears sheath-like scales. Stems usually found in clusters. As the common name implies, the root resembles coral. This is the largest of the coralroots in the park. Blooms in July in wooded areas.



85



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87

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86

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BLUE - VIOLET - PURPLE

88

STRIPED CORALROOT*

Corallorhiza striata

Orchid family

Similar to spotted coralroot except that the flowers are conspicuously striped with purple. It is the most striking of the coralroots. Blooms in June and early July in wooded areas.

89

CALYPSO ORCHID

(Fairyslipper Orchid)

Calypso bulbosa

Orchid family

A very beautiful and delicate orchid seen only by early summer visitors in the park. The solitary bronzy-purple flower borne at the top of an almost naked stalk has a spoon-shaped lip spotted with dark purple and bearing a yellowish beard within. The sepals and petals are twisted and radiate upward and outward from the lip. A single leaf stems from the base of the plant. The name, calypso, is that of a Greek goddess. Very common in June in cool mossy woods.

90

ROCK CLEMATIS

(Purple Clematis)

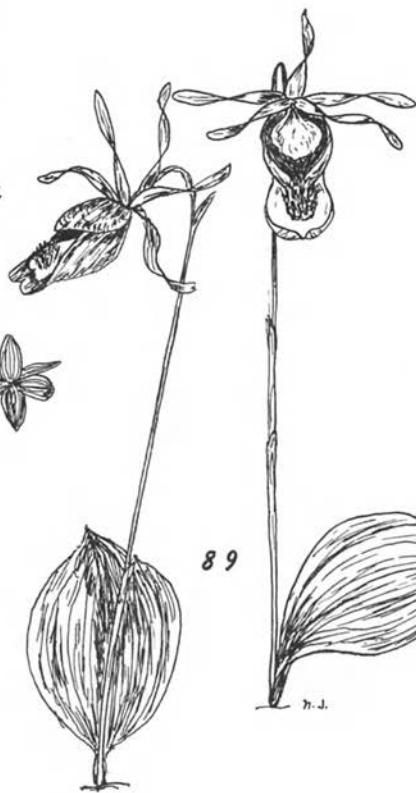
Clematis verticillaris

Crowfoot family

A beautiful and delicate lavender colored flower growing as a sprawling or climbing plant similar to virginsbower (see item 24). Lacking petals, the solitary flowers have 4 lavender petal-like sepals in a somewhat flimxy, bell-shaped arrangement about 1 to 2 inches long. Blooms in May and June. In late summer curious spherical clusters of plumed, one-seeded fruits may be seen. The long-stalked compound leaves have 3 more or less coarsely toothed leaflets. Grows most commonly in rocky and open wooded areas.



88



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BEACH PEA
(Maritime Peavine)*Lathyrus maritimus*

Bean family

Flower bonnet-shaped, similar to the garden variety of sweet pea, in blending shades of blue, rose, and white. Flowers arranged in flat clusters along the flowering stalk. Blooms throughout the summer. Plant a low trailing vine with tendrils at the ends of the compound leaf stalks. Compound leaves bearing several smooth, toothless, bristle-tipped, light green leaflets arranged along the leaf stalk. The flower develops into a pod resembling miniature garden peas. The peas are edible. Found mostly along sandy or gravelly lake shores.

VETCHLING
(Marsh Peavine)*Lathyrus palustris*

Bean family

Similar to the above, the most conspicuous difference being that the leaflets of vetchling are considerably more slender. (No drawing.)

FRINGED POLYGALA
(Gay Wings)*Polygala paucifolia*

Milkwort family

One of the most common and certainly among the most beautiful flowers on Isle Royale. The flower consists of two lateral, rose-purple, wing-shaped appendages and a central lighter colored, tube-shaped part containing the stamens and pistils and fringed at the end. One to four flowers borne at the top of the stem. Blooms in June through early July. Plant low (about 3 to 5 inches high), upright, bearing moderately broad untoothed leaves near the top of the plant and small scale-like leaves below. Most common in damp, somewhat shady locations.



Viola adunca

Violet family

Flowers violet colored. Of the 5 petals, one hangs downward like a lip, two extend laterally, and the remaining two extend more or less upward and are reflexed to the rear. Blooms in May through early July. The plant is low (about 5 to 6 inches), is somewhat branched and bears pear-shaped leaves. Most commonly found in rock crevices and rock openings.

