Field Guide to
WILD FLOWERS

Based on
Fieldbook of American Wild Flowers
by F. Schuyler Mathews

With the illustrations by
F. Schuyler Mathews

Photography by
Steven Daniel
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A MAIN STREET BOOK

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Preface

by Jacqueline B. Glasthal

Looking back on them now, the first years of the twentieth century, when F. Schuyler Mathews (1854–1938) first published this field guide were, in many ways, both the best and worst of times for wild flowers. Yes—as Mathews wrote, they were popular. Botanical gardens were springing up all around the country. John Muir had recently released a book on National Parks. And Beatrix Potter, who glorified the wonders of wildlife in her artwork and children's stories alike, was in her heyday, having just published "The Tale of Peter Rabbit."

On the down-side, however, the industrial era was also making its mark on the landscape. The inventors of the vacuum cleaner, the air conditioner, and neon lights were applying for patents, just as car companies and the Automobile Association of America were being founded. And, in their attempts to find new ways for people to move about, the first flight of both Count Zeppelin's airship and the Wright Brothers airplane were making news. One might even speculate that industry's success stories were directly influencing the growing popularity of nature preserves, Botanical Gardens, and other conservation efforts. Consciously or not, people seemed to have begun to realize that what they had once taken for granted, if not boldly protected and fought for, might not be around forever.

Today, over a century later, bluebells, lady slippers, and cattails must be sought out if they are to be seen at all; it takes more effort than ever before to find them growing free (both in the wild, and in the monetary sense!) Thus, perhaps even more so than in Mathews' time, we need a field guide like this one, its very purpose being to help us really stop, smell and identify the wild flowers when we do come upon them. As Georgia O'Keeffe once said, "Nobody sees a flower, really—it is so small—we haven't time, and to see takes time, like to have a friend takes time."

But if we are willing to make the time, F. Schuyler Mathews even now, over sixty-five years after his death, continues to be our good friend and much-trusted teacher. As an artist-turned-botanist he had the unique ability to help readers look at and truly appreciate the finer details to be found from close observation of many of nature's wonders. Mathews' casual tone and vernacular were particularly appealing to those nature enthusiasts intimidated by the technical terminology found in most other field guides of his day. And adding to his prose was his art work—enhanced now with detailed color photographs—which help to fill in the blanks where words are unable to do nature justice.

Of course, like the terrain, so too has the study of wild flowers changed since Mathews wrote this book. Today, for example, the common names of wild flowers are more often used than are the scientific (Latin) ones. And much more is now known about many species than when Mathews first wrote about them. Thus, in this updated version of his 1902 field guide, we have included some of this new knowledge while at the same time preserving, wherever possible, Mathews' quaint writing style and unique observations. So too have we retained the scientific names

that he and his peers were apt to use. And though the pastures and fields—many of which are now parking lots and shopping malls—are fewer and farther between, so too have we kept in, wherever appropriate, Mathews' comments about these places where, at least at one time, many examples of species were likely to be found.

It is our hope, of course, that wild flowers will continue to grow free, and not be relegated solely to museum-like conservation gardens. But wherever you see them—be it your own backyard, along the side of a road, in a botanical garden, or even painted and exhibited on a museum wall—you are bound to recognize them as welcome friends, thanks to the assistance of Mathews and the naturalists who have made this edition possible.

Introduction

Perhaps it is not too much to say that the wild flower of late has become popular. If such is the case I am presumably justified in presenting it in a new light, or, to speak more to the point, in the position it occupies according to the light of one who loves to draw it.

This is a fieldbook of wild flowers; it originated in the fields and it is intended to go back there, I trust, in the hand of its good reader. Of course, not all of it was written on sunny meadow and in shady wood, nor were all of its illustrations made at once from specimens gathered during various botanical rambles; but, in the truest sense of the word, nearly all of the book is a direct result of field work, ranging from New Hampshire to Virginia.

Not many years ago, my highly esteemed friend, the late William Hamilton Gibson, in the course of an address he was delivering before the Society of American Florists, said that some day he hoped to write a botany in plain English. It is unnecessary to add that if he had lived to do so, in all probability he would have contributed as much to our happiness as the father of American botany, Dr. Asa Gray.

Undoubtedly he felt, as the rest of us have felt, the great need of simple, untechnical English in direct connection with botany. But there are difficulties to face in even a modest attempt to avoid bothersome technicalities. We must necessarily retain the Latin names and surrender the advantage of those direct, crisp terms which express volumes to students who understand them and nothing at all to others who do not. On the other hand, we can resort to the drawing, which often expresses more at the glance of the eye than the best turned phrase, technical or otherwise; so with plain English and the plainer drawing, one ought to be able to identify a plant without great difficulty.

To be sure, one is continually running into "snags"; it is not all plain sailing even for the botanist. Rules are all very well in their way, but unfortunately Nature abides by them only when it suits her convenience. There are hybrids and extreme forms galore; there are puzzling groups, difficult families, and differences of expert opinion; in fact there are so many problems for one to solve that the very interest in botany lies in their solution. The roses seem to be indifferently separated. The genus *Polygonuem* is simple only to one who is satisfied to know about three species. The *Epilobiums* are not all easily distinguished apart. *Sisyrinchium*, that beautiful little blue-eyed grass, shows signs of complications relative to species which prove that it is not as simple as it looks. *Pentstemon* occasionally puzzles one by taking a half-way form. *Sagittaria*, the genius of the sluggish river, tries to be everything it ought not to be in leaf and flower, so Mr. J. G. Smith settles the matter by calling the forms, a, b, c, d, etc....

Regarding that bugbear of the botanical student, nomenclature, it may be well to make a plain statement of the facts of the case. Neither the older system of plant arrangement according to Dr. Gray nor some of his names can remain as they have been. At present the botanists prefer the system of Engler and Prantl. It certainly shows more distinctly the character of development in plant form.... As for names, few, after all, of Dr. Gray's choosing are to be displaced. His successors are now engaged with such revision as

is really necessary. Through the courtesy of Mr. Merritt L. Fernald I am able to adopt most of these names, and the extreme care with which the system they represent has been worked out inclines me to believe it will be ultimately and universally accepted.

In reference to the color names used in this book it would be advisable to explain concisely the principle upon which they are based. There is always one unfailing source where one may obtain color properly labeled; that is at the color dealer's. Perhaps I must modify this statement and say most generally properly labeled. It is upon a purely scientific basis that the flowers are given their proper color names; this is the list in simple form:

Pure yellow	Pure pink	Violet
Deep yellow	Crimson	Blue-violet
Golden yellow	Crimson-pink	Ultramarine
Pure orange	Magenta	Pure blue
Scarlet	Magenta-pink	Madder purple
Pure red	Pure purple	Madder brown

Beyond various modifications of these hues there are no color names of any value whatever in relation to the wild flower. We have in the color dealer's catalogue numerous conditions of these hues indicated by standard names: there is Naples yellow, a dilute form of golden yellow; crimson lake, a subdued rendering of crimson; and vermilion, which is a synonym for scarlet. These are standard colors that have never varied, and that will probably last with many others as long as painting does. In botanical and ornithological works we find such color names as fuscous, rufous, vinaceous, ferruginous, rose-purple, greenish purple, etc.; they mean nothing at all to one who is not a scientist, and I half suspect they mean but little to one who is. Purple (botanically speaking) is a dreadfully abused term which is made to stand for half the rainbow; it means anything from crimson to violet. As an actual fact it is fairly represented by *Mimulus ringens*, and one jot to the right or left of that hue is not purple. Pure yellow is perfectly represented by *Œnothera biennis*, and no tint to the right or left of that is a true yellow. Magenta is a crimson-purple; the list of flowers which represent it is too long to give here. Blue in its pure form only exists (dilutely) in *Myosotis*. But I find that if I disturb all the botanists' color names I may complicate matters and add to the confusion which already exists in plant names, so I am content to let *Ranunculus* stand in plain yellow, although the color is not pure yellow, and it ranges through eight distinct deep or golden tones. In many other instances, also, I have refrained from making a change, although I am compelled to draw the line at rose-purple, and call it by its proper title, light magenta.

I have found myself indebted to many authors of botanical lists for the information I give regarding the distribution of plants, and I have had frequently to congratulate myself upon the possession of that excellent work, Brainerd, Jones, and Eggleston's *Flora of Vermont*. But it seems as though I am most indebted, for many things, to the late gifted Dr. E. Newlin Williams. Not long ago we trudged together on a botanical excursion over the slopes of Mt. Washington, and I found myself depending upon him for the identification of many an alpine species; he

knew them all at a glance, and their whole history as well.

I am also indebted to others for help in the writing of this volume. I soon found my "wild garden" a field of work too narrow to enable me to record all that might be recorded regarding the visitations of insects, and was glad to turn to those remarkable essays on the subject by Professor Charles Robertson which appeared in the *Botanical Gazette*. Then, too, by the courtesy of Dr. Robinson, Curator of the Gray Herbarium, practically the whole magnificent collection of valuable specimens and the splendid library have been open to me for reference.

One must always ask for the indulgence of the reader and apologize if mistakes appear, but if they do it will be in spite of great vigilance. Again, much of the descriptive text may seem somewhat bald and brief through the effort to sustain the portable character of the book; thus the brilliant and extensive Composite family suffers for want of elbow-room. But, on the whole, I considered that we all know that family best of all, and we would be glad to give it all the room it needed on our highways, if not in our book, which must fit the narrow limits of our pocket at all hazards.

F. Schuyler Mathews.

Boston, Mass., March, 1902.

THE SPECIES

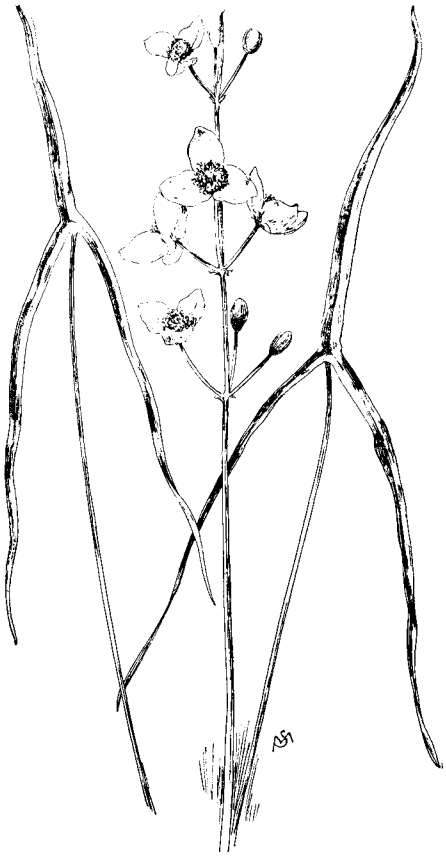
Alismaceae

Sagittaria variabilis

▸ Arrowhead

This genus is remarkable for many variations in form; hence the name *variabilis*. *Sagittaria* is derived from the Latin *sagitta*, an arrow, referring to the shape of the leaves. There are fourteen native species recorded by Britton and Brown, over twenty by Jared G. Smith, while Gray recognizes seven. However, until botanists arrive at a united opinion regarding this group, the preferable course is to accept the fewer species recognized by Gray. It is an unreliable method to rely on leaf character for the foundation of a species or group. This, unfortunately, has had a great deal to do with the separation of *Sagittaria* into many species.

The particular species called *variabilis* shows, according to Gray, four variations. The two shown here have flowers both staminate and pistillate growing on one plant. *v. angustifolia* has leaves with narrow, divergent lobes; found in mountain districts. *v. diversifolia* has lance-shaped or broader leaves, variably arrow-pointed. These are mere forms, not varieties.



COMMON NAME Arrowhead

SEASON July–September

COLOR White

Araceae

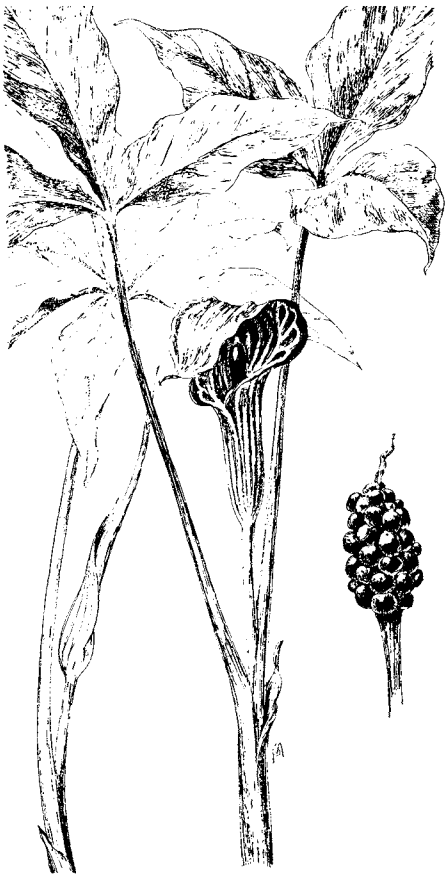
Arisœma triphyllum
▸ Jack-in-the-pulpit

Two long-stemmed, tri-parted dull green leaves without a gloss, which overshadow the hooded flower below at the junction of the leaf-stems. The flowers, on the clublike spadix within the hood, are grouped at the base of the spadix and are generally staminate and pistillate on separate plants, but often one plant develops both staminate and pistillate flowers.

The green and purple-brown striped spathe, when exposed to sunlight is quite pale, while in dark woods it is deep purple. As a rule, the plant prefers shaded, wet woods. The clustering berrylike fruit is at first green, then brilliant scarlet. The plant attains a height of 1–2.50 feet.

Arisaema Dracontium
▸ Green Dragon

This species generally has a single compound leaf with seven or more obovate-lance-shaped, pointed, dull green leaflets. The long spadix is usually composed of both staminate and pistillate flowers, and it tapers to a slender point, reaching far beyond the rolled-up, greenish, pointed spathe. The berries are red-orange. The plant is 1–3 feet high, and grows in wet woods or low grounds from Maine, south, and west to Minnesota.



Drawing: left, Green Dragon; right, Jack-in-the-Pulpit.
Opposite: left, Green Dragon; right, Jack-in-the-Pulpit

COMMON NAME Jack-in-the-pulpit
COLOR Purple-brown and green
SEASON April–July

COMMON NAME Green Dragon
COLOR Dull white-green
SEASON May–June

Araceae

Calla palustris

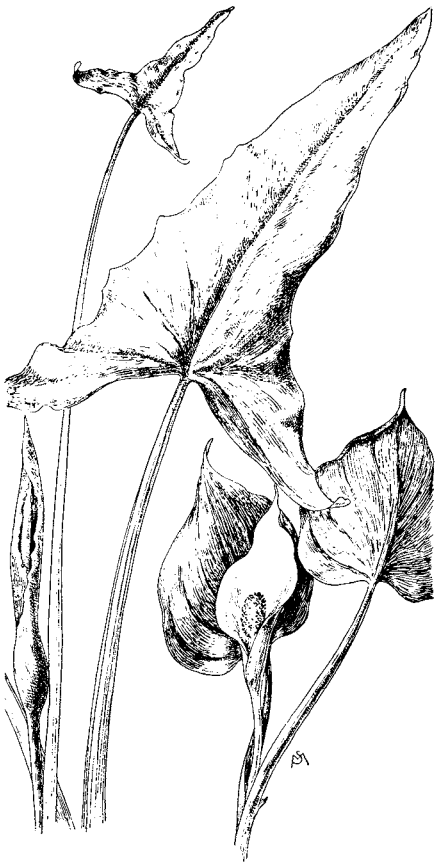
▸ Water Arum

A little swamp flower resembling the calla-lily; (so-called, although not a lily, and not even a true calla. It is a *Richardia.*) The name *Calla* is ancient and obscure, *palustris* is the Latin name for swamp. The deep green leaves of the water arum are long-heart-shaped with long stems. The open and roll-edged spathe is white above and greenish beneath. The yellow spadix is entirely covered with flowers, the lower ones perfect, i.e., with all the parts complete, and the upper ones often staminate. Fertilization is assisted by insects and pond-snails. The berries, red and distinct, in a head like those of the Jack-in-the-pulpit, are ripe in August. The plant grows 5–10 inches high and is at home in cold bogs, from Maine south to Virginia, and west to Minnesota.

Peltandra undulatum

▸ Arrow Arum

The rich green leaves are arrow-shaped with one prominent vein. The flowers are staminate and pistillate on the same plant, covering the long, tapering spadix. The pointed green spathe, rolling and wavy on the margin, is 4–7 inches long. The cluster of berries is green, and is at first enclosed in a green sheath, the fleshy base of the spathe. The plant grows 1–1.50 feet high in shallow water. Found from Maine south and west to Michigan. It gets its name from the Greek word for target or shield.



Drawing: left, Arrow Arum; right, Water Arum. Opposite: Water Arum.

COMMON NAME Water Arum

COLOR White

SEASON June

COMMON NAME Arrow Arum

COLOR Green

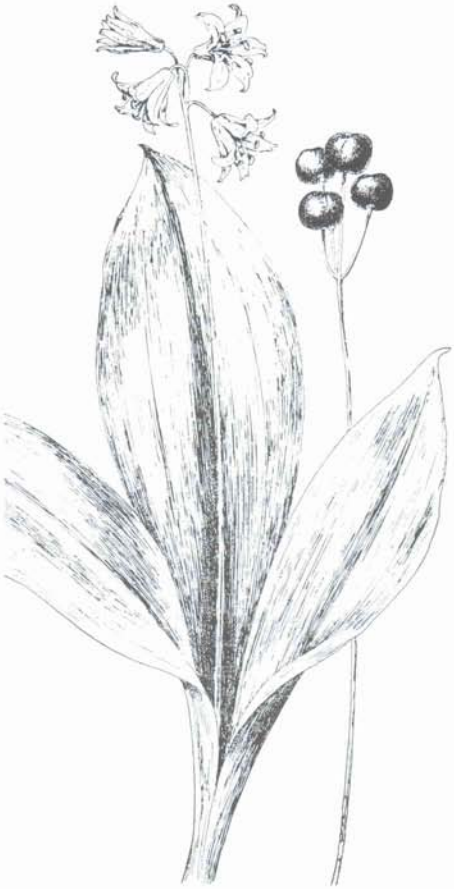
SEASON May–June

Clintonia borealis

▸ Clintonia

A handsome woodland plant with from two to four (usually three) shiny, light green, large oval-oblong leaves; a slender flower-stalk, about 7 inches high, bears from three to six cream-colored drooping flowers greenish on the outside. The flower is formed of six distinct sepals, and is perfect, having six stamens and a pistil; its form is lily-like and dainty. It was named for DeWitt Clinton, once governor of New York.

It unfortunately lacks odor and color to make it perfectly attractive, but it is not without a subtle and delicate grace. The berries, which are ripe about the middle of August, turn a beautiful pure blue, a color devoid of any purplish tinge, and therefore one which is rare and remarkable in nature. Prussian blue mixed with a little white will exactly match the unique color of the Clintonia berry. The plant grows 6–16 inches high, and is common in the northern woods, especially where they are cold and moist. Maine, south to North Carolina, and west to Minnesota.



COMMON NAME Clintonia

COLOR Cream-color, greenish

SEASON June–early July

Liliaceae

Streptopus amplexifolius
▸ Twisted Stalk

The leaves, strongly clasping the zigzag stem, are smooth and light green, with a whitish bloom beneath. The curly-sepaled, greenish flower is about 0.50 inch wide, and hangs by a long, crooked, threadlike stem from beneath the leaves. The flower is perfect and regular, with six lance-shaped sepals, and is either solitary or (rarely) in pairs. The name is from the Greek words for twisted, and foot or stalk. The usually solitary berry is red, round, and nearly 0.50 inch in diameter. 2–3 feet high. Found in cold moist woods from Maine, west to the Rockies and south to North Carolina, in the mountains.

COMMON NAME Twisted Stalk

COLOR Greenish white

SEASON May–July

Liliaceae

Smilacina racemosa
▸ False Spikenard

A really beautiful woodland plant slightly resembling Solomon's Seal, but bearing its Spiræalike cluster of fine white flowers at the tip of the stem. The light blue-green leaves are oblong and ovate-lance-shaped, taper-pointed, and with very short stems—hardly any, in fact. The tiny flower has six distinct white sepals, and is perfect, with six stamens and a pistil. The flower cluster is pyramidal, and the zigzag plant-stem gracefully inclines. The berries, smaller than peas, are at first greenish then yellowish white speckled with madder brown, and finally, in late September, a dull ruby-red of translucent character. They possess an aromatic taste. A familiar plant of the White Mt. region. The name is a diminutive of Smilax, without appropriate application. Common in moist copses and beside woodland roads. 1–3 feet high. Maine, south to South Carolina and west to Minnesota and Arkansas.

COMMON NAME False Spikenard

COLOR White

SEASON May

Liliaceae

Smilacina trifolia
▸ Three-leaved False Solomon's Seal

A still smaller species, with generally three leaves, but sometimes two or even four, tapering to a sheathing base; flowers smaller than those of the preceding species, and the berries red like those of the next species. Although the resemblance of *Smilacina trifolia* to *Maianthemum Canadense* (the next species described) is close, the differences are easily detected by a close observer. The (usually) three leaves of *Smilacina trifolia* clasp the stem but are in no way heart-shaped at the base. This species also has six sepals and as many stamens, and the whole plant is invariably smooth, not fine-hairy as is sometimes the case with the next species. 2–6 inches high. Found in bogs or wet woods from Maine, south to Pennsylvania and west to Michigan.

Smilacina stellata
▸ False Solomon's Seal

A much smaller species than the foregoing, with a very small but pretty starry cluster of white flowers at the tip of the stem. The leaves, light blue-green and very firm, clasp the zigzag stem. The flower is 1/4 inch wide. The berries, which are few, are at first spotted and finally dull ruby red. 8–16 inches high. Moist banks and meadows. Maine, south to New Jersey, and west.

Drawing: left, False Solomon's Seal; right, Three-leaved False Solomon's Seal. Opposite: Detail of flower spike of False Spikenard (page 20-21), also sometimes called False Solomon's Seal.

COMMON NAME Three-leaved False Solomon's Seal

COLOR White

SEASON May–early June

COMMON NAME False Solomon's Seal

COLOR White

SEASON May–early June

Liliaceae

Maianthemum Canadense

▸ Canada Mayflower

A tiny woodland plant resembling *Smilacina trifolia*, with small white flowers which differ from those of the genus *Smilacina* in having only four sepals and as many stamens. It has two to three light green, shiny leaves which are ovate-lance-shaped or broader, with a somewhat heart-shaped base. The berries are yellow-white, spotted with madder brown, until early fall when they turn a dull translucent ruby-red.