This is one of the more common species of violets on Isle Royale, but at least 8 other species are present. Most of these are quite similar and difficult to distinguish from one another. Therefore, only this species will be presented representing the group.

95

COMMON SKULLCAP
(Hooded Willow Herb)*Scutellaria galericulata*

Mint family

Flowers blue, long and tubular, hooded and bearing a down-hanging lip. They are borne on the stem at the points of leaf attachment. Blooms in July and August. Stem smooth, upright, sometimes sparingly branched, square in cross-section, and about 1 to 2 1/2 feet tall. The moderately slender, toothed leaves taper to a point and are opposite on the stem. Common along stream banks and other damp locations.

96

SELF HEAL
(Heal-All)*Prunella vulgaris*

Mint family

Purple flowers borne with many bracts on the upper portion of the stem. Each flower is two-lipped; the upper one being hood-like, the lower one hanging and fringed. Like typical mints, the stem is hairy and square in cross-section and the moderately slender and tapered leaves are oppositely arranged on the stem. Stem usually unbranched, upright, and about one foot high. Frequently seen in late summer in the more open areas of the park.



WILD BASIL

Satureja vulgaris

Mint family

Flowers small, pink-purple, tubular, two-lipped, and arranged in circles about the stem above the uppermost leaves. Blooms throughout the summer. Plant low (usually less than $\frac{3}{4}$ foot), unbranched and hairy. The leaves are mostly toothless, conspicuously veined, and oppositely arranged on the stem. Very common in dry open areas.

AMERICAN MINT

(Field Mint)

Mentha arvensis

Mint family

Flowers tiny, purplish-pink, bell-shaped, and arranged in dense, rounded clusters about the stem where the leaves attach. Blooms in July and August. Stem upright, hairy, square in cross-section, $\frac{2}{3}$ to 2 feet tall. Leaves opposite, toothed, and sharp pointed. This plant, the only mint native to North America, emits a very pleasant peppermint odor which permeates the area in which it grows. It is quite variable in form. Found most commonly along stream banks or other damp locations.

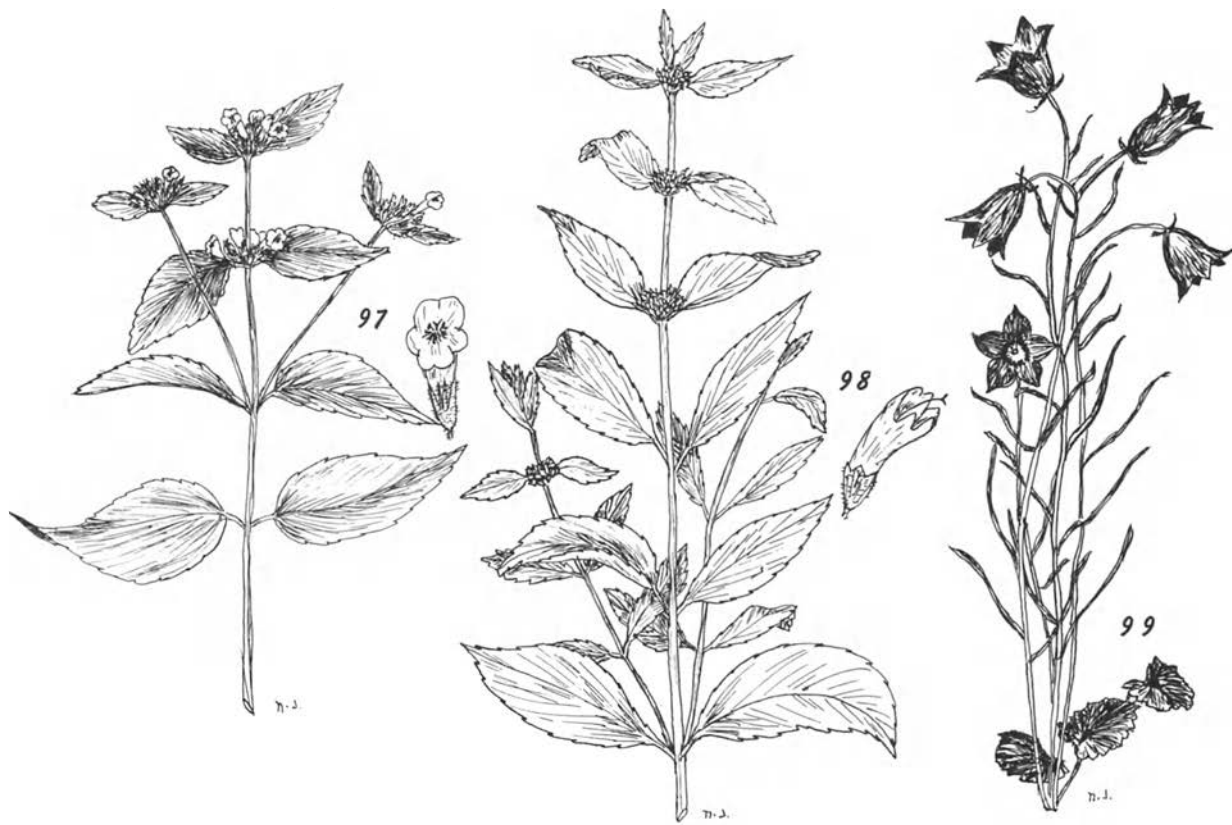
BLUEBELLS OF SCOTLAND

(Harebell)

Campanula rotundifolia

Bluebell family

Nodding, bell-shaped, blue-violet flowers, about 1 inch long, appearing from late June to September. Upright stems appear slender and fragile and seem incapable of supporting the relatively large bells. Leaf blades very narrow, almost grass-like. The delicate, fragile appearance of this beloved flower disguises its true nature, for it exhibits great stamina and fortitude in resisting the extremes of wind, cold and parching sun. Very common in open areas throughout Isle Royale and especially conspicuous in cracks and crevices in bare rocks.



JOE - PYE - WEED

Eupatorium maculatum

Composite family

A plant with large, delicate clusters of purple flowers forming magnificent displays along the banks of streams and creeks during late summer. The soft, bristly-topped flowering heads are attached by purple stalks and arranged in flat-topped clusters usually several inches wide. Blooms in late July through September. Slender, sharp-pointed leaves are arranged in whorls about a tall, upright, purple or purplish-green stem about $2\frac{1}{2}$ to 4 feet tall. Very common along stream banks and other damp places.

101

BIG LEAF ASTER

Aster macrophyllus

Composite family

Flowering heads lavender, daisy-like, occurring in groups of several at the terminus of each branch. Blooms in August through September. A tall upright plant with large, heart-shaped, basal leaves (hence the common name) and successively smaller leaves toward the top. One of the most frequently occurring ground covers in light to moderately shaded areas of the park.

Several other species of asters occur on Isle Royale but the experience of a botanist would be required for their positive identifications. Only the bigleaf aster and the tall, flattop aster (see item 50) will be mentioned in this book since these are two of the most widely distributed species and are reasonably easy to identify.



FLOWERING TIMETABLE

The following chart was prepared to aid to aid the visitor who might want a check list of plants flowering at any given time during the summer. It must be kept in mind, however, that any such time table is extremely variable and only broad generalities can be made. Annual weather conditions and specific habitat produce variations in the flowering time of many plants. In using this chart those plants marked as blooming in June and July will very often be found in flower only in the earlier weeks of July. Similarly, those marked as July and August may frequently be found in bloom only in the latter weeks of July. With a few exceptions, the early spring flowers appearing before the visitor season opens on Isle Royale have not been included in this book.

COLOR PLANT NAME TIME: June July August September
GREEN

Northern Green Rein Orchid	_____			
One Leaf Rein Orchid		_____		
Early Coralroot	_____			
Northern Comandra	—			
Bishop's Cap	_____			
One Sided Pyrola		_____		
Green Pyrola		_____		
Spurred Gentian		_____		
Eastern Paintbrush		_____		

WHITE

Common Arrowhead		_____		
Wild Calla	_____			
Wild Lily-of-the-Valley	_____			
Labrador Solomon Plume	_____			
White Bog Orchid		_____		
Round Leafed Orchid		_____		
Stout Lady's Tresses		_____		
Slender Lady's Tresses		_____		
Downy Rattlesnake Plantain		_____		
Creeping Rattlesnake Plantain		_____		
Western Rattlesnake Plantain		_____		
Bastard Toad-flax	_____			
Purple Meadowrue		_____		
Wood Anemone	_____			
Virgin's Bower			—	
Goldthread	_____			

COLOR PLANT NAME TIME: June July August September

WHITE (cont.)