Convallaria majalis

▸ Lily of the Valley

This is the only one true species, familiar in cultivation. It has two oblong leaves, shiny and smooth, and a slender stalk bearing a one-sided row of tiny white flowers, extremely sweet-scented and dainty. Flower cup is bell-shaped, with six lobes recurved, and six stamens. It is aparently cross-fertilized by bees who collect the pollen, as there is little or no honey at the base of the bell; in the absence of insects it is self-fertilized. The berry is red. The name is from the Latin *convallis*, valley, and the Greek for lily. Identical with the European flower of the gardens, it also grows on the higher Alleghanies, from Virginia to South Carolina.

Drawing: left, Canada Mayflower, showing flowers and berries; right, Lily of the valley. Opposite: Canada Mayflower in bloom.

COMMON NAME Canada Mayflower

COLOR White

SEASON May–June

COMMON NAME Lily of the Valley

COLOR White

SEASON May–early June

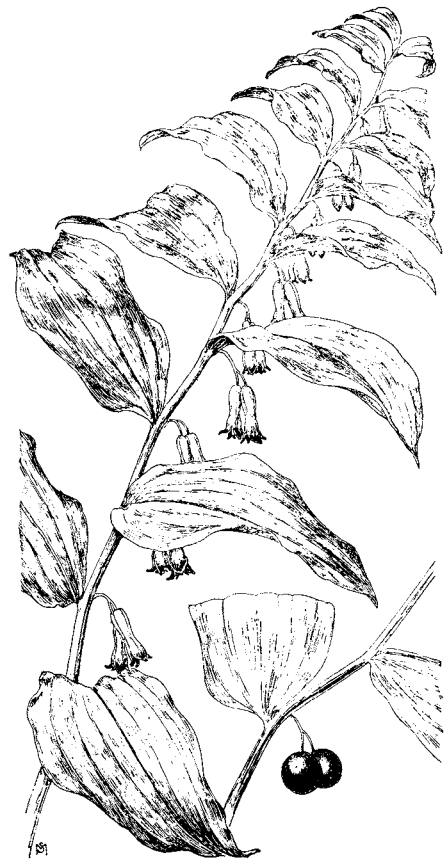
Liliaceae

Polygonatum biflorum
▸ Solomon's Seal

The oblong-ovate, light green leaves smooth or finely hairy and paler beneath, arranged alternately either side of the slender, smooth stem; the cylindrical and tassel-like perfect flowers (each having six stamens) depend in clusters of two, rarely three, below them. The pendulous position of the flowers is in a great measure protective; wind and weather can not injure or uselessly scatter the pollen. The flowers, moreover, have short styles and long anthers, and are unquestionably cross-fertilized by the larger bees. The fruit, at first a green berry with a whitish bloom, at last becomes blue-black and resembles a small Concord grape; it imparts an additionally decorative appearance to the plant. 1–3 feet high, it is common in thickets beside woodlands, and on hillsides in Maine, south and west to east Kansas, Nebraska, and Texas.

Polygonatum giganteum
▸ Great Solomon's Seal

The plant is taller and smooth, *without* the fine hairiness. Leaves ovate, pointed, and partly clasping the plant-stem, 3–8 inches long, and many-ribbed. Flowers in clusters of from two to eight. Stem stout and round. 2–8 feet high. Meadows and river banks. Maine, south to Virginia, and west to the Rocky Mountains.



Drawing: Solomon's Seal. Opposite: Great Solomon's Seal.

COMMON NAME Solomon's Seal
COLOR Pale Green
SEASON April–July

COMMON NAME Great Solomon's Seal
COLOR Pale Green
SEASON May–early July

Liliaceae

Uvularia grandiflora

▸ Large-flowered Bellwort

This is the commoner bellwort. The deep green leaves are fine-white-hairy beneath; the large pale, corn yellow flower, inclining to green, at the summit, is fully 1.50 inches long, and smooth inside. Stem with a single leaf or none below the fork. A more limited distribution, south to Georgia, and west to Minnesota, Iowa, and South Dakota.

Oakesia sessilifolia

▸ Oakesia

Similar in some respects to the foregoing genus, but with marked differences. The stem is angled. The deep green leaves, fine-hairy beneath, conspicuously three-grooved, sharp-pointed and stemless, or slightly clasping. The six divisions of the flower less pointed, no ridges within the flower-cup, the latter more buffish cream-colored, but still near corn yellow. The seed capsule three-sided, resembling a beech nut. The one or two flowers on slender stems, at first terminating the plant stem, but finally appearing opposite the leaves by reason of the growth of the branches. Named for William Oakes, an early botanist of New England. Stem 6–13 inches high. It is very common in the north woods. Maine, south to Georgia, and west to Minnesota and Arkansas.

Drawing: left, Large-flowered Bellwort; right, Oakesia.
Opposite: top, Large-flowered Bellwort; bottom, Oakesia

COMMON NAME Large-flowered Bellwort

COLOR Pale corn yellow

SEASON April–June

COMMON NAME Oakesia

COLOR Corn or cream yellow

SEASON May–June

Liliaceae

Trillium erectum

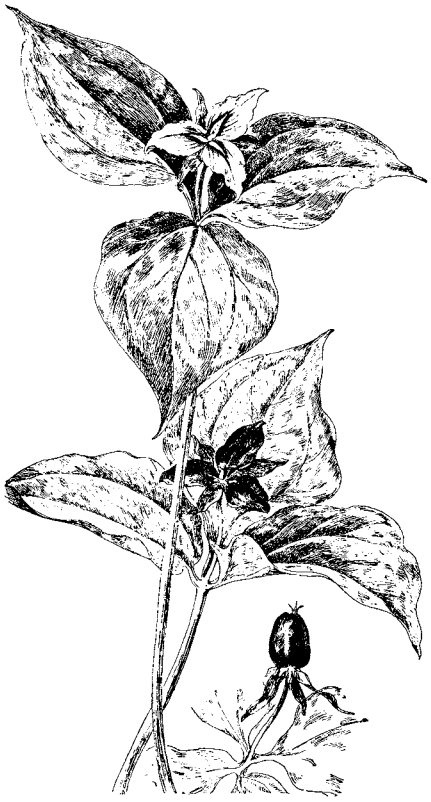
▸ Wake-robin or Birthroot

An eastern species, with four-sided ovate leaves scarcely stemmed, and pointed. The name is from *triplum*, triple, a characteristic of all parts of the plant. The flowers, with a reclining stem, vary in color from white to pink, to brownish purple-red or maroon, with flat, ovate, spreading petals nearly 1.50 inches long, the sepals a trifle shorter. It is ill-scented, and so attracts the carrion-loving green fly, who finds the raw-meat color of the flower as acceptable as the odor. This fly may be the most useful pollen disseminator of *Trillium erectum*. The berry is darker red, round-ovate. 7–15 inches high. Found in rich woods. New England to North Carolina, west to Minnesota and Missouri.

Trillium undulatum

▸ Painted Trillium

One of the most beautiful of the genus, and very common in the rich woodlands of the north. Leaves ovate and tapering to a sharp point. Green sepals quite narrow, and the gracefully recurved, wavy-edged white petals strongly marked with a crimson V deep or pale, as the case may be; it is never purple. The dark scarlet ovate berry 3/4 inch long, ripe in September, and falling at a touch. 8–16 inches high. Cold damp woods and beside woodland brooks. New England to Georgia, west to Minnesota and Missouri.



Drawing: top, Painted Trillim; bottom, Wake-robin, and fruit.
Opposite: top, Wake-robin; bottom, Painted Trillium.

COMMON NAME Wake-robin or Birthroot

COLOR Maroon, or white, etc.

SEASON April–June

COMMON NAME Painted Trillium

COLOR White, crimson-striped

SEASON May–June

Liliaceae

Trillium cernuum
▸ Nodding Trillium

Leaves almost stemless and broadly four-sided ovate. Flower with white or pinkish wavy petals 0.75 inch long, and with a short stem recurved so that the blossom is often hidden beneath the leaves. 8–14 inches high. Found in moist woods from New England to Minnesota, south and west to Georgia and Missouri.

Trillium nivale
▸ Dwarf White Trillium

A very small species with ovate leaves, 1–2 inches long, and flowers whose white petals, less than 1 inch long, are scarcely wavy. Berry red, about 0.33 inch in diamater, flattened and spherical, with three round divisions. A rounded dwarf plant 2–5 inches high. Rich woods. Pennsylvania and Kentucky to Minnesota and Iowa.

Drawing: top, Nodding Trillium, and detail of flower; right, Dwarf White Trillium. Opposite: Nodding Trillium.

COMMON NAME Nodding Trillium

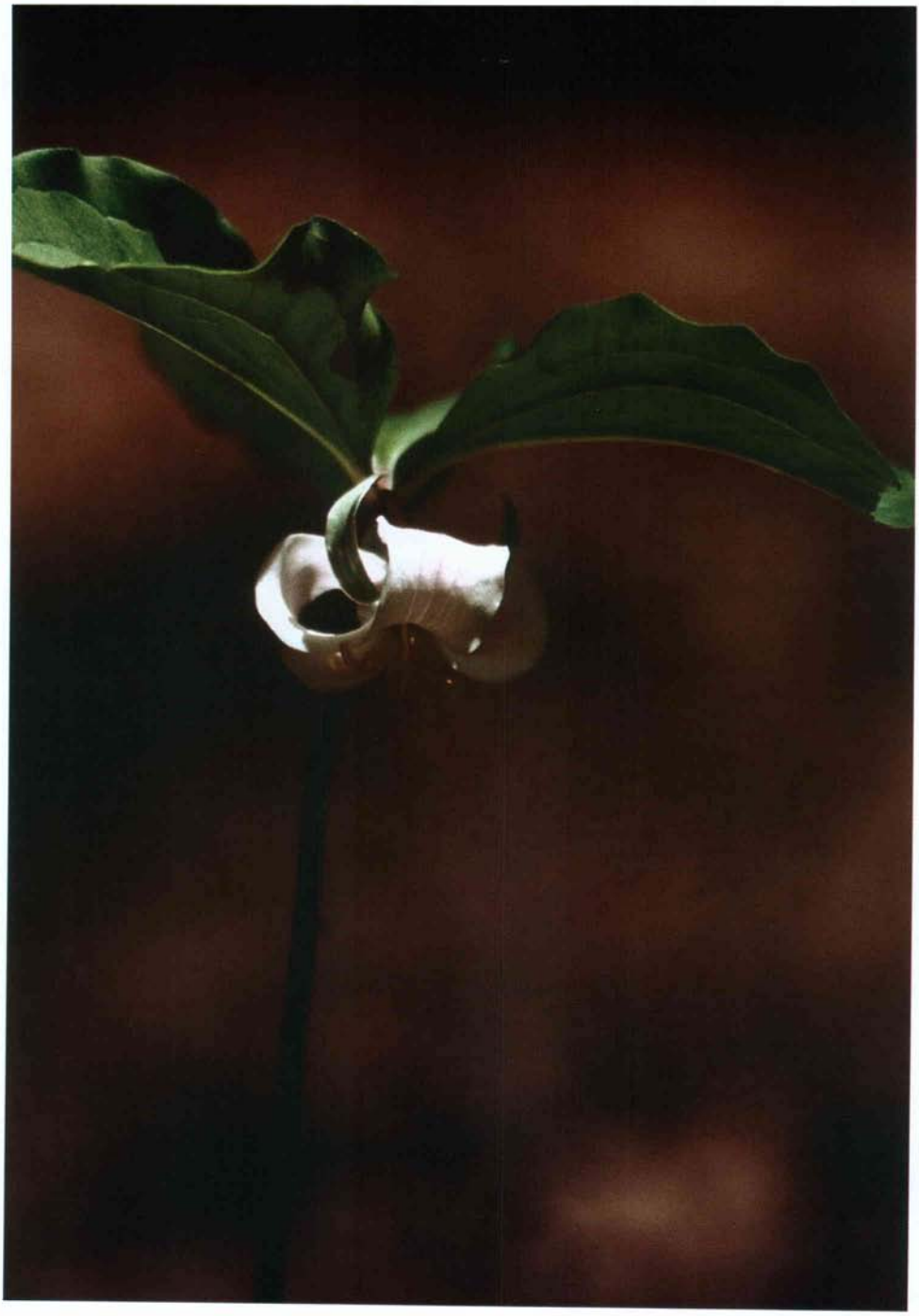
COLOR White

SEASON April–June

COMMON NAME Dwarf White Trillium

COLOR White

SEASON March–May

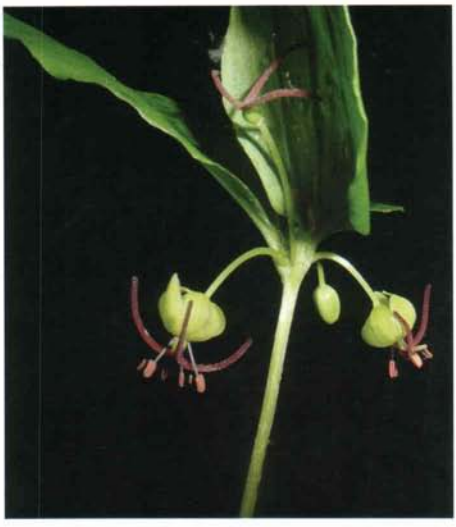


Medeola Virginica

▸ Indian Cucumber

The only species where the long-ovate, light green leaves are arranged around the middle, and the three ovate ones around the top of the thin stem. The inconspicuous nodding, but perfect flower is 0.65 inch wide, green, accented by the terra-cotta of the six stamens, and three long, curling, terra-cotta brown stigmas. In September, two or three purple-black berries replace the flowers. The common name alludes to the horizontal, white tuberous root that tastes like cucumber.

Adapted to subdued sunlight, the blossoms protected from wet weather. 1–3 feet high. Rich damp woods. Maine, west to Minnesota, and south.



COMMON NAME Indian Cucumber

COLOR Green and terra-cotta

SEASON May–June

Liliaceae Family

Chamaelirium Carolinianum

▸ Blazing Star

Also called Devil's Bit. The stem has light green, flat, lance-shaped, blunt leaves at the base with shorter, narrower ones farther up, terminated by a feathery spike, 4–10 inches long, of fragrant flowers, white with a tinting of the yellow stamens. Dependent on insects for cross-fertilization. The staminate flowers on one plant, the pistillate on another. The flower-cup has six narrow, spreading white sepals. The pistillate plant is more leafy. Fruit an oblong capsule. The wandlike stem 1–4 feet high. Low grounds and swamps, from Massachusetts to Georgia, west to Nebraska and Arkansas.

COMMON NAME Blazing Star

COLOR White

SEASON June–July

Liliaceae

Lilium Philadelphicum

▸ Wood Lily or Wild Orange-Red Lily

The most beautifully colored wild lily of all, with bright green leafy stems, flower-cup opening upward, and the six sepal divisions narrowing to a stemlike slenderness toward the base. The color varying from orange-scarlet to scarlet-orange or paler, and spotted with purple-brown on the inner part of the cup. The sepals do not recurve. From one to three flowers are borne at the branching summit of the plant-stem. A small form common in Nantucket bears a single lighter-colored flower. 1–3 feet high. Dry and sandy soil, common in the borders of thin woods. Maine to North Carolina, west to Minnesota and Missouri.

COMMON NAME Wood Lily or Wild Orange-Red Wild

COLOR Orange-scarlet

SEASON July

Liliaceae

Lilium Canadense

▸ Canada Lily

The common lily of the North, the stem is slender or stout, very light green and smooth, and bears the light green lance-shaped leaves in circles. The stem divides into several flower-stems, each bearing a pendulous flower, buff yellow on the outside, and a deeper orange-buff spotted purple-brown, on the inside. The nectar is protected from the rain by the pendulous position of the flower-cup; it is gathered by the wild honey-bee, and the leaf-cutter bee (*Megachile*), who visit the flower to gather the brown pollen as well. These insects are the means of fertilizing this lily. It grows 2–5 feet high, and frequents moist meadows and copses, from Maine, south to Georgia, and west to Minnesota, Nebraska, and Missouri.

Lilium Canadense is probably the most popular wild lily of our range. However, it certainly does not possess the beauty of color that characterizes the wood lily, nor the subtle delicacy of the Turk's Cap; but the graceful curves of its pendulous bells are unsurpassed in any wild or cultivated flower, and it must always command the greatest admiration for that matchless quality.

COMMON NAME Canada Lily

COLOR Buff yellow spotted purple-brown

SEASON June–July

Liliaceae

Erythronium albidum
▸ White Adder's Tongue

A small, lily-like flower with narrow leaves mottled slightly or not at all, smooth, thick, and whitish-green. The flowers are white, or dull, pale violet-tinged outside, and yellow-tinged inside at the heart, the six divisions of the flower-cup curling back. As the white stigma in *Erythronium* matures before the golden anthers, cross-fertilization is necessary. Its most frequent visitor is the bumblebee. It grows 5–8 inches high, and is found in New Jersey, south to Georgia, west to Minnesota.

Erythronium Americanum
▸ Dogtooth Violet

Also called Yellow Adder's Tongue. This is a very similar species, distinguished for its brown-purple-tinged (outside) gold yellow color. Sometimes the purple tinge is missing on the flower, but the two leaves are almost always strongly mottled with it, and are broader than in *E. albidum*. They are elliptical, pointed, nearly stemless, and proceed from the root. The flower is perfect, with six stamens and a pistil, and it is especially adapted to long-tongued insects. It is undoubtedly cross-fertilized by the early bees, who enter the flower-bell and issue plentifully sprinkled with pollen. The little plant, 5–10 inches high, is common in moist woods, beside brooks, and in swampy places from Maine, south, and west to Minnesota.

Drawing: left, White Adder's Tongue; right, Dogtooth Violet.
Opposite: Dogtooth Violet.

COMMON NAME White Adder's Tongue
COLOR White or violet-white
SEASON March–May

COMMON NAME Dogtooth Violet
COLOR Dull gold yellow
SEASON April–May

Amaryllidaceae

Zephyranthes Atamasco

▸ Atamasco Lily

The flower is perfect, with six stamens and a pistil, the former very much shorter than the flower-cup, leaves somewhat thick, blunt, and shining deep green, long and straight. The flower-cup is symmetrical and divided into six distinct lobes, crimson pink, white with a magenta tinge, or white; it is rarely eight-lobed. Unquestionably the plant is cross-fertilized by insects, chiefly by bees, the honeybee (*Apis mellifica*) visiting the flower most frequently, and generally early in the morning. The low position of the anthers in the flower-tube makes it impossible for the bee to pass them without powdering herself with pollen. The name is from the Latin and Greek, *Zephyrus*, the west wind, and *anthos*, a flower. The fruit is a depressed capsule. 6–15 inches high. Found in moist localities, from Delaware to Alabama and Florida.

COMMON NAME Atamasco Lily

COLOR Pink or white

SEASON April–July

Amaryllidaceae

Hypoxis erecta

▸ Star Grass

The leaves are deep green, linear, grasslike, and covered with hairs. The perfect flower is six-parted, with six stamens of unequal lengths; it is deep yellow inside, and hairy and greenish outside. There are perhaps three flowers at the top of the hairy stalk, which, by a plentiful supply of pollen, attract both smaller bees (*Halictus*) and smaller butterflies, notably the Meadow Fritillary (*Brenthis bellona*). The plant depends mostly upon the genus *Halictus* for fertilization, and is self- as well as cross-fertilized. *Hypoxis* is commonly found in the meadow grass, in dry situations. The name is of Greek origin, alluding to some unknown plant with sour leaves. 3–6 inches high. Maine, south, and west to Minnesota, east Kansas, and Texas.

COMMON NAME Star Grass

COLOR Yellow

SEASON April–July

Iridaceae

Iris versicolor

▸ Blue Flag

Also called Fleur-de-lis, this is a handsome plant, with light green, straight, flat leaves, and three-parted perfect flowers blooming one by one from a green bract or leaflet at the tip of a somewhat irregular stalk.

The three larger and more showy divisions of the flower, which are beautifully veined with deep violet over a whitish ground are tinted at the base with yellow. The stamens are under each of the three straplike divisions of the style (the middle portion of the pistil) which directly overlie the showy purple-veined petals. Thus the insect, in order to reach the honey, must alight upon the showy petal, crawl beneath the overhanging style-division, and brush past the anther hidden below it, dislodging the yellow pollen in its passage. At the tip of each style-division is the stigma, and on this some of the pollen is deposited as the bee passes. It is, however, the pollen from some previously visited flower that possesses the greater fertilizing power, so the iris is a plant that has especially adapted itself to cross-fertilization. The fruit is a long three-lobed capsule.

The name is from the Greek word for rainbow, in allusion to the prismatic colors of the species. 16–30 inches high. On the wet margins of ponds, and in swamps, from Maine, south, and west to Minnesota, Arkansas, and Nebraska.

COMMON NAME Blue Flag

COLOR Violet-blue

SEASON May–July

Iridaceae

Iris verna

▸ Dwarf Iris

A usually one-flowered, small, slender-stemmed species with grasslike leaves scarcely over seven inches long, the flower with the three principal divisions narrowed toward the base, slightly woolly, and deep gold yellow at the narrowing part. Sometimes the flowers are white. The fruit capsule is obtusely triangular and short. 4–8 inches high. On wooded hillsides, from south Pennsylvania to Georgia and Kentucky

Iris cristata

▸ Crested Dwarf Iris

A lance-shaped leaf tapering at both ends distinguishes this species from all others; the leaf is bright green, 4–9 inches long, and about 1/2 inch wide. The flowers are very light violet with the broad outer divisions *crested*; i.e., they are marked with three raised parallel flutings along the center, the middle one of which is orange yellow. The flower is exceedingly delicate in color and dainty in form. The fruit capsule is sharply triangular and ovate in outline, hardly twice as long as it is wide. 3–6 inches high. It is a very dwarf plant common on the hillside and along streams, from Maryland south to Georgia, and west to southern Indiana and Missouri.

Drawing: Crested Dwarf Iris. Right: Dwarf Iris.

COMMON NAME Dwarf Iris
COLOR Violet-blue and yellow
SEASON April–May

COMMON NAME Crested Dwarf Iris
COLOR Light violet
SEASON April–May

Orchidaceae

Spiranthes cernua
▸ Ladies' Tresses

A marsh orchid with a twisted or spiral flower-spike and light green linear leaves not nearly as tall as the flower stem. The bugle-horn-shaped tiny flowers are yellowish white, or variably cream white, the whiter ones generally more fragrant. It is fertilized by some of the smaller bees, moths and butterflies.