Red Baneberry	_____			
Lyre-Leaf Rockcress	_____			
Drummond Rockcress	_____			
Roundleaf Sundew		_____		
Early Saxifrage	_____			
Three-Toothed Saxifrage		—		
Wild Strawberry	_____			
Three-Toothed Cinquefoil		_____		
Dewberry	_____			
Western Thimbleberry		—		
Cream Peavine		_____		
Wild Sarsaparilla	_____			
Devilsclub		—		
Cow Parsnip		—		
Canada Dogwood	_____			
Woodnymph		_____		
Shinleaf Pyrola		_____		
Indian Pipe			_____	
Labrador Tea	_____			
Starflower	_____			
Bog Buckbean	_____			
Upright Bindweed		_____		
White Turtlehead		_____		
Narrowleaf Cowwheat		_____		
Tall Flat-topped Aster			_____	
Field Pussytoes	_____			
Pearly Everlasting		_____		
Common Yarrow	_____			
White Rattlesnake-Root			_____	

YELLOW

Blue Beadlily	_____			
Yellow Lady Slipper	_____			
Yellow Pond Lily	_____			
Marsh Marigold	—			
Barren Strawberry	_____			
Shrubby Cinquefoil		_____		
Swamp Candle		_____		
Great Mullein		_____		
Bush Honeysuckle		_____		
Balsam Groundsel	_____			
Canada Hawkweed		_____		

ORANGE to RED

Wood Lily				
Eastern Columbine				
Pitcherplant				
Jewel-Weed				
Douglas' Honeysuckle				

PINK

Rose Mandarin				
Pink Lady Slipper				
Pale Corydalis				
Wild Prickly Rose				
Fireweed				
Pipsissewa				
Pink Pyrola				
Bog Laurel				
Bearberry				
Blueberry				
Spreading Dogbane				
Twinflower				

BLUE-VIOLET-PURPLE

Skunkcabbage				
Blue-Eyedgrass				
Wild Iris				
Purple Fringed Orchid				
Spotted Coralroot				
Striped Coralroot				
Calypso Orchid				
Rock Clematis				
Beach Pea				
Vetchling				
Fringed Polygala				
Violet				
Common Skullcap				
Selfheal				
Wild Basil				
American Mint				
Bluebells of Scotland				
Joe-Pye-Weed				
Bigleaf Aster				

FRUITS OF SOME COMMON WILDFLOWERS

The late summer visitor will see many of the flowering plants in the fruiting stage. Many of these fruits produce as beautiful a display as do the flowers. To aid in identifying some of the plants which have fairly conspicuous fruits, the list below is arranged according to the color of the fruit. Also a few remarks regarding the nature of the fruit and an item reference for the plant's complete description is given.

COLOR	FRUIT	REMARKS	ITEM
RED			
	Rose, Prickly	a hip, pear shaped	74
	Bunchberry	tight clusters of berries	40
	Strawberry, Wild	like the cultivated strawberry, but smaller; edible	32
	Thimbleberry, Western	like a raspberry, but broader and flatter; edible	35
	Bearberry	berry-like, small, scattered	79
	Baneberry, Red	dense clusters of shiny, red (sometimes white), berry-like fruits	26
	Solomon's Seal, Three-leafed	clusters of small, berry-like fruits	13
	Dewberry	raspberry-like; not easily separated from receptacle; edible	34
	Rose Mandarin	berry-like; hang like earrings below the leaves	71
	Lily-of-the-Valley, Wild	clusters of small berry-like fruits; yellowish and spotted when immature	12
ORANGE			
	Commandra, Northern	berry-like; sparsely scattered along stem	4
	Honeysuckle, Douglas'	tight clusters of berry-like fruits at branch terminals	70
YELLOW			
	Lily-of-the-Valley, Wild	clusters of small, berry-like fruits, later turning red	12
BLUE			
	Yellow Clintonia	berry-like; a few at top of slender stalk	55
	Blueberry	berry-like; edible	80
DEEP PURPLE OR BLACK			
	Blueberry	berry-like; edible	80
	Sarsaparilla, Wild	berry-like; rounded clusters	37