In *Spiranthes*, the rostellum holds a narrow boat-shaped disc containing a sticky fluid. It is covered by a membrane easily ruptured by an insect, and the exposed sticky fluid then glues itself to the tongue of the insect and the disc is withdrawn together with the pollinia, which are attached to it at the back. When the flower first opens, the passage between the rostellum and the lip is very narrow, so it is easily ruptured by visitors. Later, the space widens in the maturer development of the flower. Only flowers that are mature are sufficiently open for an insect to reach the stigma and leave the pollen of a younger flower.

The name is from the Greek for *coil* and *flower*. 6–24 inches high. Found in wet meadows and grassy swamps from Maine, south, and west to Minnesota and Nebraska.

COMMON NAME Ladies' Tresses

COLOR Yellowish white

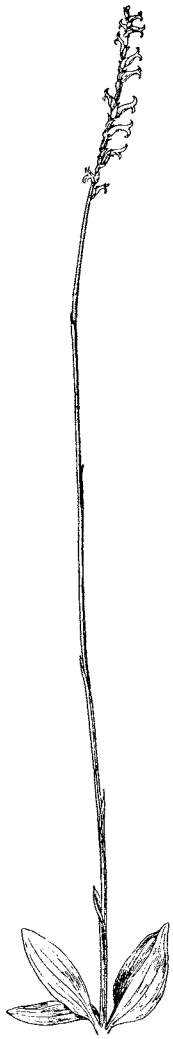
SEASON August–September

Orchidaceae

Spiranthes gracilis

▸ Slender Ladies' Tresses

An exceedingly slender and tall species, smooth or rarely woolly above, bearing small withering bracts or leaflets along the flower-stem which is terminated by a very-much twisted cluster of many slender flowers, translucent cream white, and very fragrant. The odor of *Spiranthes* is peculiarly aromatic, reminiscent of horse-chestnut, but remarkably sweet. The sepals of the flower are a little longer than the lip, which is greenish above with white margins. The ovate leaves at the root wither before the flowers bloom. Visited by the bumblebee (*Bombus Americanorum*) and the small bee, *Calliopsis andreniformis*. 10–22 inches high. It is common in dry situations, in pastures, fields, and half-wooded hillsides in Maine, south, and west to Minnesota and Kansas. It is rare in central New Hampshire, where *S. cernua* is plentiful.



COMMON NAME Slender Ladies' Tresses

COLOR Cream white

SEASON August–October

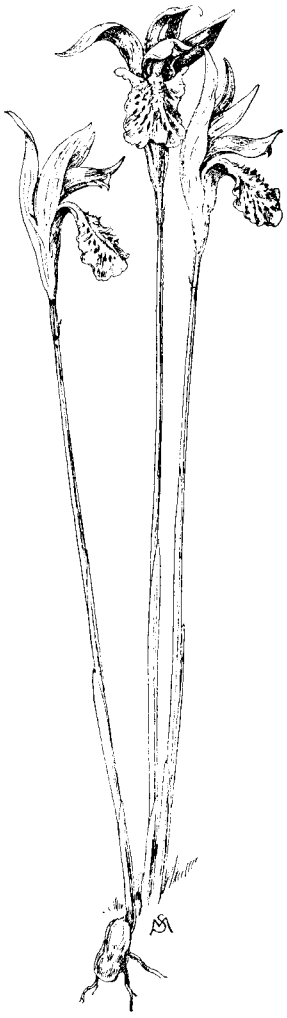
Orchidaceae

Arethusa bulbosa

▸ Arethusa

A large single-flowered and delicately scented orchid. The light magenta-crimson petals and sepals point upward like the fingers of a half-open hand viewed in profile. The lip of the flower is recurved and spreading, with the broad apex often fringed, magenta blotched, and crested in three white hairy ridges; this forms a conspicuously colored landing platform for the visiting insect, usually a bumblebee, who, after pressing beneath the column and sipping the nectar, backs out brushing against the edge or lid of the anther, opening it and emptying the enclosed pollen upon his head, as is also the case with *Pogonia ophioglossoides*.

The column is topped by the lid-like anther instead of the usual rostellum, and the pollen-masses are not pearlike and stemmed. The solitary leaf is linear, and hidden in the sheathed scape; it appears after the flowering season. Rarely a plant produces two flowers, varying from 1–2 inches in length. The fruit capsule is elliptical, about 1 inch long. 5–10 inches high, it is common in bogs, from Maine, south to North Carolina, west to Minnesota and Indiana. It is named for the fountain nymph, Arethusa.



COMMON NAME Arethusa

COLOR Magenta-crimson

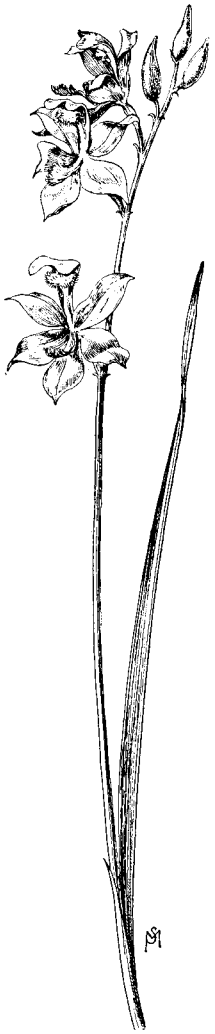
SEASON May–June

Orchidaceae

Calopogon pulchellus

▸ Grass Pink

A smaller-flowered, but very beautiful orchid, slender-stemmed, and with one linear bright green leaf. Flower-stem bearing 3–9 magenta-pink sweet-scented flowers with a long spreading lip crested with yellow, orange, and magenta hairs; the anther and pollen are as in *Arethusa*. Name from the Greek, *beautiful* and *beard*, referring to the handsome bearded lip. 10–16 inches high. In bogs, from Maine, south, and west to Minnesota and Missouri. Often found in company with the next.



COMMON NAME Grass Pink

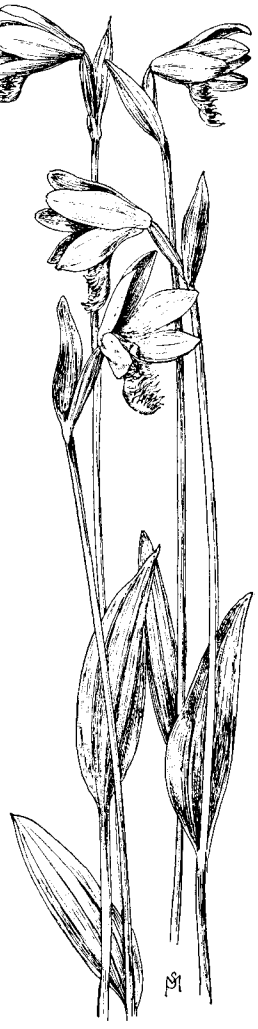
COLOR Magenta-pink

SEASON June–July

Orchidaceae

Pogonia ophioglossoides
▸ Snake Mouth

A most delicate little orchid bearing generally solitary, raspberry-scented crimson-pink flowers with a small light green lance-shaped leaf halfway up the stem, and a tiny one just below the blossom; sometimes a long-stemmed leaf proceeds from the root. The flower has sepals and petals of equal length overhanging a beautifully crested and fringed lip, curved like the hollow of one's hand, which furnishes an alighting platform for the visiting insect, who pushes forward in the narrow space between the stigma and the lip, scraping pollen off its back in its progress. The pollen attaches to the gummy stigma. In retreating, the lid of the anther catches on the back of the visitor, swings open, and fresh pollen is deposited for the benefit of the next flower. This orchid has no rostellum and its pollen is not in stemmed pearlike masses. The name, Greek, *bearded*, from the bearded lip of some of the species. 8–13 inches high. In wet meadows and swamps. Maine, south, and west to Kansas. Frequently found in company with *Calopogon*.



COMMON NAME Snake Mouth

COLOR Crimson-pink

SEASON June–July

Habenaria psycodes

▸ Smaller Purple Fringed Orchis

A species with a compact, settled flower-spike, with elliptical and lance-shaped leaves, smaller above. The long flower-spike is crowded with deep-spurred flowers, fragrant magenta-pink or lilac-pink, variably pale or deep, and a spur 2/3 inch long. Stands 1–3 feet high, commonly found in swamps and wet woods from Maine, south to North Carolina, and west to Minnesota.

Habenaria blephariglottis

▸ White Fringed Orchis

A handsome species with white fringed flowers with a less deeply fringed lip, the lip being one-third the length of the spur. 12–21 inches high, found in swamps and bogs from Maine, south to New Jersey, and west to Minnesota.

Drawing: Smaller Purple Fringed Orchis. Left: White Fringed Orchis. Right: Smaller Purple Fringed Orchis.

COMMON NAME Smaller Purple Fringed Orchis

COLOR Magenta-pink

SEASON July–early August

COMMON NAME White-fringed Orchis

COLOR White

SEASON July–early August

Orchidaceae

Cypripedium pubescens
▸ Yellow Lady's Slipper

This is a taller species, with a slender leafy stem, and showy fragrant yellow flowers the petals and sepals of which are madder purple streaked; the narrow petals are usually twisted, and the bright golden yellow lip as well as the summit of the column is more or less blotched and striped with madder purple. 12–24 inches high, found in woods and woodland bogs from Maine, south among the mountains to Alabama, and west.

COMMON NAME Yellow Lady's Slipper

COLOR Yellow

SEASON May–July

Orchidaceae

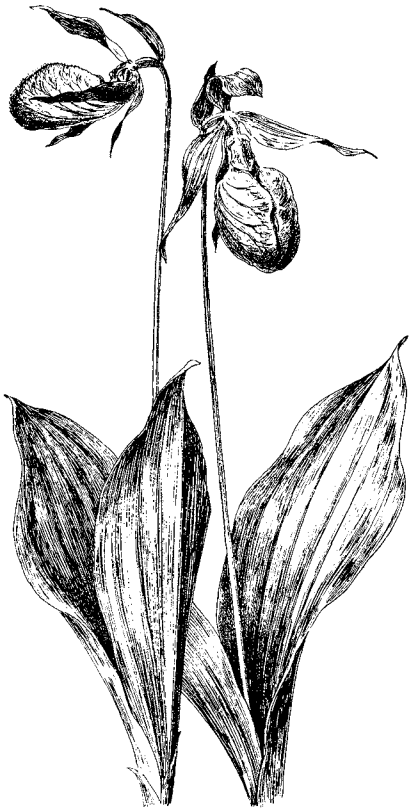
Cypripedium acaule
▸ Moccasin Flower

Also callled Stemless Lady's Slipper. The commoner and more familiar lady's slipper, with two large leaves from the root, without a plant-stem, the slightly fragrant flower terminating a long slender stem with a green leaflet or bract at the point of junction. The pouch is crimson-pink (rarely white) veined with a deeper pink, the sepals and petals greenish and brown, more or less curved and wavy.

Hidden beneath the third, or sterile stamen of *Cypripedium*, which crowns the column and overhangs the stigma which receives pollen from the backs of visiting bees,. It grows from 8–12 inches high. Maine to North Carolina, and Kentucky, west to Minnesota.

Cypripedium spectabile
▸ Showy Lady's Slipper

This is perhaps the most beautiful plant in the whole of the genus. The stem is stout and leafy to the top, the flower fragrant; its pouch iwhite, more or less blotched or stained with velvety light crimson-magenta. The sepals and petals are white, broad, and not longer than the rotund pouch. The sterile stamen that crowns the column is long-heart-shaped, stained yellow at the tip and spotted crimson, 1–2 feet high, found in swamps and wet woods from Maine south to Georgia and west to Minnesota.



Drawing: left, Moccasin Flower; right, Stemless Lady's Slipper Right: Showy Lady's Slipper.

COMMON NAME Moccassin Flower

COLOR Crimson-pink

SEASON May–early July

COMMON NAME Showy Lady's Slipper

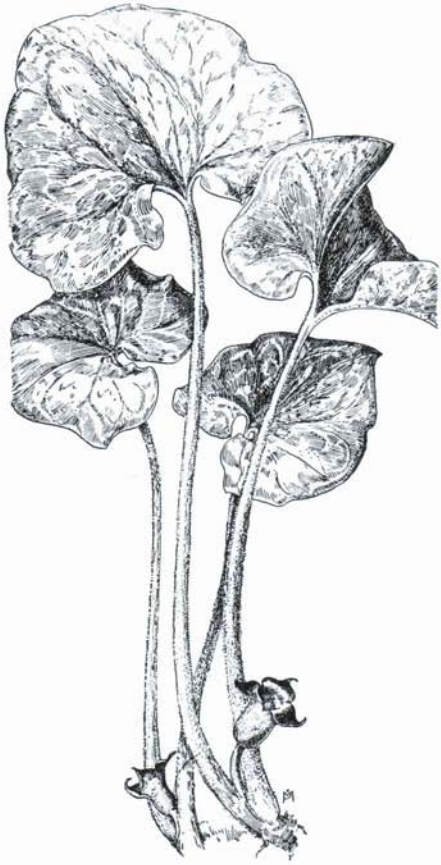
COLOR White, crimson-magenta

SEASON June–July

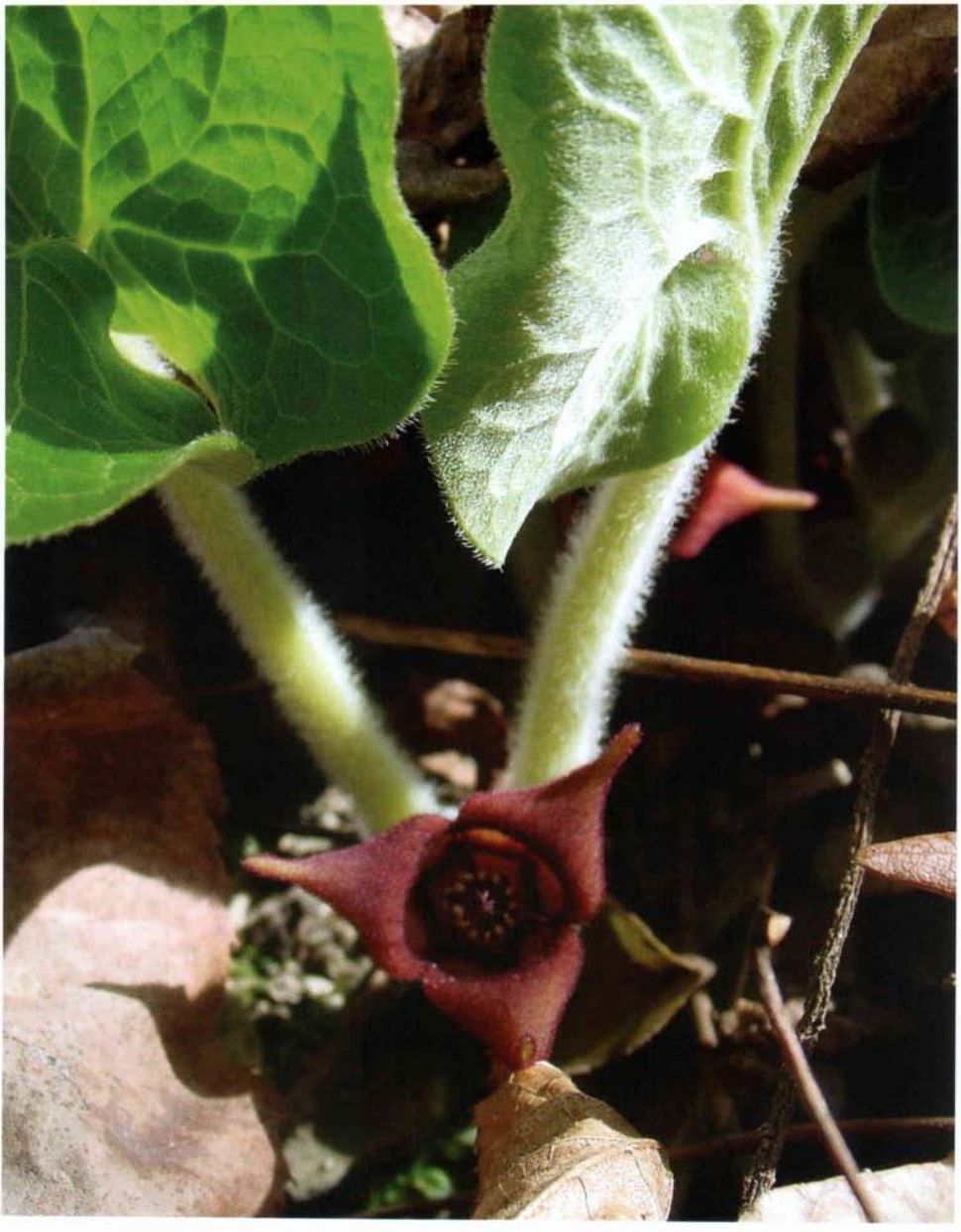
Asarum Canadense
▸ Wild Ginger

The two long-stemmed deep-green leaves are patterned with veins, woolly soft, and heart-shaped, their stems hairy. The flower has three distinct, pointed, brownish or madder-purple divisions to the calyx which is closely united to the solid seed receptacle or ovary, which is green outside. The cup is white below, marked by a hexagon in purple-brown.

This is a curious woodland plant whose odd flower is half concealed by its low position and its sober color that not infrequently resembles the leaf-mould just beneath it. Its proximity to the ground and the frequent visits of the fungus gnats and the early flesh-flies suggest that these have most to do with the fertilization of the plant. 6–12 inches high, it is common in rich woods from Maine, south to North Carolina, and west to Missouri and Kansas.



COMMON NAME Wild Ginger
COLOR Brown-purple
SEASON April–May



Portulacaceae

Portulaca oleracea

▸ Purslane or Pusley

A fleshy-leaved, prostrate annual, naturalized from the old world, and commonly found in gardens and dooryards. The stems are thick and often a terra-cotta pink, the leaves dark green, thick, and round-end wedge-shaped. The tiny, solitary, five-petalled yellow flowers open only in the morning sunshine. They have 7–12 stamens. The branches are 3–10 inches long and hug the ground, radiating out in an ornamental circle. In early days the plant was used as a pot herb.

Claytonia Virginica

▸ Spring Beauty

A charmingly delicate flower (rarely quite white) of early spring, distinguished for its flush of pale crimson-pink, and its veins of deeper pink starting from a yellow base. The deep-green leaves are linear or broader, the two upper ones located at about the middle of the plant-stem. The flower has five petals and but two sepals. Its golden stamens develop before the stigma is mature, making cross-fertilization a certainty. Stem 6–12 inches high. Found in open moist woods, from Maine, south to Georgia, and southwest to Texas.

Drawing: left, Purselane; right, Spring Beauty. Right: Spring Beauty.

COMMON NAME Purslane or Pusley

COLOR Yellow

SEASON June–September

COMMON NAME Spring Beauty

COLOR Pale pink or white

SEASON March–May

Nymphaeaceae

Nuphar advena
▸ Yellow Pond-Lily

Also known as Spatter-dock. An odorless yellow pond-lily, familiar in stagnant water, with stouter stem and coarser leaves than those of *N. odorata*, found often in the same water with it. With ovate leaves, and small, green and yellow cup-shaped flowers, having 6 green sepals, sometimes purple-tinged, yellowish inside. The petals yield nectar; they are small, narrow, thick, and yellow—stamenlike. The stigma is a pale ruddy or deep golden yellow-rayed disc, beneath which the undeveloped anthers are crowded. Found in northern Vermont to Michigan and Pennsylvania.

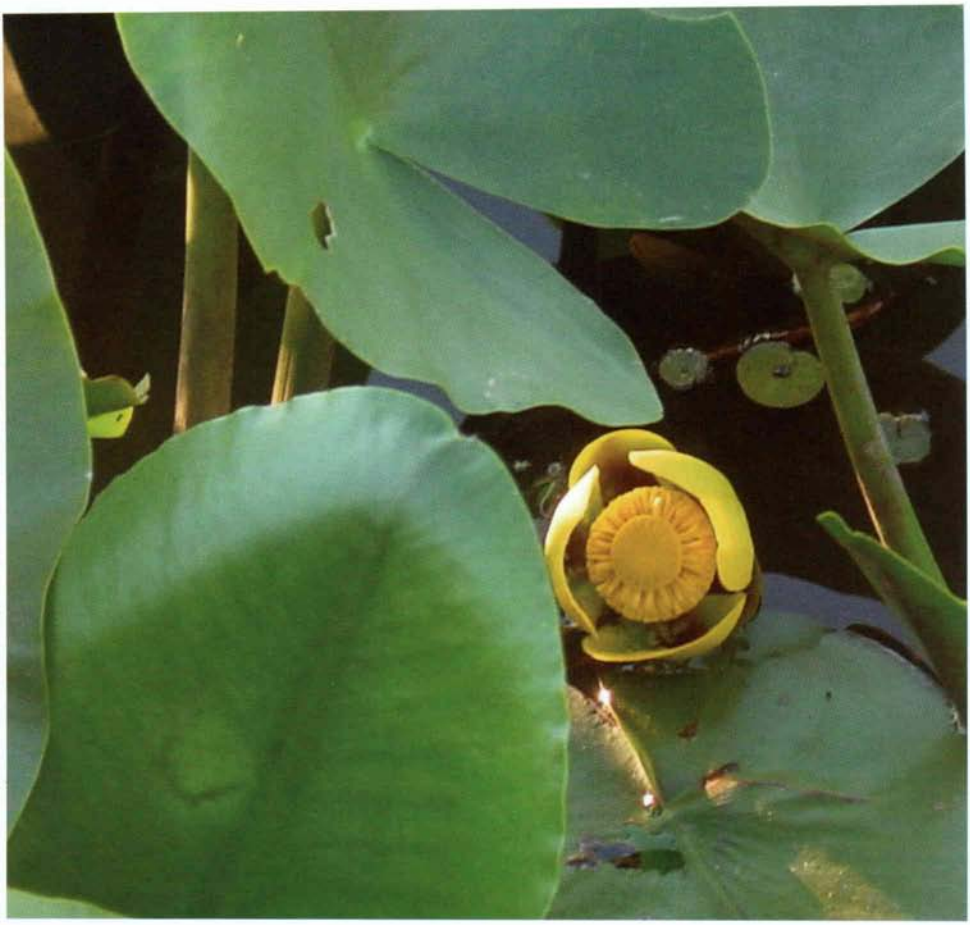
Nymphaea odorata
▸ Water-Lily

The beautiful white pond-lily found in still waters everywhere. Leaves dark green, pinkish beneath, ovate-round, cleft at the base up to the long stem. The white flowers, often 5 inches in diameter when fully developed, open in the morning and close at noon or later; they are frequently pink-tinged; the golden stamens and anthers are concentric, and are luminous in quality of color. They mature after the stigma does, and cross-fertilization occurs by the agency of bees and beetles in general. The flower yields pollen only.

Drawing: below, Water-lily; above, Yellow Pond-lily. Right: below, Water-lily; above, Yellow Pond-lily.

COMMON NAME Yellow Pond-Lily
COLOR Golden yellow
SEASON May–September

COMMON NAME Water-Lily
COLOR White
SEASON June–September



Ranunculaceae

Anemone quinquefolia
▸ Wood Anemone or Wind Flower

A delicate plant with deep green leaves of five divisions and frail white, or magenta-tinged blossoms of from 4–9 petal-like sepals; the solitary flower frequently 1 inch across. Common in the early spring on the borders of the woods, standing 4–8 inches high; found in Maine, south to Georgia, and west to the Rocky Mountains.

Anemonella thalictroides
▸ Rue Anemone

Often blooms in company with *Anemone quinquifolia*, but is readily distinguished from it by the cluster of 2–3 flowers, the other bearing a solitary blossom. Usually white but rarely magenta-pink-tinged., the deep-olive green leaves in groups of three are long-stemmed. It stands 5–9 inches high and is common in thin woodlands everywhere.

Hepatica triloba
▸ Hepatica

The earliest flower of spring, it appears before its leaves and is found half hidden among the decaying autumn leaves that cover the woodland floor. The blossom about 0.8 inch broad, with 6–12 lustrous sepals varying from lilac-white to pale purple and light violet, beneath which are three leaflets resembling a calyx, or outer floral envelop. It stands about 3 inches high. Common from the eastern seaboard west to Missouri.

Drawing: top, Wood Anemone; middle, Rue Anemone; bottom, Hepatica. Right: Rue Anemone.

COMMON NAME Wood Anemone
COLOR White
SEASON April–June

COMMON NAME Rue Anemone
COLOR White, or pink-tinged
SEASON March–May

COMMON NAME Hepatica
COLOR Lilac white, pale purple
SEASON March–May

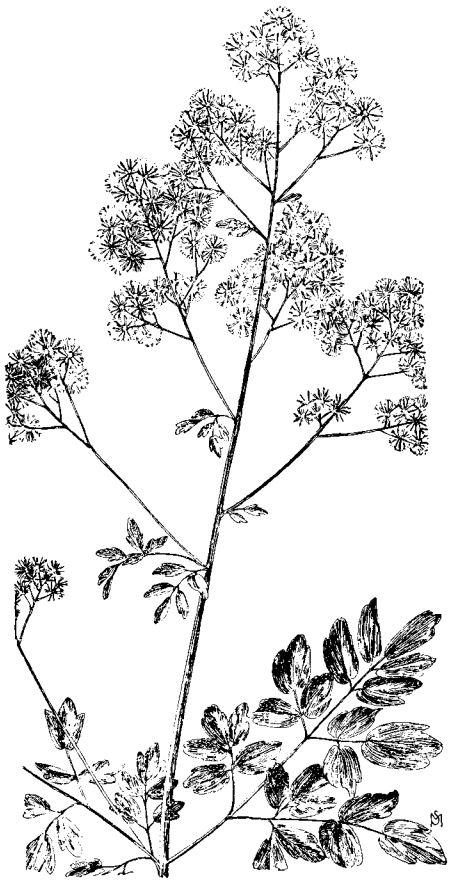
Ranunculaceae

Thalictrum polygamum
▸ Tall Meadow Rue

The commonest species, remarkable for its starry plumy clusters of white flowers, lacking petals, but with many conspicuous threadlike stamens. The flowers are polygamous, that is, with staminate, pistillate, and perfect ones on the same or different plants. The leaves are compound, with lustreless blue-olive green leaflets; the stout stem light green or magenta-tinged at the branches. The decorative, misty-white flower-clusters are often a foot long. The delicate-scented staminate flowers are a decided tone of green-white. It stands 3–10 feet high and is common in wet meadows from Maine, west to Ohio, and south.

Thalictrum dioicum
▸ Early Meadow Rue

A beautiful but not showy, slender meadow rue with the staminate and pistillate flowers on separate plants. The blue-olive green leaves lustreless, compound, and thinly spreading; the drooping staminate flowers with generally four small green sepals, and long stamens tipped with terra-cotta, and finally madder purple. The pistillate flowers are inconspicuously pale green. An airy and graceful species, common in thin woodlands. Stands 1–2 feet high. Found from Maine, south to Alabama, and west to Missouri, South Dakota, and Kansas.



Drawing: Tall Meadow Rue. Right: Early Meadow Rue

COMMON NAME Tall Meadow Rue
COLOR White
SEASON July–September

COMMON NAME Early Meadow Rue
COLOR Green, terra-cotta
SEASON April–May

Ranunculaceae

Ranunculus acris
▸ Tall Buttercup

This is the common buttercup of fields and meadows. The stem is hairy, branched and deep green. The leaves deep green with 3–7 stemless divisions, and these are again correspondingly divided into linear segments. The nearly 1 inch broad flowers are lustrous light golden yellow within, and light yellow without, 2–3 feet high, set on long slender stems. They sometimes continue to bloom until frost.

The variety *R. acris,* var. *Steveni,* is similar except in the shape of its leaf, which has very broad instead of linear segments, giving the plant a thicker, heavier appearance in the field.

Caltha palustris
▸ Marsh Marigold

A thick, hollow-stemmed, stocky plant common in marshes, with round or kidney-shaped, deep green, obscurely blunt-toothed leaves, and brilliant golden yellow flowers resembling buttercups, often wrongly called cowslips. The flowers are perfect with 5–9 petal-like sepals, and numerous stamens. They are honey-bearing, and although the anthers and stigmas mature simultaneously, cross-fertilization is favored by the anthers opening outwardly, and the outermost ones farthest from the stigmas opening first.

The plant stands 8–24 inches high and is found in wet meadows, from Maine, south to South Carolina, and west.

Drawing: Tall Buttercup Right: Marsh Marigold

COMMON NAME Tall Buttercup
COLOR Golden or deep yellow
SEASON May–August

COMMON NAME Marsh Marigold
COLOR Golden yellow
SEASON April–May

Aquilegia Canadensis

▸ Wild Columbine

A most delicate but hardy plant common on rocky hillsides and the borders of wooded glens. The long-stemmed compound leaves are light olive green, with three-lobed leaflets. The flowers are graded from yellow through scarlet to red at the tip of the spurs. The petals are the 5 tubes culminating in the spurs, and the 5 sepals are the spreading ruddy yellow leaflets grading into a greenish yellow, situated between the tubes. Stamens yellow. Fertilized by moths and butterflies. 1–2 feet high. Common everywhere. Rarely the flowers are altogether golden yellow. The long spurs indicate the adaptation of the flower to long-tongued insects.

COMMON NAME Wild Columbine

COLOR Scarlet, yellow

SEASON April–early July

Actaea spicata var. rubra

▸ Red Baneberry

A bushy woodland plant with compound 3–5 parted leaves, the leaflets toothed and lobed, the lower end-leaflets sometimes again compound. The tiny white, perfect flowers with 4–10 exceedingly narrow petals and numerous stamens; the 4–5 sepals petal-like and falling when the flower blooms. Cross-fertilized by the small bees, especially of the species *Halictus*. The stigmas mature before the anthers are open, thus securing cross-fertilization. Fruit a thick cluster of coral red, oval berries borne upon slender stems. 1–2 feet high. Woods, from Maine, southwest to New Jersey and Pennsylvania, and west.

COMMON NAME Red Baneberry

COLOR White

SEASON April–June

Actaea alba

▸ White Baneberry

A similar species with the same distribution. The leaflets are more deeply cut, the teeth are sharper, and the lobes are acute. The narrow, stamen-like petals are blunt at the tip, and shorter than the stamens. The fruit is a china-white berry with a conspicuous purple-black eye; the stems are thick and fleshy, and usually red. Forms with slender-stemmed white berries, and fleshy-stemmed red berries occasionally occur, but these are considered hybrids. The *Actaeas* are not honey flowers and the smaller bees (*Halictus*) visit them for pollen.

COMMON NAME White Baneberry

COLOR White

SEASON Late April–June

Berberidaceae

Podophyllum peltatum
▸ May Apple or Mandrake

A handsome woodland plant remarkable for its large leaves, frequently measure a foot in diameter. The flowerless stem of the plant bears a leaf with 7–9 lobes, supported by the stem in the center, as an umbrella.

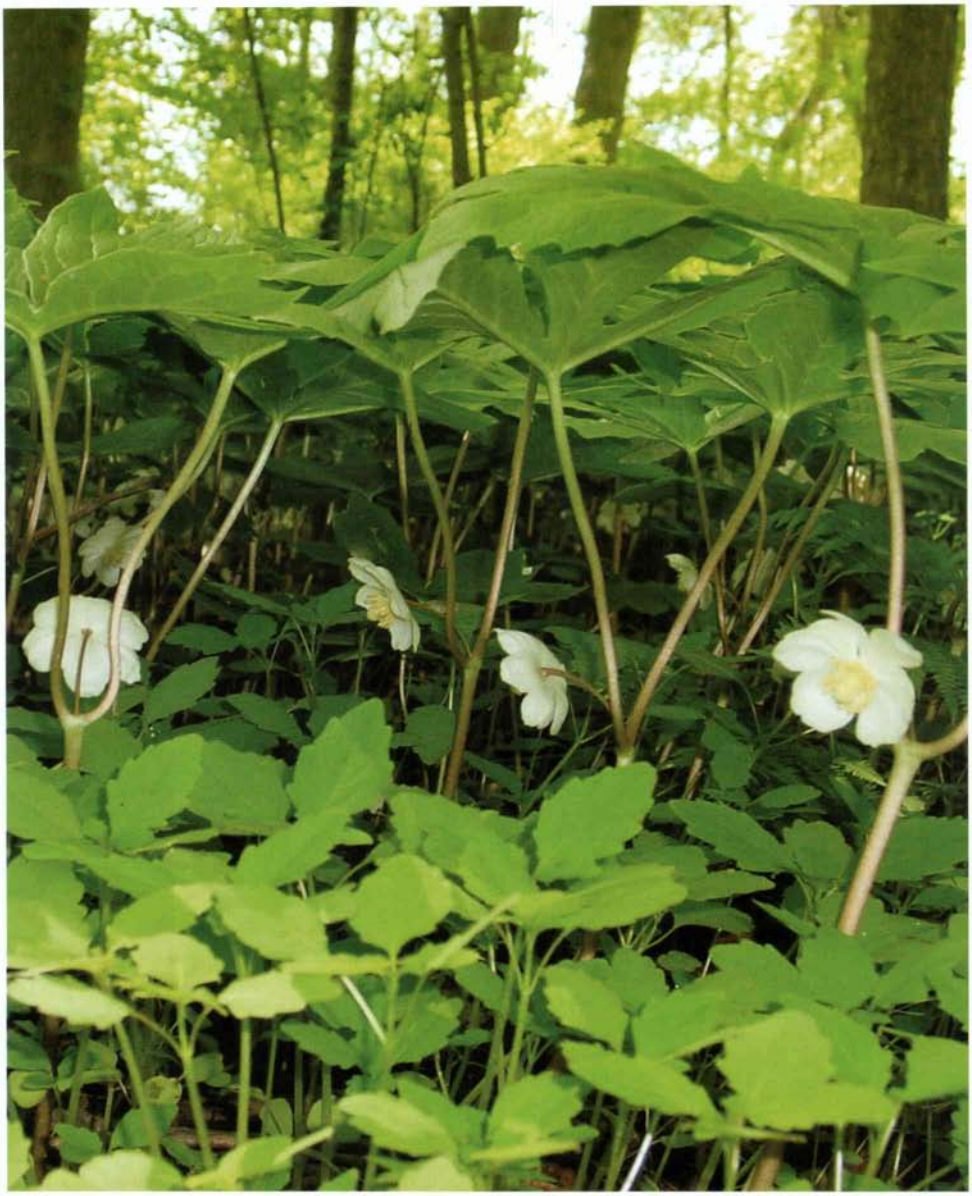
The May Apple has also been called Umbrella Leaf, and, in allusion to its peculiar lemonlike fruit, Wild Lemon. The flowering stalks bear two less symmetrical leaves, from between the stems of which droops the ill-smelling but handsome white flower nearly 2 inches broad. It usually has 6 petals and twice as many stamens. It is without nectar, but is nevertheless cross-fertilized by the early bees and the bumblebees, who collect the pollen.

The fruit is a large, fleshy, edible, lemon-shaped berry. Leaves and root are poisonous, and medicinal. The plant is 12–18 inches high, and is common in damp rich woods, from New York, west to Minnesota and Nebraska, and south. Not in northern New England.

COMMON NAME May Apple or Mandrake

COLOR White

SEASON Late April–May



Papaveraceae

Sanguinaria Canadensis

▸ Bloodroot

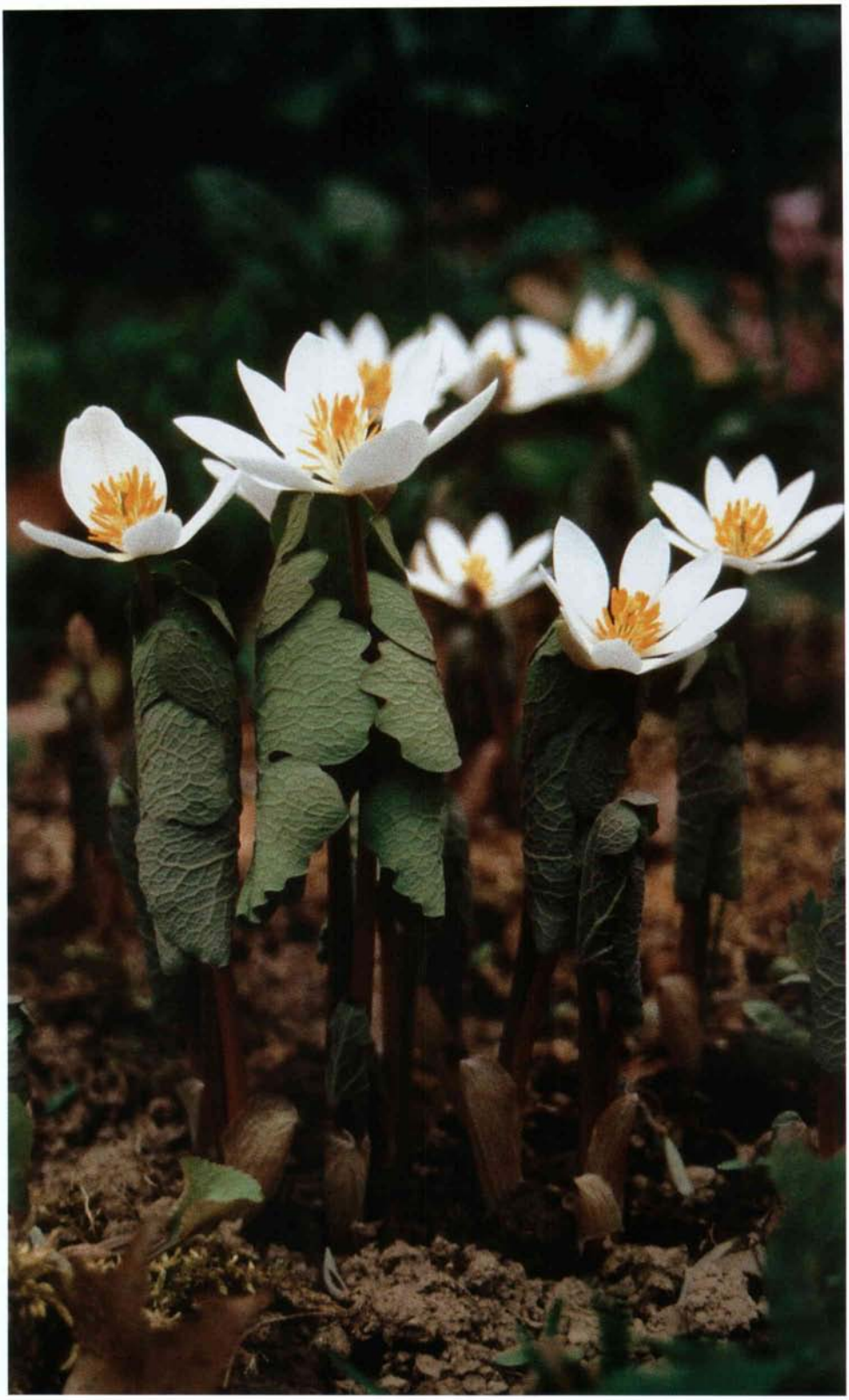
A most beautiful but fragile flower of early spring, 1.5 inches broad, with generally 8 (rarely 12) brilliant white petals four of which alternating with the others are a trifle narrow, and impart a four-sided aspect to the full-blown blossom. The petals expand flatly in the morning, and become erect toward late afternoon, and close by evening.

As the plant breaks through the ground in early April, the leaf is curled into a cylinder that encloses the budding flower; afterward the blossom pushes upward beyond the leaf. Eventually the light blue-olive green leaf, generally with seven irregular shallow lobes, is 6–10 inches broad. The dull orange-colored sap is acrid, astringent, and medicinal in quality. Fruit-capsule elliptical-oblong with many light yellow-brown seeds. Plant finally about 10 inches high. Common everywhere on the borders of rich woods, shaded roadsides, and copses.

COMMON NAME Bloodroot

COLOR White

SEASON April–May



Papaveraceae

Dicentra Cucullaria

▸ Dutchman's Breeches

One of the daintiest wild flowers of spring, it has a feathery compound leaf, long-stemmed and proceeding from the root, thin, grayish green in tint, blue and paler beneath. The leaflets are finely slashed and distributed in three parts.

The flowering stalk also proceeds from the root, and bears 4–8, rarely more, nodding white flowers, of four petals joined in pairs and forming, two of them, a double, two-spurred, somewhat heart-shaped sack, the other two, within the sack, very small, narrow, and protectingly adjusted over the slightly protruding stamens. The spurs are stained with light yellow.

Cross-fertilized mostly by the early bumblebees. Honeybees collect only pollen, their tongues too short to reach the nectar. The proboscis of the bumblebee, 8 mm. long, reaches it, that of the honeybee, 6 mm., cannot. The honeybee alights on the flower, forces its head between the inner petals, and gathers only the pollen with its front feet! Such a pendulous position is extremely difficult for insects other than bees to maintain. Butterflies therefore visit the flower with less success than bumblebees.

The flowering stem is 5–9 inches high. This is found in thin woodlands and on rocky slopes from New England, south to North Carolina, and west to Nebraska, South Dakota, and Missouri.

COMMON NAME Dutchman's Breeches

COLOR White, yellow-tipped

SEASON April–May

Papaveraceae

Corydalis glauca
▸ Pale Corydalis

This is another delicate wild flower of spring. The pale or whitish-green leaves are compound, and cut into ornamental segments that are generally three-lobed. The pale crimson-pink, or sometimes magenta-pink, slightly curved corolla is half an inch or more long, somewhat round at the top (which is really the bottom), and two-flanged at the bottom or mouth, which is golden yellow.

The slender and erect stem whitened with a slight bloom and often stained pinkish, is 8–22 inches long. The seed-pods are erect and slender, 1.5 inches long. Found in rocky situations from Maine, south to North Carolina, and west to Minnesota.

Dicentra Canadensis
▸ Squirrel Corn

A similar species with more attenuate flowers, white or greenish white tinted with magenta-pink, 4–8 on the stalk, all very short-stemmed, and narrow at the base, slightly fragrant. 6–12 inches high, the roots bearing many little tubers resembling yellow peas, hence the common name. Rich woodlands, from Maine south along the mountains to Virginia, and west to Minnesota, Nebraska, and Missouri.

Drawing: left, Pale Corydalis; right, Squirrel Corn
Right: Squirrel Corn

COMMON NAME Pale Corydalis
COLOR Pale pink
SEASON May–August

COMMON NAME Squirrel Corn
COLOR White, magenta-pink
SEASON May–June

Cruciferae

Dentaria diphylla

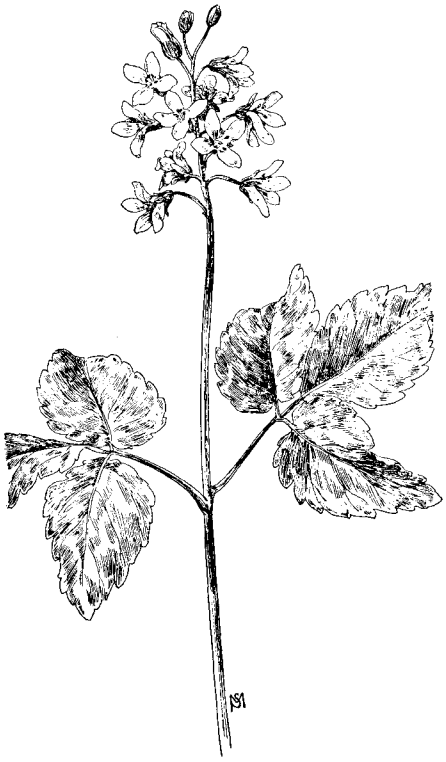
▸ Toothwort or Crinkleroot

A low woodland plant with inconspicuous flowers 2/3 inch wide, having four petals and many yellow stamens. The basal leaves long-stemmed, three-lobed, and toothed, the two upper stem-leaves similar and opposite; all smooth. The flowers borne in a small terminal cluster. The slender seed-pods 1 inch long. The long root is wrinkled, toothed, and is edible, possessing a pleasant pungent flavor, like watercress. 8–13 inches high. In rich woodlands and damp meadows, from Maine, south to South Carolina, west to Minnesota.

Dentaria laciniata

▸ Cut-leaved Toothwort

A similar species, but with the leaves deeply cut into narrow lobes, sharply and coarsely toothed; three are borne upon the smooth, or sparingly woolly stem not far below the flower-cluster. The basal leaves are developed after the flowering time. The flowers are often faintly tinged with magenta-pink. Root also peppery. Common everywhere in moist woods or on the borders of thickets.



Drawing: Toothwort Right: above, Toothwort; below, Cut-leaved Toothwort.

COMMON NAME Toothwort or Crinkleroot

COLOR White

SEASON May

COMMON NAME Cut-leaved Toothwort

COLOR White or pinkish

SEASON April–May

Cardamine hirsuta

▸ Small Bitter Cress

A bitter-tasting little herb easily distinguished by its exceedingly long, thin seed-pods that are an inch long and erect. The tiny flowers with four narrow petals are white, and are frequently visited by the brilliant flies of the family *Syrphidae*. The little compound leaves mostly at the base of the plant form a rather pretty rosette; the few upper leaflets are exceedingly narrow. It grows 3–12 inches high. Common everywhere in wet places.