A

Achillea millefolium	53
Actaea rubra	26
Anaphalis margaritacea	52
Anemone canadensis	23
Anemone, Canadian	23
Anemone, Wood	23
Antennaria neglecta	51
Apocynum androsaemifolium	81
Aquilegia canadensis	67
Arabis drummondii	28
Arabis lyrata	27
Aralia nudicaulis	37
Arctostaphylos uva-ursi	79
Arrowhead, Common	10
Arum, Water	11
Aster, Bigleaf	101
Aster, Flat-top	50
Aster, macrophyllus	101
Aster, Tall Flat-Topped White	50
Aster umbellatus	50

B

Baneberry, Red	26
Basil, Wild	97
Beach Pea	91
Beadlily, Blue	55
Bearberry	79
Bindweed, Upright	47
Bishop's Cap	5
Bluebells of Scotland	99
Blueberry	80
Blue-Eyed Grass	84
Blue Flag	85
Bogbean, Common	46
Bog Candle	14
Bog Kalmia	78
Bog Laurel	78
Bog Orchid, White	14
Buckbean, Bog	46
Bunchberry	40
Bush honeysuckle	63

C

Calla palustris	11
Calla, Wild	11
Caltha palustris	58
Calypso bulbosa	89
Campanula rotundifolia	99
Canker-Root	25
Castilleja septentrionalis	9
Chelone glabra	48
Chimaphila umbellata	76
Cinquefoil, Bush	60
Cinquefoil, Shrubby	60
Cinquefoil, Three-Toothed	33
Clematis, Purple	90
Clematis verticillaris	90
Clematis virginiana	24
Clintonia borealis	55
Clintonia, Yellow	55
Columbine, Eastern	67
Comandra, Common	18
Comandra, Northern	4
Comandra livida	4
Comandra umbellata	18
Convolvulus spithameus	47
Coptis trifolia	25
Corallorhiza maculata	87
Corallorhiza striata	88
Corallorhiza trifida	3
Coralroot, Early	3
Coralroot, Spotted	87
Coralroot, Striped	88
Cornus canadensis	40
Corydalis, Pale	73
Corydalis sempervirens	73
Cowparsnip, Common	39
Cowwheat, Narrowleaf	49
Cypripedium acaule	72
Cypripedium calceolus	56

D

Dewberry	34
Devilsclub, American	38

Diervilla lonicera	63	I	
Dogbane, Spreading	81	Impatiens biflora	69
Dogwood, Canada	40	Indian pipe	43
Doll's Eyes	26	Iris versicolor	85
Drosera rotundifolia	29	Iris, Wild	85
Duck Potato	10		
		J	
E		Joe-Pye-Weed	100
Epilobium angustifolium	75	Jewel Weed	69
Eupatorium maculatum	100		
Everlasting, Pearly	52	K	
		Kalmia, Bog	78
F		Kalmia polifolia	78
Fireweed	75	Kinnikinnick	79
Flag, Blue	85		
Flannel Plant	62	L	
Fragaria virginiana	32	Labrador Solomonplume	13
Fringed Polygala	93	Labrador Tea	44
		Lady's Tresses, Continental	16
G		Lady's Tresses, Slender	17
Gay Wings	93	Lady Slipper, Yellow	56
Gentian, Spurred	6	Lady Slipper, Pink	72
Ghost Pipe	43	Lady's Tresses, Stout	16
Goldthread	25	Lathyrus maritimus	91
Goodyera oblongifolia	21	Lathyrus ochroleucas	36
Goodyera pubescens	19	Lathyrus palustris	92
Goodyera repens	20	Laurel, Bog	78
Groundsel, Balsam	64	Ledum groenlandicum	44
		Lilium philadelphicum	66
H		Lily-of-the-Valley, Wild	12
Habenaria dilatata	14	Lily, Wood	66
Habenaria hyperborea	1	Linnaea borealis	82
Habenaria obtusata	2	Lonicera dioica var. glaucescens	70
Habenaria orbiculata	15	Loosestrife, Swamp	61
Habenaria psycodes	86	Lysimachia terrestris	61
Halenia deflexa	6		
Harebells of Scotland	99	M	
Hawkweed, Canada	65	Maianthemum canadense	12
Heal-All	96	Marigold, Marsh	58
Heracleum lanatum	39	Meadowrue, Purple	22
Hieracium canadense	65	Melampyrum lineare	49
Honeysuckle, Bush	63	Mentha arvensis	98
Honeysuckle, Douglas'	70		
Honeysuckle, Limber	70		