Drawing: Small Bitter Cress. Left: Spring Cress in bud.

COMMON NAME Small Bitter Cress

COLOR White

SEASON April–June

Cardamine Family

Cardamine rhomboidea

▸ Spring Cress

A smooth and inconspicuous slender plant found beside springs, or in wet meadows, with somewhat angularly round root-leaves, and sparingly coarse-toothed, ovate stem-leaves. The flowers, like toothwort, 0.5 inch broad, succeeded by a long beanlike pod. It grows 6–16 inches high. Found in western New York, south to Maryland, and west to Wisconsin and South Dakota.

COMMON NAME Spring Cress

COLOR White

SEASON April–May

Sarraceniaceae

Sarracenia purpurea
▸ Pitcher Plant

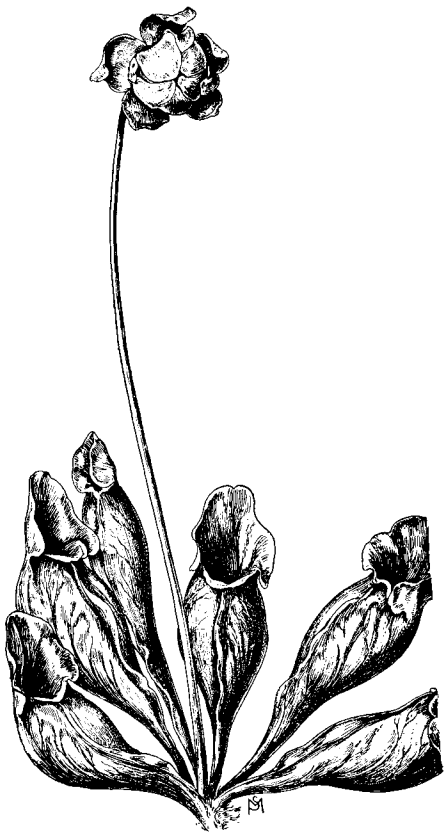
A curious plant found in peat-bogs, its strange hollow leaves, keeled on the inner side toward the flower-stem, are usually partly filled with water and the fragments of insects, apparently drowned, and no doubt contributing to the sustenance of the plant.

The raw-meat coloring, red veining, and the general form of the flower attract the carrion flies, which are especially fitted for the cross-fertilization of the flower.

The green style within the blossom is like an umbrella with five ribs, the stigmatic surface on the inside. The folding petals and the flower's drooping position protect ripening pollen from the elements, but the inquisitive insect finds easy access to it.

The coloring of the whole plant is green with red-purple veining; the sepals are madder purple, and greenish on the inside. The outer surface of the pitchers is smooth, but the inner surface is covered with fine bristles pointing downward, trap insects. The pitchers are circled around the root and measure 4–10 inches in length. The flower-stem can be a foot high.

Commonly found in the black peat-bogs of wooded hills or in mountain tarns where there is scant sunshine. When more exposed to the sun, its green coloring predominates. It is common north and south, and extends as far west as Minnesota.



COMMON NAME Pitcher Plant

COLOR Dull dark red

SEASON May–June

Droseraceae

Drosera filiformis
▸ Thread-leaved Sundew

The leaves of this larger species are reduced to a threadlike shape with no distinct stem; they are red hairy, the hairs ending in a red bead or dot. The flowers 0.5 inch broad, and dull purple-magenta. There are many in the cluster. 8–18 inches high. Found in wet sand near the seacoast, from Massachusetts, south to the pine barrens of New Jersey.

Drosera rotundifolia
▸ Round-leaved Sundew

A *very* small plant with long-stemmed round leaves lying close to or on the ground, both leaf and stem covered with long, fine, red hairs.

The flower-cluster is one-sided, and the blossoms open one at a time only in the sunshine. The leaves exude clear drops of fluid, which appear like small dewdrops, and the sap stains paper a ruddy madder purple. 4–9 inches high, it is found in bogs, from Maine south and west to the Dakotas.

Drosera intermedia, v. Americana
▸ Long-leaved Sundew

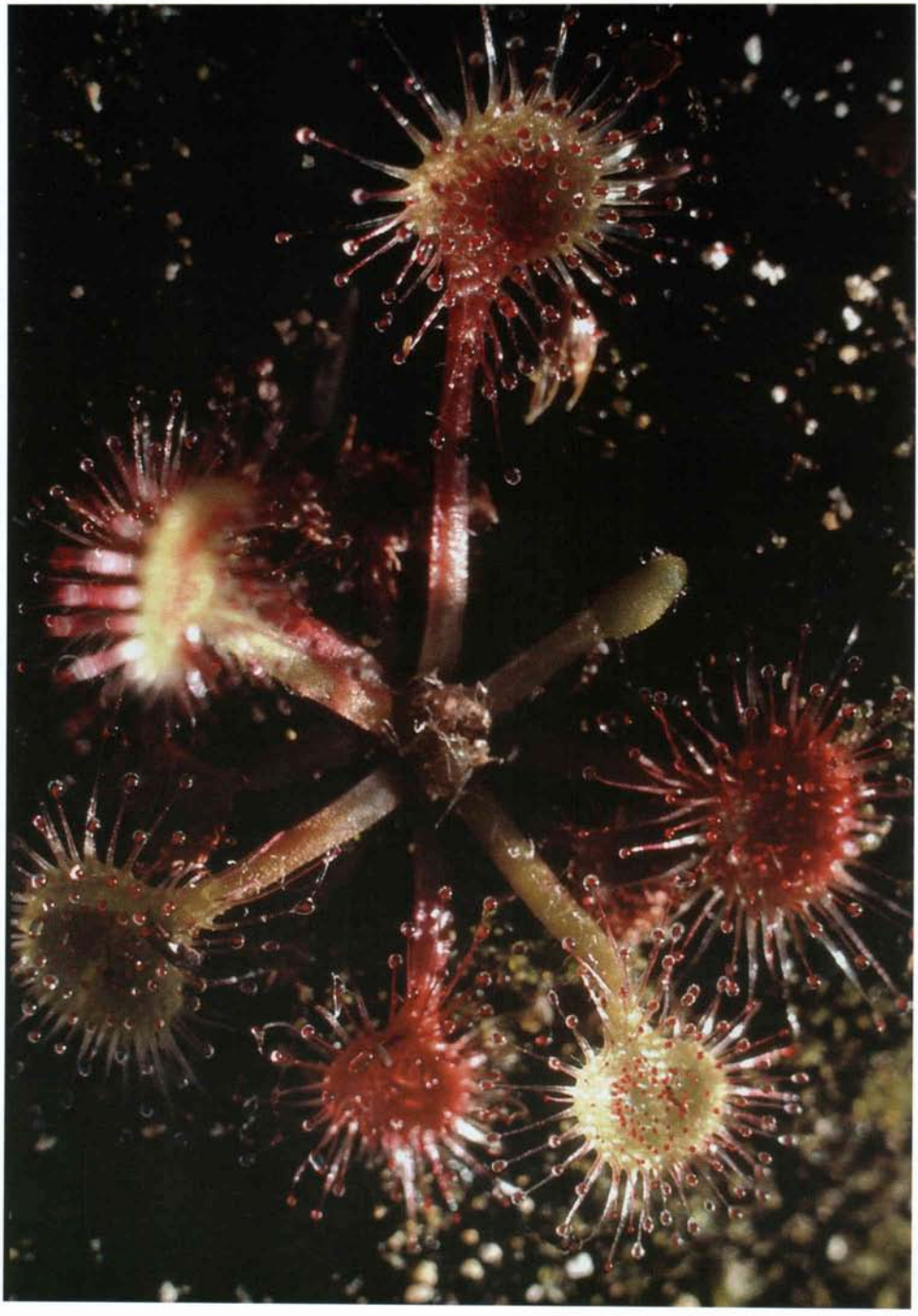
A very similar species, but with elongated blunt-tipped leaves whose stems are long and rather erect. It differs further by the naked leaf-stems, the red hairs appearing only on the little leaves. It is not so common, but occupies about the same territory.

Drawing: left, Thread-leaved Sundew; middle, Round-leaved Sundew; right, Long-leaved Sundew. Right: Round-leaved Sundew.

COMMON NAME Thread-leaved Sundew
COLOR Purple-magenta
SEASON July–August

COMMON NAME Round-leaved Sundew
COLOR White
SEASON July–August

COMMON NAME Long-leaved Sundew
COLOR White
SEASON July–August



Crassulaceae

Sedum Telephium

▸ Live-forever or Garden Orpine

A common perennial, with a stout light green stem and very smooth, fleshy, dull-toothed leaves, which children are fond of splitting by lateral pressure with the fingers, and forming into green "purses." It is adventive from Europe, and is generally an escape from gardens, establishing itself in fields and on roadsides. The light green leaves, particularly when young, are covered with a whitish bloom. The small flowers in thick clusters are opaque crimson. 10–18 inches high.

Penthorum sedoides

▸ Ditch Stonecrop

A familiar weed of ditches and swamps with insignificant greenish-yellow, or yellow-green flowers, in slender bending clusters of 2–3 branches, at the top of the erect stem. The latter is smooth, usually branched, and bears lance-shaped, or elliptical, pointed, light green leaves, finely toothed. The flower has five sepals, but rarely any petals, ten stamens, and five pistils united below, finally forming a five-angled seed-vessel. Not fleshy-leaved. 8–20 inches high. Maine, west to South Dakota and Nebraska.

Drawing: Live-Forever. Right: Ditch Stonecrop

COMMON NAME Live-forever or Garden Orpine

COLOR Dull garnet red

SEASON June–September

COMMON NAME Ditch Stonecrop

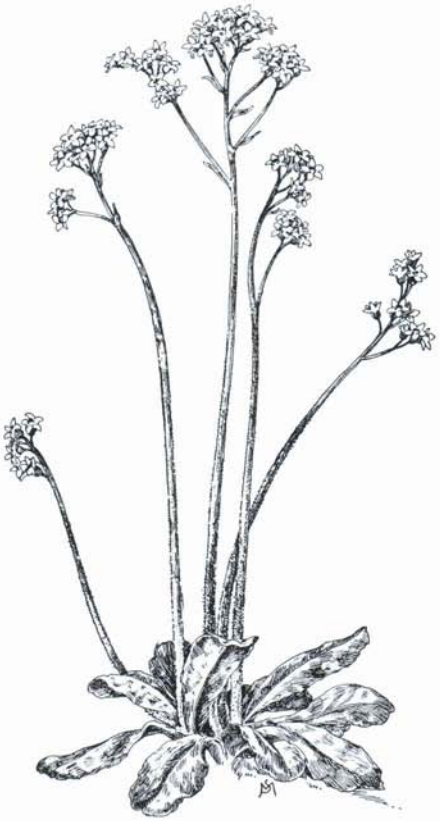
COLOR Yellow-green

SEASON July–September

Saxifraga Virginiensis

▸ Early Saxifrage

A little plant hugging the rocks on dry hillsides and blooming along with the first flowers of spring; the buds are formed early, and appear like little (fine-haired) balls in the center of the rosette-like clusters of obovate leaves close to the ground. Eventually a cluster expands to a branching downy stem bearing many little white, five-petaled, perfect flowers with ten yellow stamens. The flowers are succeeded by rather odd and pretty madder purple seed-vessels which are two-beaked; often the color is madder brown. Besides some of the earlier bees, the *Antiopa* butterfly (rusty black with a corn-color border), and the tortoise-shell butterfly (brown and tan) may be included as among the frequent visitors of the flower; but whether they play any important part in the process of fertilization, it is difficult to say. 4–10 inches high. Maine, south to Georgia, and west to Minnesota.



COMMON NAME Early Saxifrage

COLOR White

SEASON April–May

Saxifragaceae Family

Parnassia Caroliniana

▸ Grass-of-Parnassus

An interesting perennial herb with single cream-white flowers delicately veined with green, about 1 inch broad. A single ovate olive green leaf clasps the flowering stem; the others are long, slender-stemmed and heart-shaped, and spring from the root. The flower has five petals and five straw yellow anthers terminating the fertile stamens and alternating with the petals; a number (perhaps 15) of abortive stamens encircle the green pistil. The blossom is visited by bees and the smallest butterflies (skippers); chief among the visitors are the larger ones named *Colias philodice* (yellow), and *Pieris rapae* (white). 8–20 inches high. In swamps and wet meadows, Maine, south to Virginia, west to South Dakota and Iowa.

COMMON NAME Grass-of-Parnassus

COLOR White green-veined

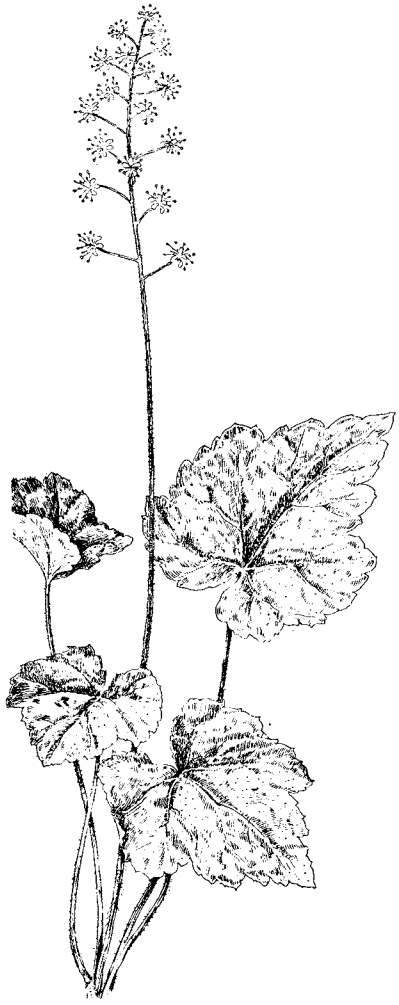
SEASON June–September

Saxifragaceae

Tiarella cordifolia

▸ Foamflower

Also called False Mitrewort, or Coolwort. This attractive little plant decorates moist woodlands with its ornamental leaves all through the summer. The feathery spike of fine white flowers with five petals appears conspicuously above the leaves in late spring or early summer. The ten prominent stamens have orange anthers, and the long pistil in the center is white. The leaves remotely resemble those of the mountain maple, but they are small, rough-hairy over the upper surface, and dark green, sometimes mottled with a brownish tone. The little seed-capsule is characteristically cloven like a tiara, hence the name; the heart-shaped form of the leaf accounts for the specific *cordifolia*. 6–12 inches high, from Maine, south along the mountains to Georgia, and west to Minnesota. Common in the woods of the White Mountains.



COMMON NAME Foamflower

COLOR White

SEASON Late April–early June

Mitella nuda

▸ Naked Mitrewort

A much smaller and daintier species distinguished by its naked stem, which is without the two leaflets, and is slightly hairy. The leaves approach a somewhat round form, and the snow-crystal-like flowers are greenish white, and few. They have ten yellow stamens. 4–7 inches high. Found in cool woods and mossy bogs, from New England, south to Pennsylvania, and west.

Mitella diphylla

▸ Mitrewort

Also called Bishop's Cap. The true mitrewort is very easily distinguished from the false, by several marked differences. Half-way up the stem are two opposite leaves nearly, if not quite, stemless. The flowers, instead of being borne on rather long individual stems in a thin feathery cluster, are short-stemmed and distinctly separated. The tiny white blossom has five petals beautifully fringed, which remind one of a highly ornamental snow crystal.

This plant is also hairy throughout. Grows 8–16 inches high, in woods in Maine, south to North Carolina, and west to Minnesota.

Drawing: Naked Mitrewort. Right: Mitrewort.

COMMON NAME Naked Mitrewort
COLOR Greenish white
SEASON April–June

COMMON NAME Mitrewort
COLOR White
SEASON April–May

Rosaceae

Rubus Chamaemorus
▸ Cloudberry

Also called Mountain Raspberry. An interesting relative of the common raspberry finds its home among the clouds of high mountaintops. The cloudberry is another instance of a break in the family rule: the flowers are staminate on one plant and pistillate on another. The solitary white flower is about an inch broad. The fruit is a pale wine red, or when nearly ripe, amber color, and possesses a delicate flavor; the lobes are few. Grows 3–10 inches high. Maine to New York, north to the Arctic regions.

Rubus odoratus
▸ Purple Flowering-Raspberry

A shrubby roadside species that suffers with a misleading name; the Rose Family is quite incapable of producing a true purple flower. This big-leaved plant exhibits a wild-rose-like flower of five broad petals whose color is at first deep crimson-pink, and at last a faded magenta-pink. The large maple-like leaves are 3–5 lobed and a trifle hairy.

The stem is covered with short red or brown bristly hairs; the flower-stems are particularly red, as well as the calyx, or flower-envelop. The fruit is a flat, red raspberry, often called Thimble-berry. Grows to 3–5 feet high. Found in stony woodlands, beside the shaded road, from Maine, south to Georgia and west to Michigan. The name *rubus* is an ancient one for bramble, from the Latin, *ruber*, red.

Drawing: Purple Flowering Raspberry. Right: below, Purple Flowering Raspberry; above, Cloudberry

COMMON NAMES Cloudberry

COLOR White

SEASON June–July

COMMON NAME Purple Flowering-Raspberry

COLOR Crimson-pink or magenta-pink

SEASON June–August

Rosaceae

Potentilla palustris
▸ Purple Cinquefoil

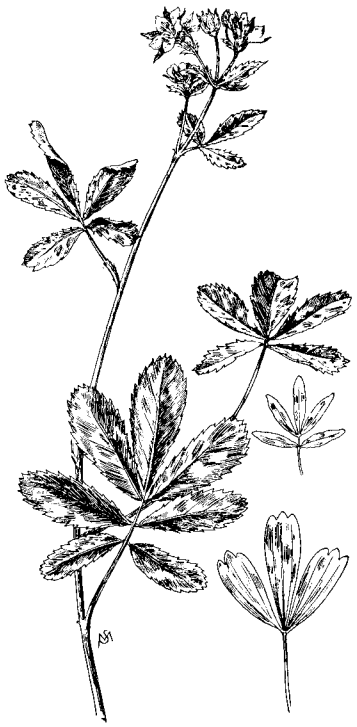
Also called Marsh Five-finger. The only purple-flowered five-finger, the reddish stem is stout, mostly smooth; woody at the base. The leaves with 5–7 blunt-tipped, sharp-toothed leaflets. The flowers are magenta-purple within, pale or greenish without, through the influence of the somewhat longer green sepals. Blossom nearly an inch broad, with pointed petals, 6–20 inches long. Found in swamps and cold bogs from Maine south to New Jersey and west to California.

Potentilla fruticosa
▸ Shrubby Cinquefoil

A shrubby species, with nearly erect, leafy stems. Leaves entirely different from the other species, being toothless, olive yellow-green, with 5–7 lance-shaped, slightly hairy leaflets with edges curving backward. The deep yellow flowers are generally 1 inch broad. 1–2 feet high. Found in swamps and wet places from Maine, south to New Jersey, and west.

Potentilla Anserina
▸ Silverweed

Silverweed is decorative, and remarkable for the very silky hairs covering the underside of the leaves, which have about 7–23 sharp-toothed leaflets. The yellow flowers are solitary. Stem 1–3 feet long. In salt marshes and on wet meadows, from Maine, south to New Jersey, and west to Nebraska.



Drawing: Purple Cinquefoil. Right: bottom, Shrubby Cinquefoil; top, Silverweed.

COMMON NAME Purple Cinquefoil
COLOR Magenta-purple
SEASON June–August

COMMON NAME Shrubby Cinquefoil
COLOR Yellow
SEASON June–September

COMMON NAME Silverweed
COLOR Yellow
SEASON May–September

Leguminosae

Baptisia australis
▸ Blue False Indigo

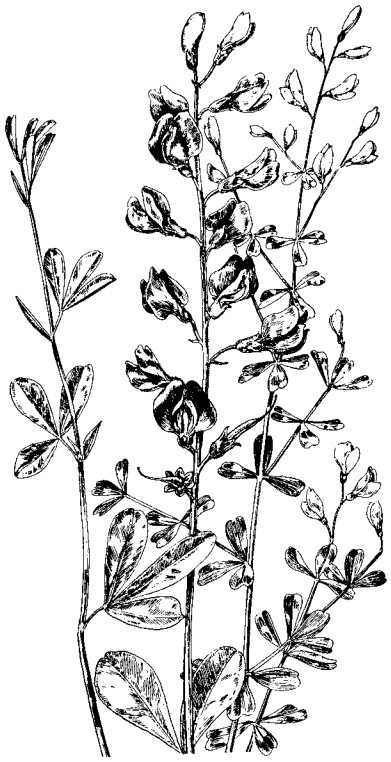
A beautiful, tall species, with loose flower-clusters, sometimes 10 inches long, of a soft, aesthetic hue. The peapod-like fruit is tipped with a spur. The plant stands 3–6 feet high, and grows in rich, alluvial soil in western Pennsylvania, south to Georgia and west to Missouri. It is quite handsome in cultivation

Baptisia tinctoria
▸ Wild Indigo

A smooth and slender plant with deep gray-green, triple leaves. The small pea-like blossoms are pure yellow, and terminate the many branches of the upright stem. The plant grows 18–28 inches tall, with a blushy luxuriance in favorable situations, and has a most remarkable habit of turning black upon withering. Found in sandy soil in unspoiled areas of the Northeast.

Lupinus perennis
▸ Blue Lupine

A most charming so-called blue wild flower rings all the changes on violet and purple, and scarcely touches blue. The sweet-scented, pea-like blossom has violet or deep purple wings and a light violet hood veined with blue-violet. The leaf has generally eight narrow, light green leaflets. Stem and leaves are generally fine-hairy, and frequently show a few touches of purple-red through the green. The flower-spike is quite showy, and pinkish early in the bud. It stands 1–2 feet high, and is found in sandy fields.



Drawing: left, Blue False Indigo; right, Wild Indigo. Right: Blue Lupin.

COMMON NAME Blue False Indigo
COLOR Light violet
SEASON June–July

COMMON NAME Wild Indigo
COLOR Yellow
SEASON June–August

COMMON NAME Blue Lupine
COLOR Violet
SEASON May–June

Apios tuberosa

▸ Ground Nut

A climbing vine reaching a height of about 4 or 5 feet. The root is tuberous and edible. The compound leaf is composed of 3–7 toothless, ovate-pointed leaflets, smooth and light green. The æsthetic flower-cluster is maroon and pale brown-lilac in color with a texture of velvet; the bean-blossom-like florets are cloyingly sweet, and suggest English violets with a slight and strange horse-chestnut odor. They are fertilized mostly by the various bees, including the honeybee. The plant is exceedingly beautiful and worthy of cultivation. It is found on low, damp ground, from Maine, south, and west to South Dakota, Nebraska, and Kansas.

COMMON NAME Ground Nut

COLOR Maroon and pale brown-lilac

SEASON August–September

Cassia marilandica
▸ Wild Senna

A showy and decorative plant with compound leaves of 12–20 broad lance-shaped leaflets of a rather yellow-green tone. They are smooth and somewhat sensitive to the touch. The flower-clusters are loosely constructed. The light golden yellow flowers of five slightly unequal petals are accented in color by the prominent chocolate brown of the anthers; the stamens are very unequal in length. 3–8 feet high. In swamps and alluvial soil from Maine, south, and west to Minnesota, Nebraska, Kansas, and Louisiana.

Cassia Chamaecrista
▸ Partridge Pea

An erect annual species with large showy yellow flowers, 1.5 inches across, in groups of 2–4 at the bases of the sensitive leaves; often the five petals are purple-spotted at the base. The 20–30 leaflets, less than an inch long, are blunt lance-shaped and pointed with a tiny bristle. The slender pod, about 2 inches long, is slightly hairy. Grows 1–2 feet high in dry or sandy fields.

Drawing: Partridge Pea. Left: Partridge Pea. Right: Wild Senna.

COMMON NAME Wild Senna
COLOR Golden, yellow, brown-tipped
SEASON July–August

COMMON NAME Partridge Pea
COLOR Yellow
SEASON July–September

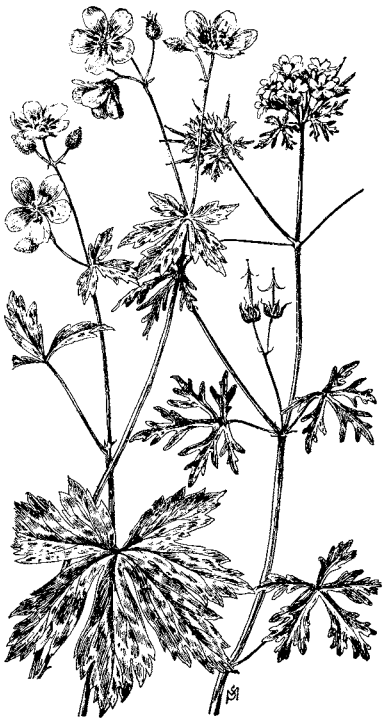
Geraniaceae

Geranium Carolinianum
▸ Carolina Geranium

Another similar species but one more commonly distributed through the South. The leaves are deeply cut and narrowly lobed, and the pale magenta flowers are borne in compact clusters. The beak to the seed-vessel is nearly an inch long, and is short-pointed in contradistinction to that of the foregoing species, which is long-pointed. The curved sections of the beak are also shorter. The stem is fuzzy and 8–15 inches high. In poor soil from Maine, south to Mexico, and west.

Geranium maculatum
▸ Wild Geranium

Also called Cranesbill. A delicate wild flower pale or deep magenta-pink, or a quite light purple. Sometimes the ten anthers are a delicate peacock blue. The deeply cut, five-lobed leaf is rough-hairy, the stem and the unfolded bud are also remarkably hairy. The blossoms are cross-fertilized mostly by the agency of honeybees, and the smaller bees. The flower is, perhaps, quite incapable of self-fertilization in the absence of insects, as the pollen is ripe and the anthers fall away before the stigma is receptive. The plant stands 1–2 feet high, and is found in woodlands and on wooded roadsides, from Maine, south to Georgia, and west.



Drawing: left, Wild Geranium; right, Carolina Geranium. Right: Wild Geranium.

COMMON NAME Carolina Geranium

COLOR Pale magenta

SEASON May–August

COMMON NAME Wild Geranium

COLOR Magenta-pink

SEASON May–July

Oxalidaceae

Oxalis acetosella

▸ Wood Sorrel

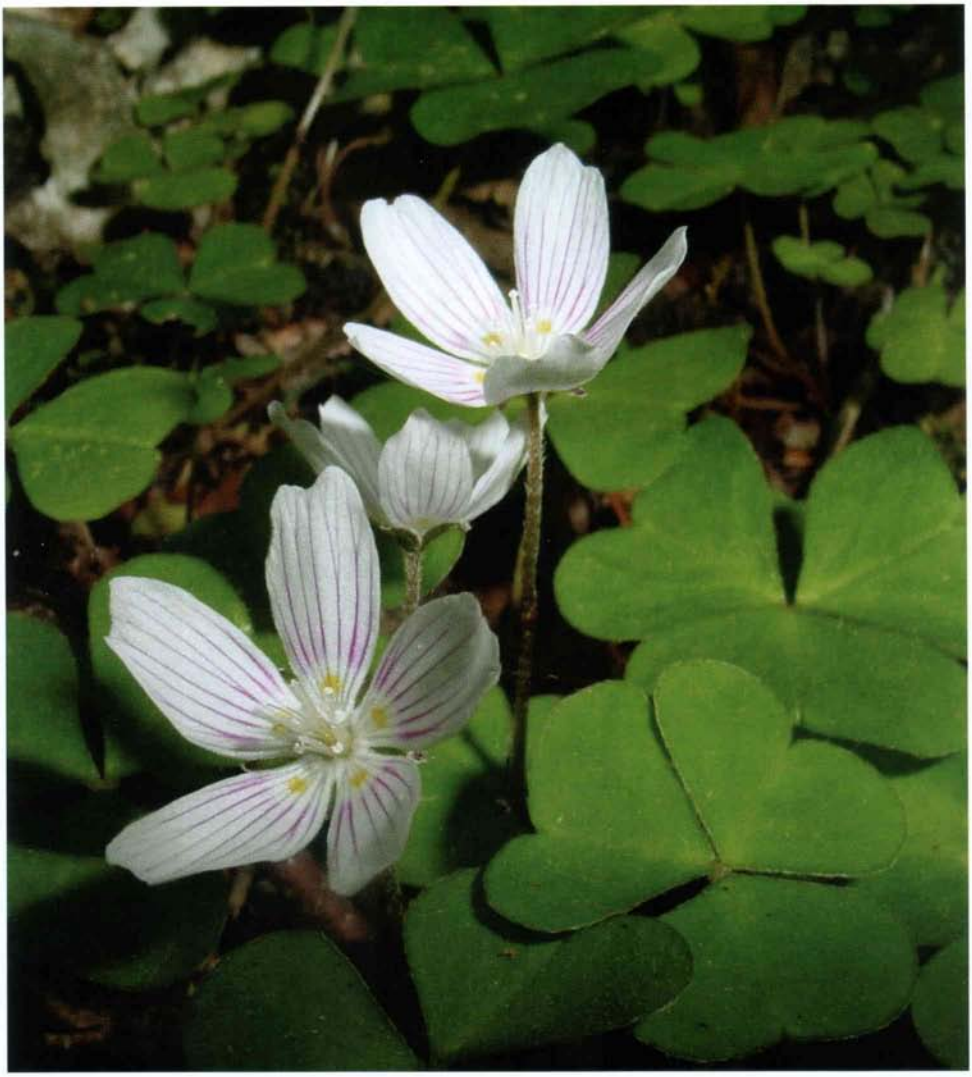
One of the daintiest woodland plants, common in cool, damp situations. The leaf composed of three light green heart-shaped leaflets that droop and fold together after nightfall. The frail flowers nearly an inch broad, with five notched petals, are borne singly on delicate long stems, and are either pinkish white, striped with crimson lines, the color deepening toward the center of the blossom, or white with crimson-pink lines. Fertilized by the smaller bees (*Halictus*), and the *Syrphid* flies. Cleistogamic flowers (a kind fertilized in the bud without opening) are also borne on small curved stems at the base of the plant.

A stemless perennial about 3–4 inches high, growing from a creeping scaly-toothed root. Common in thin, damp woods from Maine to the mountains of North Carolina, and west on the north shore of Lake Superior. Found at Profile Lake, Franconia Notch, New Hampshire. A native of the old world, and a most interesting flower frequently introduced in the paintings of Fra Angelico and Sandro Botticelli.

COMMON NAME Wood Sorrel

COLOR White pink-veined

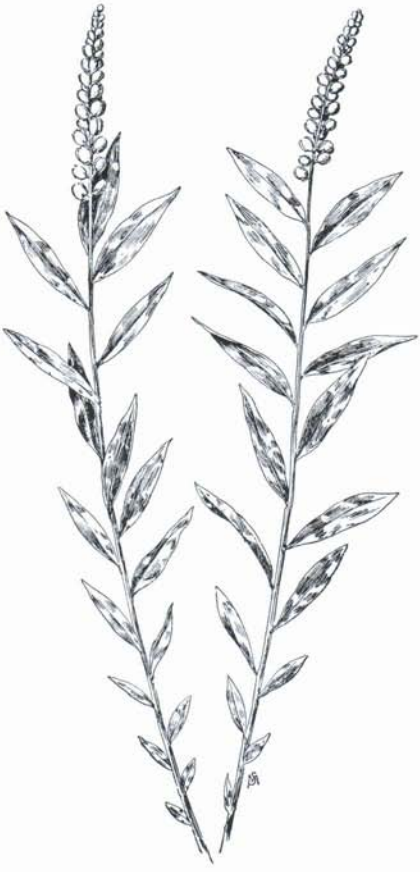
SEASON May–July



Polygala Senega

▸ Seneca Snakeroot

A much less showy species with white or greenish-white flowers and fewer lance-shaped leaves, the lowest ones very small and scalelike. The small terminal flower-cluster dense. It bears no cleistogamous blossoms. Stem 6–12 inches high, simple or slightly branched. In rocky woodlands, from western New England, south to North Carolina, among the mountains, and west to Minnesota and Missouri.



COMMON NAME Seneca Snakeroot

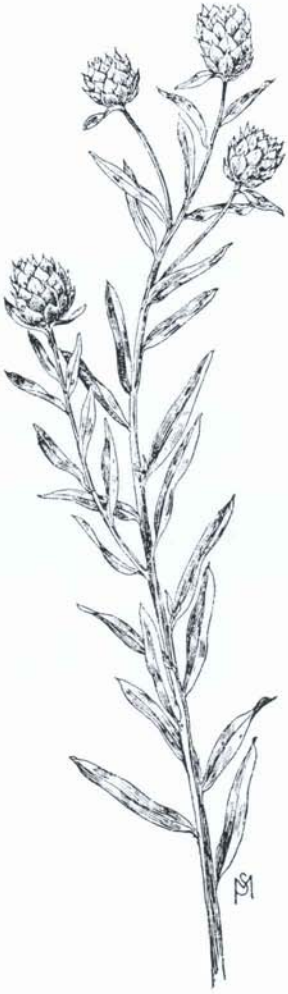
COLOR White or greenish white

SEASON May–June

Polygala sanguinea

▸ Field Milkwort

A branching and leafy species with globular or oblong, compact flowerclusters of deep or pale magenta blossoms; rarely are they white. It is the calyx that contributes the ruddy magenta to the flower, the yellowish petals are hidden within. The stem is slightly angled. The little leaves are similar to those of *P. polygama*. It stands 6–12 inches high and is found in moist sandy fields and roadsides in New England, south to South Carolina, and west to Minnesota, Arkansas, and Louisiana.



COMMON NAME Field Milkwort

COLOR Dull magenta-pink

SEASON July–September

Viola palmata

▸ Common Violet

A very common species, with heart-shaped or longer deep-green leaves, deeply lobed or cut especially on the sides. The flowers are bright, light violet, or rarely, white. Grows 3–7 inches high on dry ground, mostly woodlands, from Maine, south to Georgia, and west to Minnesota, Nebraska and Arkansas.

Viola pedata

▸ Bird-foot Violet

A beautiful violet with dull, pale greenleaves cut into 3–5 segments, three of which are again cut and toothed, so that the average leaf possesses nine distinct points, or more. The pale blue-violet or lilac flowers, larger than those of any other species, are often an inch long. The lower, spurred petalis are grooved, and partly white-veined with violet. The throat of the flower is obstructed with the orange anthers and the style. It stands 4–10 inches high and is found in dry sandy fields from Maine, south, and west to Minnesota, South Dakota and Missouri.

Drawing: Common Violet. Left: Common Violet, Right: Bird-foot Violet.

COMMON NAME Common Violet
COLOR Light purple
SEASON April–May

COMMON NAME Bird-foot Violet
COLOR Light violet, etc.
SEASON April–June

Violaceae

Viola pubescens
▸ Downy Yellow Violet

The flowers grow singly from the fork of two leaf-stalks. The leaves are deep green, broad heart-shaped, slightly scallop-toothed, and somewhat soft-hairy to the touch. The flowers are pale golden yellow, veined with madder purple; the lower petal, short, with a two-scalloped tip and short spur. Grows 6–17 inches high.

Viola Canadensis
▸ Canada Violet

Sweet-scented with heart-shaped, deep green leaves, the flowers spring from the forking leaf-stalks, a lighter or deeper violet on the outside of the petals and nearly white on the inside, with the throat yellow-tinted; the lower petals are purple-veined, the side petals bearded, and the middle petal is acutely tipped. The flowers are rarely altogether white. It grows 5–15 inches high, occasionally more, in hilly woods.

Viola rotundifolia
▸ Round-leaved Violet

An early violet, found on woodland floors and rocky hillsides. Smooth, deep green leaves round or long heart-shaped; small in the blooming season, by midsummer up to 2-4 inches in diameter, lying flat on the ground. Flowers small, pale golden yellow, with a short spur. The lateral and lower petals veined with madder purple.

Drawing: Downy Yellow Violet. Right: bottom, Round-leaved Violet; top, Canada Violet

COMMON NAME Downy Yellow Violet
COLOR Pale golden yellow
SEASON April–May

COMMON NAME Canada Violet
COLOR Pale violet, white
SEASON May–July

COMMON NAME Round-leaved Violet
COLOR Pale golden yellow
SEASON April-May

Violaceae

Viola striata
▸ Pale Violet

A handsome species, with smooth, long, straight stems. The deep, dull green leaves a pointy-heart-shape, finely scallop-toothed, and more or less curled at the base when young. The moderately large flowers are white, cream-colored, or very pale lavender, the lateral petals bearded, the lower one broad and thickly striped with purple veins. The stigma of the flower projects far beyond the anthers, so self-fertilization is impracticable. The most frequent visitors are the bees, and *Colias philodice*, the butterfly who "puts a finger in everyone's pie," is also an occasional visitor. It stands 6–16 inches high in moist woods and fields from western New England, to Minnesota, and Missouri, and south along the Alleghanies to Georgia.

Viola canina var.Muhlenbergii
▸ Dog Violet

A low, creeping violet; the light green stems with many tooth-stipules (leafy formations at the angles of the stems), and small, round heart-shaped yellow-green leaves, obscurely scalloped and slightly pointed at the tip. The pale purple or violet flowers are small, with the side petals slightly bearded, and the lower petal purple-veined and long-spurred. Rarely, the flowers are white. 2–6 inches high. Visited by the small bees of the genus *Halictus*. Common in wet woodlands and along the shady roadsides from Maine, south to North Carolina and Tennessee, and west to Minnesota.

Drawing: Pale Violet. Right: bottom, Dog Violet; top, Pale Violet.

COMMON NAME Pale Violet
COLOR White or pale lavender
SEASON April–May

COMMON NAME Dog Violet
COLOR Light purple
SEASON April–June

Lythraceae

Lythrum alatum
▸ Loosestrife

A tall, slim species with dark-green leafage and a smooth, much-branched and angled stem. The leaves alternate (the lowest opposite), lance-shaped, pointed at the tip and broader at the base. The flowers deep purple-magenta, 0.50 inch or more broad, and dimorphous, i.e. in two forms, one with long filaments (the stem part of the stamen minus the anther) and a short style, or vice-versa. Petals 4–7, stamens 4–14 and very long in some blossoms. Sometimes the petals are absent. Grows 1–3 feet high in low moist ground from Massachusetts and Vermont south to Kentucky, and west to Minnesota, South Dakota, Arkansas and Colorado.

Decodon verticillatus
▸ Swamp Loosestrife

A somewhat shrubby plant, nearly smooth, with reclining or recurved stems of 4–6 sides, and lance-shaped leaves nearly stemless, opposite-growing, or mostly in threes; the uppermost with clusters of small, bell-shaped magenta-flowers, growing from their bases. Flowers with five wedge-lance-shaped petals 1/2 inch long. Stamens 10, five short and five long. 2–8 feet long. Swampy places. New England south and west to Minnesota and Louisianna.

Drawing: Loosestrife. Right: Swamp Loosestrife.

COMMON NAME Loosestrife
COLOR Deep purple-magenta
SEASON July–September

COMMON NAME Swamp Loosestrife
COLOR Magenta
SEASON June–August

Melastomaceae

Rhexia Virginica
▸Virginia Meadow-beauty

Also called Deer-grass. A stout-stemmed perennial, sometimes branched (the stem rather square). It has smooth, light green, three-ribbed, sharp-toothed leaves, ovate or narrower, pointed and stemless. The flowers with four broad magenta or purple-magenta petals, the golden anthers large. There are eight stamens slightly varying in length; the pistil reaching beyond them secures the cross-fertilization of the flower by the honey-bee and *Colias philodice* (the omnipresent yellow butterfly). It grows 10–18 inches high in sandy marshes, from Maine, south, and west to Illinois and Missouri.

Rhexia Mariana
▸ Meadow-beauty

This is a slender, round-stemmed species, rather hairy, and with short-stemmed linear-oblong, toothed leaves, pointed and three-ribbed. The flowers are light magenta and similar to those of *Rhexia Virginica*. The genus name, from the Greek, means a break or crevice, alluding to the situation where the plant is usualy found in sandy swamps, and in the pine barrens of New Jersey, south, and southwest to Texas.

Drawing: Virginia Meadow-beauty. Right: Meadow-beauty.

COMMON NAME Virginia Meadow-beauty
COLOR Magenta
SEASON July–August

COMMON NAME Meadow-beauty
COLOR Magenta
SEASON July–August

Onagraceae

Epilobium angustifolium
▸ Fireweed

Also called Great Willow Herb. A tall perennial herb with ruddy stem and dark olive green, lance-shaped, white-ribbed leaves without teeth or nearly so, resembling those of the willow. The light magenta or rarely white flowers in a terminal showy spike with four broad and conspicuous petals, eight stamens, and a prominent pistil. The slender velvety, purple-tinged pods, gracefully curved, open lengthwise and liberate a mass of silky down in late August and September, which gives the plant a wild and dishevelled appearance. 4–7 feet high. Common on newly cleared woodland, especially where the ground has been burned over. From Maine, south to North Carolina, and west to South Dakota and Texas.

Epilobium hirsutum
▸ Hairy Willow Herb

A foreign perennial species which has become naturalized about towns near the coast. The deep yellow-green leaves oblong lance-shaped, finely toothed and stemless. The four-petaled magenta flowers, 7/8 inch broad, in a short terminal cluster, or between leaf-stem and plant-stem. There are eight stamens. Seed-pod long and slender, the seed wafted by means of a long tuft of silky hairs at the tip. 3–4 feet high, densely soft-hairy, stout and branching.

Drawing: left, Fireweed; right, Hairy Willow Herb. Right: Fireweed.

COMMON NAME Fireweed or Great Willow Herb

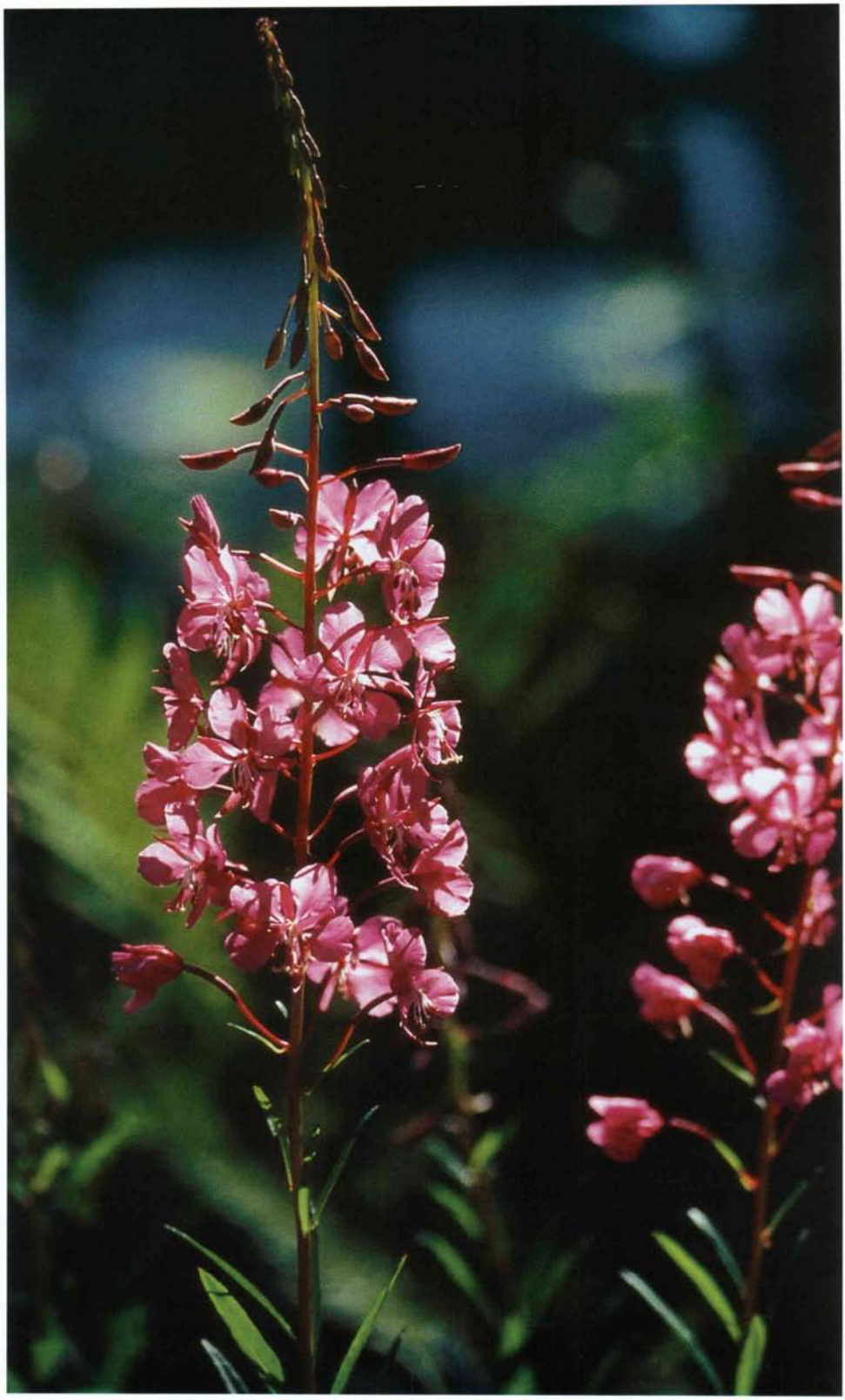
COLOR Light magenta

SEASON July–August

COMMON NAME Hairy Willow Herb

COLOR Magenta

SEASON July–August



Umbelliferae

Osmorrhiza brevistylis
▸ Sweet Cicely

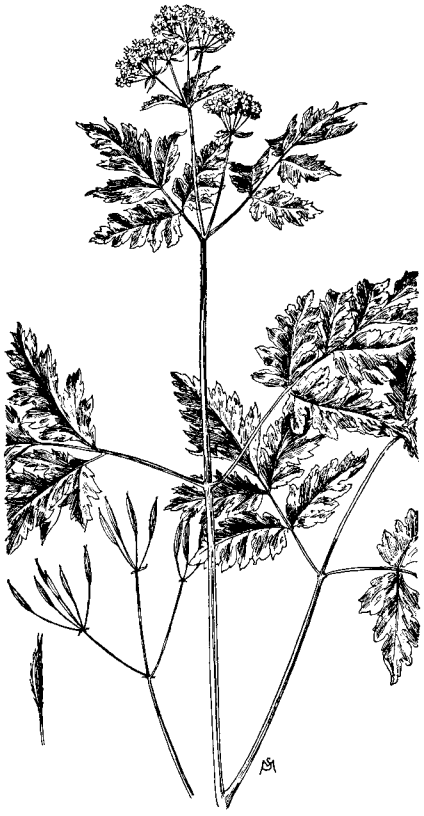
The round, slightly silky-hairy stem of this perennial is dull green, often stained with a brownish purple. The compound leaf is cut and toothed, mostly three-divided and fern-like. The lower leaves are sometimes over a foot long.