Menyanthes trifoliata	46	Pyrola elliptica	42
Milfoil	53	Pyrola, Alpine	77
Mint, Field	98	Pyrola, Green	8
Mitella nuda	5	Pyrola, One-Flowered	41
Miterwort, Naked	5	Pyrola, One-Sided	7
Moccasin Flower	72	Pyrola, Pink	77
Monesis uniflora	41	Pyrola, secunda	7
Monotropa uniflora	43	Pyrola, Sidebells	7
Morning-glory, Dwarf	47	Pyrola virens	8
Mullein, Great	62	Pyrola, Waxflower	42
		Pyrola, White	42
N		R	
Nuphar variegatum	57	Ragwort	64
O		Raspberry, Dwarf	34
Oplopanax horridum	38	Rattlesnake Plantain, Creeping	20
Orchid, Calypso	89	Rattlesnake Plantain, Downy	19
Orchid, One Leaf Rein	2	Rattlesnake Plantain, Dwarf	20
Orchid, Purple Fringed	86	Rattlesnake Plantain, Giant	21
Orchid, Northern Green Rein	1	Rattlesnake Plantain, Western	21
Orchid, Round Leafed	15	Rattlesnake Root, White	54
P		Rockcress, Lyre Leaf	27
Paintbrush, Eastern	9	Rockcress, Drummond	28
Pea, Beach	91	Rockcress, Tall	28
Pearly Everlasting	52	Rock Harlequin	73
Peavine, Cream	36	Rosa acicularis	74
Peavine, Maritime	91	Rose Mandarin	71
Peavine, Marsh	92	Rose, Wild Prickly	74
Pipsissewa	76	Rubus parviflorus	35
Pitcherplant	68	Rubus pubescens	34
Polygala, Fringed	93	S	
Polygala paucifolia	93	Sagittaria latifolia	10
Pond Lily, Yellow	57	Salmon Berry	35
Potentilla fruticosa	60	Sarracenia purpurea	68
Potentilla tridentata	33	Sarsaparilla, Wild	37
Prenanthes alba	54	Satureja vulgaris	97
Prince's Pine	76	Saxifraga tricuspidata	31
Prunella vulgaris	96	Saxifraga virginianensis	30
Pussytoes, Field	51	Saxifrage, Early	30
Pyrola asarifolia	77	Saxifrage, Threebristle	31
		Saxifrage, Three-Toothed	31

Saxifrage, Virginia	30	T	
Scutellaria galericulata	95	Thalictrum dasycarpum	22
Selfheal	96	Thimbleberry, Western	35
Senecio Pauperculus	64	Toadflax, Bastard	18
Shinleaf	42	Touch-Me-Not, Spotted	69
Sidesaddle Flower	68	Trientalis borealis	45
Sisyrinchium angustifolium	84	Turtlehead, White	48
Skullcap, Common	95	Twinflower	82
Skunkcabbage	83	Twistedstalk, Rosy	71
Smilacina trifolia	13	V	
Spatterdock	57	Vaccinium angustifolium	80
Solomon Plume, Labrador	13	Verbascum thapsus	62
Solomon's Seal, Three-Leafed	13	Vetchling	92
Solomon's Seal, Two-Leafed	12	Vetchling, Cream-Colored	36
Spiranthes gracilis	17	Viola adunca	94
Spiranthes romanzoffiana	16	Violet	94
Spurred Gentian	6	Virgin's Bower	24
Starflower, American	45	W	
Strawberry, Barren	59	Waldsteinia fragarioides	59
Strawberry, Wild	32	Wild Basil	97
Streptopus roseus	71	Wild Sarsaparilla	37
Sundew, Roundleaf	29	Willow Herb, Hooded	95
Swamp Candle	61	Wintergreen, One-Flowered	41
Symplocarpus foetidus	83	Wood Lily	66
		Woodnymph	41
		Y	
		Yarrow, Common	53

Address all correspondence to: Isle Royale Natural History Association, Isle Royale National Park, Houghton, Michigan