The stems of the dull white flower-clusters are slender and few; consequently there is no appearance of an aggregate flat-topped cluster as in most of the *Umbelliferae*.

Grows 16–34 inches high in moist, rich woodlands from Maine, south through the mountains to North Carolina, and west to Minnesota and Nebraska.

Zizia aurea
▸Meadow Parsnip

A very common smooth perennial, found on shaded roadsides or meadow borders. The medium light green leaves are doubly compound; generally three divisions (or leaflets, properly speaking) of 3–7 leaflets, all narrow, pointed, and sharply toothed, but varying to broader types. The stem is often branched. The tiny dull light gold yellow flowers have prominent stamens, and are collected in many small clusters, each widely separated from the other, but all forming a thin radiating cluster. Visited commonly by many flies, small butterflies, and but few bees. Seeds slightly ribbed. Grows 16–34 inches highfrom Maine to South Dakota.



Drawing: Sweet Cicely. Right: Meadow Parsnip.

COMMON NAME Sweet Cicely
COLOR Dull white
SEASON May–June

COMMON NAME Meadow Parsnip
COLOR Light gold yellow
SEASON May–June

Cornaceae

Cornus Canadensis
▸ Dwarf Cornel Bunchberry

A dainty little plant, remarkable for its small, close clusters of brilliant scarlet berries. The leaves, set in circles around the stem, are light yellow-green, broadly ovate and pointed, toothless, and deeply marked by 5–7 nearly parallel, curving ribs.

The flowers are greenish and tiny, closely grouped in the center of four large, slightly green-white bracts, having the semblance of petals and imparting to the whole the appearance of a single blossom about an inch broad. They are succeeded in late August by a compact bunch of scarlet berries. Grows 3–8 inches high. In cool, damp, mossy woods and wooded hilltops; frequently found on summits over 4,000 feet high, among the Adirondacks and the White Mountains. From Maine, south to New Jersey, and west to Indiana, Minnesota, Colorado, and California.

Cornus florida
▸ Flowering Dogwood

A tall shrub and often a tree, whose familiar flowers, appearing just before or with the ovate deeper green leaves, have four similar broad green-white or pinkish bracts, ribbed, and notched on the blunt tips. Fruit ovoid and scarlet, in small groups. 7–40 feet high. Vermont, Massachusetts, south to Kentucky and Florida, and west to Missouri and Texas. The name from *cornu*, a horn, in allusion to the hardness of the wood.

Drawing: bottom, Dwarf Cornel Bunchberry; top, Flowering Dogwood. Right: bottom, Bunchberry fruit; top, Bunchberry flowers

COMMON NAME Dwarf Cornel Bunchberry

COLOR Greenish white

SEASON May–July

COMMON NAME Flowering Dogwood

COLOR Greenish white or pink

SEASON April–June

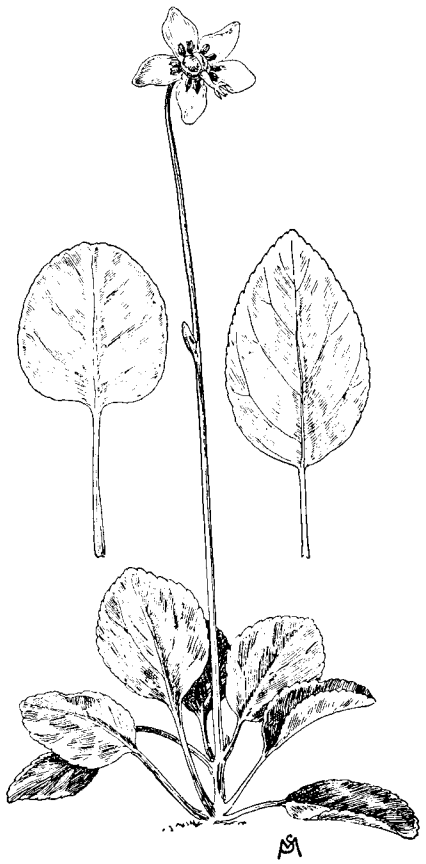
Pyrolaceae

Moneses grandiflora
▸ One-flowered Pyrola

A very small plant, bearing a single blossom. The leaves are flat-stalked, thin, deep shining green, round or nearly so, with rather fine indistinct teeth. The five petals of the cream-colored or ivory white flower are a bit pointed; the ten white stamens have two-pointed dull yellow anthers, and the long green pistil bends downward; not far below the flower on the stem is a tiny bract or minute leaflet. Stands 2–5 inches high, found in pine woods usually near brooks from Maine, south to Rhode Island and Pennsylvania, and west to Oregon, the Rocky Mountains and south to Colorado.

Pyrola secunda
▸ Small Pyrola

A northern woodland plant with ovate pointed deep-green leaves, rather round-toothed, and long-stemmed; the leaves set in a circle near the base of the plant-stem. The leaf-stalks are also somewhat flat and troughed. The flower-stalk is tall and bracted, or remotely set with minute leaflets. It bears a one-sided row of small greenish-white flowers that assume a drooping position; the corolla is bell-shaped and five-lobed; the pistil is extremely prominent. The slender flower-stalk is often bent sideways. Grows 3–9 inches high in woodlands, from Maine, south to Pennsylvania, and west to Minnesota. Found on the slopes of the White and Adirondack Mountains.



Drawing: One-flowered Pyrola. Right: Small Pyrola.

COMMON NAME One-flowered Pyrola
COLOR Ivory white
SEASON June–August

COMMON NAME Small Pyrola
COLOR Greenish white
SEASON June–July

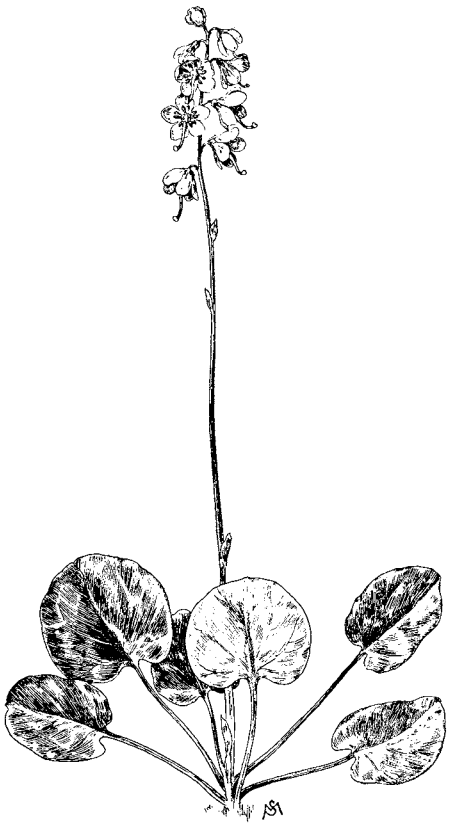
Pyrolaceae

Pyrola rotundifolia
▸ Round-leaved Pyrola

A similar but much taller species, with nearly round or very broad oval leaves, thick, very indistinctly toothed or toothless, and a deep shining green; the stems usually longer than the leaves, and narrowly margined; they are evergreen. The white waxy flowers are like those described above, but the roundish obovate petals spread open much more; they are also very sweet-scented. 8–18 inches high. In dry or damp sandy woodlands, from Maine, south to Georgia, and west to Minnesota, South Dakota, and Ohio.

Pyrola asarifolia
▸ Pink Pyrola

This similar species has pale crimson or magenta flowers, and very round heart-shaped leaves, rather wide, shining, and thick. The southern limit, northern New York and New England, but both species are more frequently found northward.



Drawing: Round-leaved Pyrola. Right: Pink Pyrola.

COMMON NAME Round-leaved Pyrola
COLOR White
SEASON June–July

COMMON NAME Pink Pyrola
COLOR Pale crimson, magenta
SEASON June–July

Monotropa uniflora

▸ Indian Pipe

A clammy, white parasitic plant, deriving nourishment from roots and decayed vegetation, found in the vicinity of rotting trees. The stem is thick, translucent white, and without leaves, except for the scaly bracts which take their place. The white or delicately pink-salmon-tinted flower has five, or sometimes four, oblong petals, and the 10–12 stamens are pale tan color. The flower is nodding, and is usually solitary.

The enlarged ovary finally assumes an erect position, becoming a pale tawny salmon color; it is usually ten-grooved and five-celled, and forms a large, fleshy, ovoid seed-vessel. The plant is at home in the dim-lit fastnesses of the forest, and it quickly withers and blackens after being gathered and exposed to sunlight. Grows 3–9 inches high, nearly throughout the country.

COMMON NAME Indian Pipe

COLOR White or pinkish

SEASON July–August

Gaultheria procumbens

▸ Wintergreen

The familiar Boxberry of the Middle States, common in wildernesses and all evergreen woodlands. The broad, ovate, evergreen leaf is stiff, thick, and shiny dark green, with small teeth or toothless, and very nearly stemless. The younger leaves are yellow-green; all are clustered at the top of the buff-brown or ruddy stem. The white, waxy flowers are vase-shaped and nodding; they grow from the angles of the leaves. The dry but exceedingly aromatic berry is pure red (a deep cherry color), often 1/8 inch in diameter, and is formed of the calyx which becomes fleshy, surrounds the seed-capsule, and has all the appearance of a true fruit. 2–5 inches high. From Maine, south, and west to Michigan. The same aromatic essential oil exists in sweet birch as in this wintergreen. Also called Checkerberry.

COMMON NAME Wintergreen

COLOR White

SEASON July–August

Epigaea repens

▸ Trailing Arbutus

The Mayflower of New England, common in the vicinity of evergreen woods and on the borders of rocky woods and hillsides, and blooming beside the remnants of snow-drifts in early spring. The rough-hairy, light brown stems are shrubby and tough, creeping close to the cold earth under decayed leaves and grasses. The old dull light olive green leaves are more or less rusty-spotted, the sides spread from the centrally depressed rib. The new leaves develop in June, the surface rough and netted with fine veins. Underneath is rough-hairy and much lighter in color. The sweet-scented, white or delicately pink-tinted flowers are five-lobed, tubular, and possess a frosty sheen.

Commonly the flowers are dimorphous, of staminate and pistillate forms. The staminate blossoms contribute a touch of light yellow to the delicate surrounding of pure pink and white. The flower is nectar bearing, the branches grow 6–12 inches long. Found from Maine south to Florida and west to Minnesota.

COMMON NAME Trailing Arbutus

COLOR White and pink

SEASON April–May

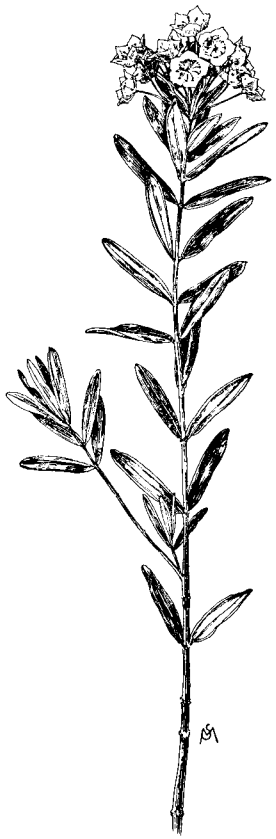
Ericaceae

Kalmia glauca
▸ Pale Laurel

A similar, smaller species, blooming about the same time, distinguished by its two-edged branches that seem to grow in sections set at right angles to one another. The narrow, evergreen leaves grow oppositely or are set in groups of three, the edges are rolled back rather strongly and are conspicuously white-green beneath. The crimson-pink or often light lilac flowers, 0.50 inch broad, terminate the stem. It grows 6–20 inches high, confined to cold peat bogs and hillside swamps from Maine, south to northern New Jersey, and west to Michigan.

Kalmia angustifolia
▸ Sheep-laurel

Also called Lambkill. A shrub of lesser proportions, and small, narrow, drooping leaves, elliptical or lance-shaped, evergreen and dull olive green, often rusty-spotted, lighter green beneath. The flower is crimson-pink, small, but otherwise like that of Mountain Laurel, except that the filaments and all other parts are more or less pink-tinged. The stem is terminated by the newer leaves which stand nearly upright; beneath these is the encircling flower-cluster; below, the leaves droop. The foliage is poisonous to cattle. 8–36 inches high. Common in swamps from Maine south to Georgia and west to Wisconsin.



Drawing: Pale Laurel. Right: Sheep-laurel.

COMMON NAME Pale Laurel
COLOR Crimson-pink
SEASON June–July

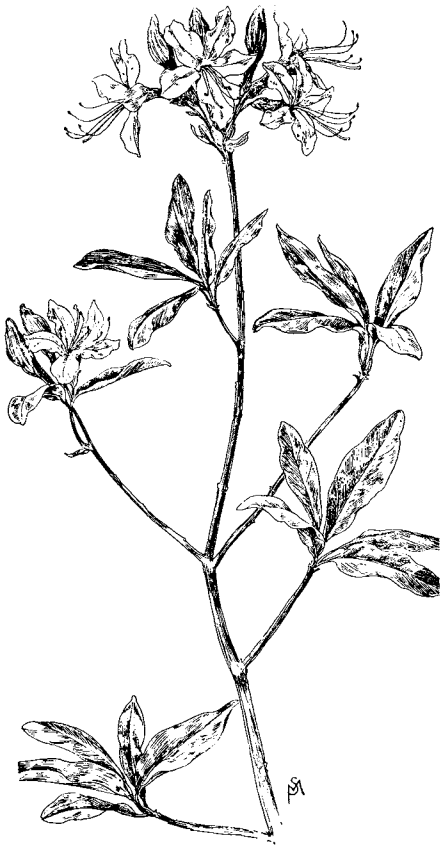
COMMON NAME Sheep-laurel
COLOR Crimson-pink
SEASON June–July

Ericaceae

Rhododendron nudiflorum

▸ Pinxter Flower

Sometimes also called Wild Honeysuckle. A more leafy shrub with branching stem, characterized by its extremely golden yellow-green foliage. The ovate leaf tapers and is pointed at both ends; the edge and surface are very slightly hairy. The delicate and beautiful flowers are pale or deep crimson-pink with the base of the tube a trifle stronger; the broader corolla lobes do not curve back conspicuously; the stamens and pistil, all exceedingly prominent, are light crimson. The flowers are delicately fragrant, grow in small terminal clusters expanding before or with the leaves, and when fading the corollas slide down the pistils, depend from them a while, and finally drop. The most frequent visitors are the honeybees and moths. 2–6 feet high. In swamps or in shady places, from Maine, south, and west to Illinois.



COMMON NAME Pinxter Flower

COLOR Pale or deep pink

SEASON April–May

Primulaceae

Lysimachia quadrifolia
▸ Four-leaved Loosestrife

A pretty species common on low land, especially sandy riverbanks. The light green leaves lance-shaped and arranged in a circle of generally four, sometimes three or six. From the bases of the leaves project slender stems, each bearing a single star-shaped, light golden yellow flower, prettily around the center with terra-cotta red that sometimes extends in faint streaks The stamens and pistil project in a cone-shaped cluster; the stigma so far beyond the anthers that the plant depends on bees for fertilization. It has a smooth or minutely hairy stem; straight and round, 12–30 inches high, simple or rarely branched.

Lysimachia stricta
▸ Swamp Candles

In the slender, spirelike clusters of the simple-stemmed *Lysimachia stricta*, whose flowers are not appreciably different, except the red spots are double in *L. stricta*, while they are single in *L. quadrifolia*.

The slender *flower-spike* is distinctly characteristic of *L. stricta*; it forms an aggregation of misty yellow color (when a large colony of the plants is seen). The leaves are lance-shaped and sharp-pointed at either end and in both species apt to be sepia-dotted. Stem 8–20 inches high. Moist and sandy soil. Maine, west to Minnesota, and south to Georgia.

Drawing: left, Loosestrife; right, Four-leaved Loosestrife. Right: Loosestrife.

COMMON NAME Four-leaved Loosestrife

COLOR Yellow

SEASON June–July

COMMON NAME Swamp Candles

COLOR Yellow

SEASON June–August

Gentianaceae

Sabbatia gracilis
▸ Marsh Pink

Like the preceding. The stem exceedingly slender and much branched. The leaves linear or linear lance-shaped, the uppermost almost threadlike. The exceedingly narrow lobes of the calyx equal in length the lobes of the corolla (rarely they are appreciably shorter). The style is about half-cleft. Grows 1–2 feet high in marshes of Nantucket, Massachusetts, south to New Jersey, Florida and Louisiana.

Sabbatia stellaris
▸ Sea Pink

A pretty species common on salt meadows, with crimson-pink flowers as large as or larger than a nickel. The light green leaves oblong lance-shaped or linear, the uppermost small and bract-like. The numerous flowers are borne solitary at the ends of the branches; the linear calyx-lobes almost equal (the rule is flexible) in length the lobes of the pale crimson-pink or white corolla. More than half the style is two-cleft, the stamens are golden yellow, and the center of the flower is green-yellow edged with ochre or sometimes red. 6–20 inches. Along the coast from Maine to Florida.

Drawing: left, Sea Pink; right, Marsh Pink. Right: Marsh Pink.

COMMON NAME Marsh Pink
COLOR Pink
SEASON June–August

COMMON NAME Sea Pink
COLOR Pink
SEASON July–August

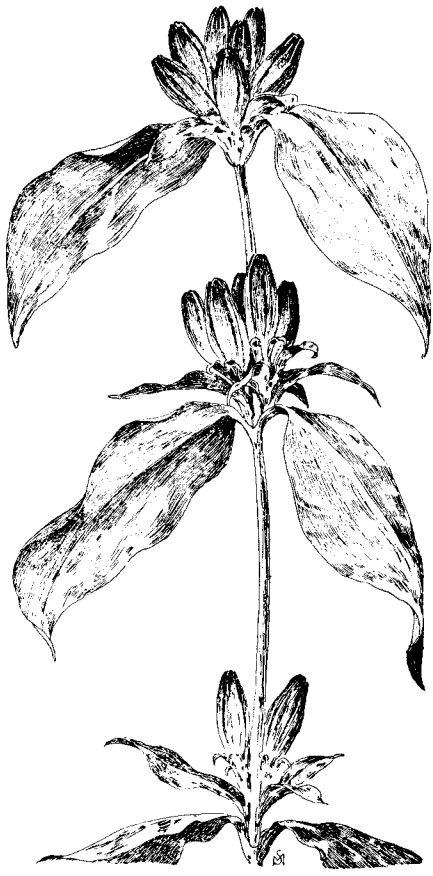
Gentianaceae

Gentiana Andrewsii

▸ Bottle Gentian

This perennial is the commonest of all Gentians, remarkable for its tight-closed bottle-shaped corolla, contracted by white-striped plaits, white at the base and an intense violet-blue at the apex. Sometimes the blue approaches ultramarine.

The medium, sometimes rusty, green leaves are smooth, ovate lance-shaped, pointed at the tip, and generally narrowed at the base. The flowers are mostly crowded in a terminal cluster, but some grow from the leaf-bases and all are set close to the leaves, which are conspicuously arranged in pairs. Bumblebees not infrequently force an entrance into the corolla, and self-fertilization is sometimes questionable. The smooth, round stem grows 1–2 feet in rich woodland borders, Maine to South Dakota, south to Georgia and Missouri.



COMMON NAME Bottle Gentian

COLOR Violet-blue

SEASON August–October

Asclepias tuberosa

▸ Butterfly Weed

The handsomest member of the genus, with brilliant light orange or orange-yellow flowers, in erect flat-topped clusters at the termination of the branches. The leaves are a light olive green, narrow-oblong or lance-shaped, hairy beneath and veiny, nearly or quite stemless. The juice is very slightly, if at all, milky, the stem somewhat rough. The slender pods are borne erect on a short stalk with an s-curve. It grows 1–2 feet high, and is common in dry fields everywhere, especially south.

COMMON NAME Buttlerfly Weed

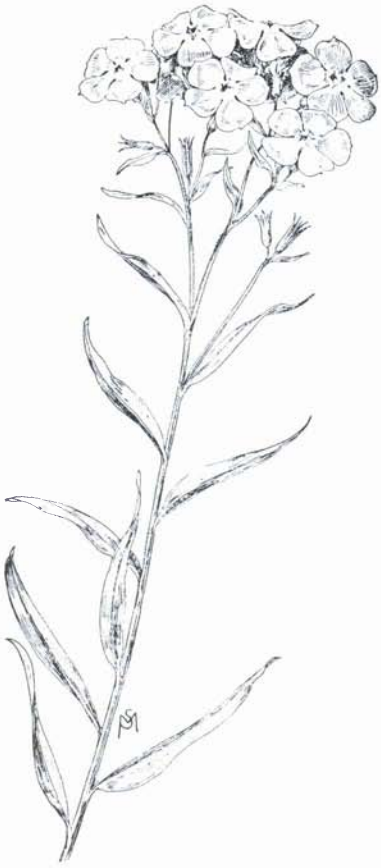
COLOR Light orange

SEASON June–September

Phlox pilosa

▸ Downy Phlox

A more southern and western species with soft-downy stem and leaves, the latter deep green, linear or lance-shaped, without teeth and stemless. Flowers from pale crimson-pink to purple and white. The calyx sticky-glandular, the corolla-tube usually fine-hairy. 1–2 feet high. In dry ground from Southbury, Connecticut (E. B. Harger), and New Jersey, south, west to South Dakota, and Texas.



COMMON NAME Downy Phlox

COLOR Purple, etc.

SEASON May–June

Polemoniaceae
Family

Phlox subulata
▸ Ground or Moss Pink

A very low species with tufted stems, spreading over the ground until it forms compact masses resembling moss. The small, thickish yellow-green leaves sharp-tipped, linear, and close set; the plant mostly evergreen. Flowers few in a cluster terminating the short stems, varying in color from white through crimson-pink to light magenta; the petals notched. The stems fine-hairy or becoming smooth. 2–5 inches high. In sandy or rocky ground. New Hampshire. and Massachusetts, south, west to Michigan and Kentucky. *Phlox paniculata*, which is a tall garden species, in colors varying from pink and lilac to white, with stout, smooth stem, and dark green acute lance-shaped or oblong leaves, has escaped from cultivation in some of the eastern states, and is established permanently in many localities, generally adjoining old dwellings. 2–6 feet high.

COMMON NAME Ground or Moss Pink

COLOR Crimson-pink, etc.

SEASON April–September

Boraginaceae

Mertensia Virginica
▸ Virginia Cowslip

A beautiful species frequently cultivated, having rich violet-hued flowers nearly 1 inch long. The stem smooth and erect, sometimes branched. The deep-green leaves toothless, ovate pointed or obovate, strongly veined, and scarcely stemmed; only the lowest with margined stems. The showy flowers trumpet-shaped with five lobes; they are rarely white. 1–2 feet high. On river meadows and along riverbanks from New York and New Jersey, south to South Carolina, west to Minnesota, Nebraska, and Kansas.

Myosotis palustris
▸ Forget-me-not

The true forget-me-not of gardens, escaped from cultivation, and found in wet ground or marshes. A perennial with slender, sprawling, fine-hairy stems, and gray-green oblong lance-shaped leaves, stemless or nearly so. The small light blue flowers with a golden eye, in small clusters somewhat curved. 6–15 inches high. Beside brooks and in wet places from Maine, south to Pennsylvania, and west. A native of Europe and Asia.

Drawing: Forget-me-not Right: bottom, Forget-me-not; top, Virginia Cowslip.

COMMON NAME Virginia Cowslip

COLOR Violet

SEASON March–May

COMMON NAME Forget-me-not

COLOR Light blue

SEASON May–July

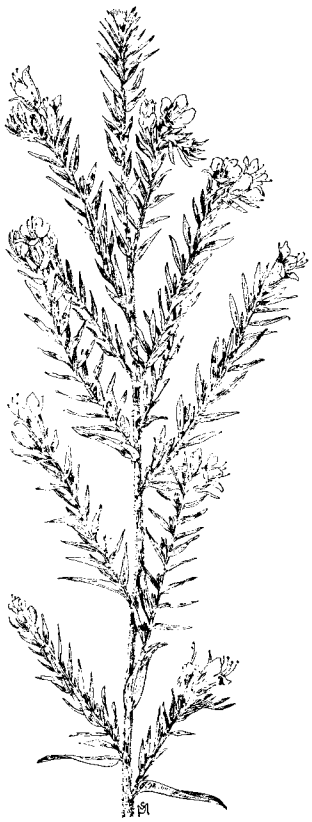
Boraginaceae

Echium vulgare
▸ Viper's Bugloss

This biennial is sometimes called blueweed, with a flower sufficiently approaching a blue tone to justify the name, but it actually ranges between lilac, purple, and a bluish-violet. It has an exceedingly bristly-hairy stem, and light green, hairy-silvery leaves that are lance-shaped, toothless, and stemless. The flowers are rather showy, tubular or vase-shaped, with five rounded unequal divisions. The four stamens and pistil, which are pink, extend far beyond the limit of the corolla. The flower-spike is one-sided, at first closely coiled, but finally long and slightly curved. The blossoms are pink, but the mature flower is light blue-violet. Growing 1–2.50 feet high from Maine to Virginia, and west to Nevada and South Dakota.

Lithospermum canescens
▸ Puccoon

A perennial, indigenous species, named Puccoon by the Native Americans, it is soft-hairy and rather hoary, with obtuse linear-oblong leaves, stemless and hairy. The orange-yellow flowers have a broad corolla, five-lobed and about 0.5 inch long. The roots yield a red dye. It grows 6–18 inches high and is cross-fertilized by bees and butterflies. It is found in dry soil from Maine, south to New Jersey and Alabama, and west to Minnesota, South Dakota, Kansas, and Arizona. Rare in New England.



Drawing: Viper's Bugloss Right: Puccoon.

COMMON NAME Viper's Bugloss
COLOR Blue-violet
SEASON June–July

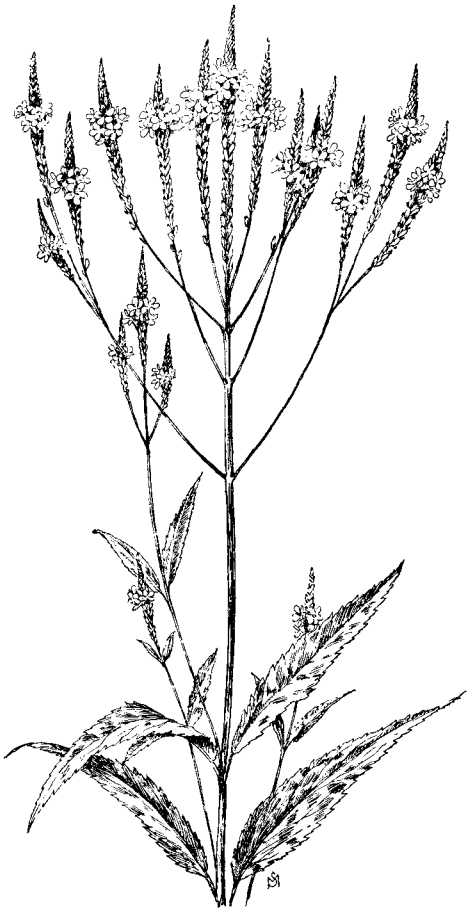
COMMON NAME Puccoon
COLOR Orange-yellow
SEASON March–June

Verbenaceae

Verbena hastata

▸ Blue Vervain

One of the handsomest yet commonest members of the genus. The stem erect, stout, four-sided and grooved, roughish, and dull green. The short-stemmed leaves dark green, lance-shaped or oblong lance-shaped, acutely incised with double teeth, and with a rough surface; the lower leaves are more or less three-lobed. The flower-spikes are numerous and branch upward like the arms of a candelabra; the flowers bloom from the foot of the cluster upward, a few at a time, leaving behind a long line of purple-tinged calyx; the tiny blossoms are deep purple or violet—either one hue or the other. The flowers never approach blue or any hue allied to it, so the common name is misleading. *Verbena hastata* is a special favorite of the bumblebee, and it is also closely attended by the honeybee and the bees of the genus *Halictus*. The smaller butterflies are also occasional visitors, among them the white *Pieris protodice*. 3–7 feet high. In fields everywhere. Rare in central New Hampshire.



COMMON NAME Blue Vervain

COLOR Deep purple

SEASON July–September

Labiatae

Monarda fistulosa
▸ Wild Bergamot

A brilliant and showy wildflower with a smooth or sparingly downy, slender stem, and deep-green leaves, the upper ones somewhat stained with the pure pale lilac or whitish tint that characterizes the flower-bracts. The flowers have a less expanded throat and are paler or deeper magenta-purple. Grows 2–3 feet high on dry ground, from Maine, south, and west to Nebraska and South Dakota.

OMMON NAME Wild Bergamot

COLOR Magenta-purple

SEASON June–September

Scrophulariaceae

Chelone glabra

▸ Turtle-head

A smooth-stemmed plant superficially resembling the Bottle Gentian, with smooth, bright deep green, toothed, short-stemmed, lance-shaped leaves 3–6 inches long. The flower not unlike a turtle's head, about an inch long, white, and delicately tinged at the tips with magenta-pink or crimson-pink; the corolla two-lipped, the upper lip arched over the lower one. The stamens dark and woolly. 1–3 feet high. On wet banks, in swamps, and beside brooks, from Maine, south, and west to Minnesota, Kansas, and Texas.

COMMON NAME Turtle-head

COLOR White, pink-tinged

SEASON July–September

Scrophulariaceae

Gerardia purpurea

▸ Purple Gerardia

A dainty annual with a generally smooth stem, slim, straight, and rigid, the branches widely spreading. The leaves are yellowish green, small and linear with acute tips. The downy, lighter or deeper magenta- purple flowers are cup-shaped, with five wide, flaring lobes. There are four stamens bearing rather large, deep golden-yellow anthers. The seed capsule is spherical. It grows 12–26 inches high in moist soil, generally near the coast of sea or lakes, from Maine, south, and west to Minnesota.

COMMON NAME Purple Gerardia

COLOR Magenta-purple

SEASON August–September

Scrophulariaceae

Castilleja coccinea
▸ Painted Cup

An odd species, annual or biennial, with the flower's corolla almost hidden in the long, cylindrical, two-lobed calyx, which is generally tipped with brilliant scarlet. The plant-stem is ruddy, soft-hairy, slender, and simple. The leaves are light green, parallel-veined, and slightly hairy or smooth, the lower ones oblong or broader, clustered, and undivided, the uppermost generally three-lobed—sometimes five-lobed; all are stemless, and each looks as if it had been stained on the tip with deep vermilion or scarlet, more or less vivid according to the individual plant. William Hamilton Gibson calls the color of the Painted Cup "the brightest dab of red the wild palette can show." The color of the inconspicuous flower is greenish-yellow, the corolla is tubular and two-cleft. The blossoms, completely eclipsed by the red floral leaves, form with these a dense terminal cluster. Rarely the red of the leaves is displaced by yellow. Like the *Gerardias*, this plant is also parasitic in nature. 12–20 inches high. Common in low, wet meadows, from Maine, south to Virginia and Kentucky, and west to Kansas and Texas. Named for Castillejo, a Spanish botanist.

COMMON NAME Painted Cup
COLOR Scarlet green-yellow
SEASON June–July

Scrophulariaceae

Pedicularis Canadensis

▸ Wood Betony

Also known as Beefsteak Plant or Lousewort. A very slightly hairy species with simple stem, and soft-hairy leaves, dull dark green, and finely lobed, growing on grassy slopes or in copses. The lower leaves are feather-shaped and often stained with dull magenta, as is also the rather stout plant-stem; the upper leaves are sparse and grow alternately. The flower-cluster is terminal and domeshaped, the flower two-lipped, the prominent upper lip dull dark whitish-opaque magenta, and strongly curved in a hook-shape with a two-toothed tip; the lower is three-lobed and dull green-yellow. The coarse and hairy, light green calyx is tinged at the edge with dull crimson-magenta. Bract-like leaves are set close in the flower-cluster, which lengthens to an oblong shape as the flowers develop. The four stamens are under the hooded upper lip, admirably protected from rain or other pollen-destroying agents; the flower is fertilized mostly by bees; the bumblebees and the bees of the genus *Halictus* are common visitors. 5–12 inches high. Common everywhere. Maine, south and west to South Dakota.

COMMON NAME Wood Betony

COLOR Magenta, dull green-yellow

SEASON May–July

Orobanchaceae

Orobanche uniflora
▸ One-flowered Cancer Root

Also called Naked Broom-rape. A beautiful little parasitic plant bearing a few brownish ovate bracts near the root, and sending up 1–4 erect, slender, one-flowered stalks; the curved tubular, five-lobed flower is purplish or light violet, or rarely cream white, .75 inch long, externally fine-hairy, and delicately fragrant. Cross-fertilized mostly by the smaller bees and the bumblebees. 3–6 inches high. Found in moist woods from Maine south to Virginia.

Epiphegus Virginiana
▸ Beech-drops

Also called Cancer Root. A parasitic plant that draws its sustenance from the roots of the beech tree. The stem is tough, straight, almost upright-branched, stained with brown madder, and set with a few small, dry scales. The curved tubular, dull magenta and buff-brown upper flowers are purple-striped; although generally sterile they are complete in every part, the style slightly protruding beyond, and the stamens just within the throat. The tiny lower flowers are cleistogamous—closed to outward agencies and self-fertilized. A few of the upper flowers are cross-fertilized by bees. 6–20 inches high. Beech woods, Maine, south and west to Wisconsin and Mo. The name means *on the beech.*

Drawing: Beech-drops. Right: One-flowered Cancer Root.

COMMON NAME One-flowered Cancer Root

COLOR Purplish

SEASON April–June

COMMON NAME Beech-drops

COLOR Dull magenta buff-brown

SEASON August–October

Rubiaceae

Houstonia caerulea

▸ Bluets

Also called Quaker Ladies, Innocence, or Houstonia. A familiar little wayside flower; communistic in manner of growth and frequently covering large spaces with its white bloom. It is a perennial, and forms dense tufts of oblong lance-shaped, tiny light green root-leaves and slender, threadlike stems sparingly set with minute opposite leaflets.

The little four-lobed corolla is about 0.50 inch in diameter, white, or white-tinged with lilac on the lobes, or pale violet (the nearest approach to blue). The center is stained with golden yellow. Stands 3–6 inches high in moist grassy places or sandy waysides, from Maine, south to Georgia and Alabama, west to Michigan. Named for William Houston, an early botanist.

COMMON NAME Bluets

COLOR White and lilac, etc.

SEASON April–July

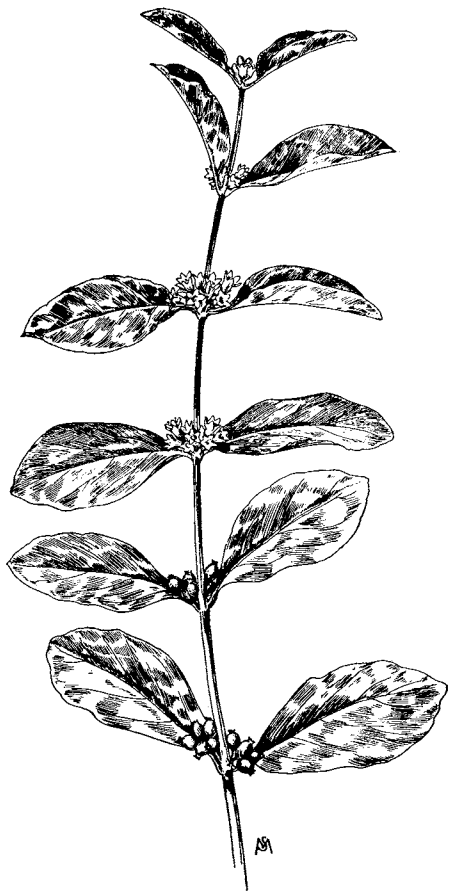
Caprifoliaceae

Triosteum perfoliatum
▸ Wild Coffee

Sometimes called Tinker's-weed or Horse Gentian. The stout, simple stem is sticky-fine-hairy. The flowers are an inconspicuous purplish-brown or madder-purple, growing at the junction of the leaves with the plant-stem. The corolla five-lobed, tubular, and scarcely longer than the long-lobed calyx, which remains attached to the mature fruit; this is .50 inch long or less, orange-scarlet, densely fine-hairy, and contains three hard nutlets. 2–4 feet high. In rich soil, from Maine, south to Alabama and Kentucky, and west to Minnesota, Iowa, and Kansas.

Symphoricarpos vulgaris
▸ Indian Currant

Also called Coral-berry. A shrub with erect, madder-brown branches slightly wooly-hairy on the younger growths. The dull-gray-green leaves are ovate, toothless, and have distinctly short stems. The five-lobed flowers are tiny bell-shaped, and grow in small clusters at the angles of the leaves. The corolla is pink graded to white, and soemwhat filled by the fine hairiness of style and stamens. The small berries in small terminal clusters are first coral red and finally dull crimson-magenta. Grows 2-5 feet high on rocky slopes in Massachusetts, the banks of the Delaware River in New Jersey, and from Pennsylvania south to Georgia and Texas and west to the Dakotas.



Drawing: Indian Currant. Right: Wild Coffee.

COMMON NAME Wild Coffee
COLOR Madder purple
SEASON May–July

COMMON NAME Indian Currant
COLOR Pink and white
SEASON July

Caprifoliaceae

Lonicera ciliata

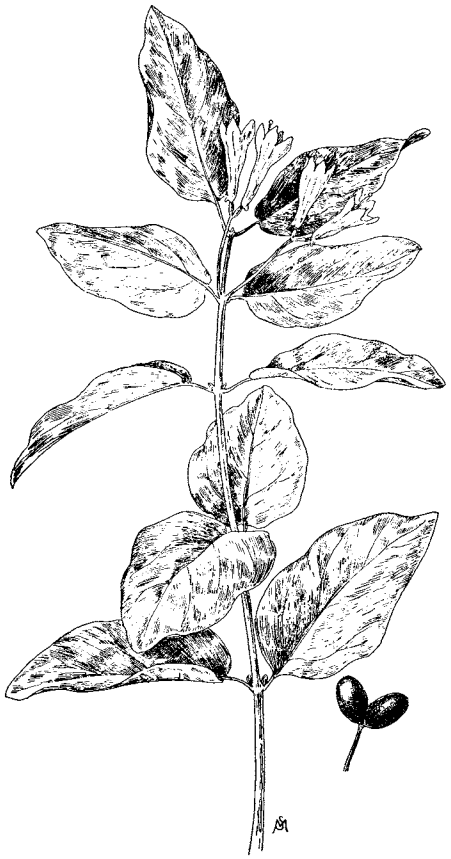
▸ Fly-honeysuckle

A thin, straggling bush with smooth, brownish stems. The thin leaves bright, light green on both sides, ovate lance-shaped, sometimes very broad at the base, toothless, short-stemmed, and hairy-edged. The pale-yellow or honey yellow, five-lobed flower about 0.75 inch long, is funnel-formed and borne in pairs at the leaf angles. The fruit is two small, ovoid red berries. It grows 3–5 feet high in moist woods from Maine to Pennsylvania and west to Michigan.

Linnaea borealis

▸ Twin-flower

A delicate and beautiful trailing vine common in the northern woodlands, with a terra-cotta colored, somewhat rough-woody stem and a rounded, short-stemmed, scallop-toothed light evergreen leaf with a rough surface. The fragrant little bell-shaped flowers, in nodding pairs, terminate 3-4 inch stalks. They are delicate crimson-pink, graded to white on the margins of the five lobes. The tiny calyx divisions are threadlike. Branches grow 6–20 inches long. Common in rich moist woods, particularly in the mountains.



Drawing: Fly-honeysuckle. Right: Twin-flower.

COMMON NAME Fly-honeysuckle
COLOR Pale yellow
SEASON May–June

COMMON NAME Twin-flower
COLOR Crimson-pink
SEASON June–August

Campanulaceae

Campanula rotundifolia
▸ Harebell or Bluebell

A dainty and delicate perennial plant, so remarkably hardy that it survives the cold and storms of mountaintops over 5,000 feet above sea level. Also native to Europe and Asia, it is identical with the bluebell of Scotland.

In spring the plant displays a tuft of round leaves (hence the name *rotundifolia*), small and sparingly toothed; these wither before the time of flowering (rarely they remain until that time), and are succeeded by a tall, wiry stem with linear, pale-olive green leaves and a succession of airy blue-violet bells depending from threadlike pedicels (flower-stems).

The corolla is five-lobed, and graded in color from light violet or pale lavender to white at its base; the prominent pistil is tipped with a three-lobed stigma, which is at first green and finally white; the five anthers are a delicate lavender tint. The chief visitor is the bumblebee, who must clasp the prominent stigma before he can enter the inverted bell; in the bustling endeavor to reach the base of the blossom some of the pollen obtained from a previously visited flower is brushed off and cross-fertilization is effected.

It grows 6–18 inches high on rocky cliffs, in barren, sandy fields or grassy places, in shade or sunshine. Found in Maine, south to New Jersey, and west to South Dakota, Nebraska, Arizona, the Rocky Mountains and the mountains of California.

COMMON NAME Harebell or Bluebell

COLOR Light violet

SEASON June–September

Campanulaceae

Campanula Rapunculoides
▸ Bellflower

The simple, erect, and rigid stem is light green and slightly rough-hairy; the leaves are thin, fine hairy and light green, the upper ones broad, lance-shaped, the lower arrow-head-shaped with a heart-shaped base; all are irregularly scallop-toothed. The bell-shaped purple flowers have five acute lobes, and hang downward mostly on *one side* of the stem; the pistil is white and protruding; the stigma three-lobed and purple-tinged; the linear lobes of the green calyx are strongly turned backward. The common visitors of the flower are the honeybee and bumblebee. 1–3 feet high. In fields and on roadsides. Me., to southern N.Y., Pa., and Ohio.

Campanula Americana
▸ Tall Bellflower

A tall annual or biennial with a slightly fine-hairy, erect, slender green stem, rarely branched. The ovate or ovate lance-shaped, stemless, light green leaves are long and drooping; the lower ones narrowed at the base like a stem; all are acute-pointed and toothed.

The dull-toned light violet or nearly white flowers grow from the angles of the leaves and form a slender terminal spike; the 1-inch wide corolla has five long, pointed lobes; the style curves downward and then upward extending far beyond the mouth of the flower. The flower-stalk frequently grows 18 inches tall in moist, shady places, inland from New York, south to Florida, and west to South Dakota, Kansas and Arkansas.

Drawing: Bellflower. Right: Tall Bellflower.

COMMON NAME Bellflower
COLOR Purple
SEASON July–August

COMMON NAME Tall Bellflower
COLOR Light violet
SEASON July–September

Lobelia cardinalis

▸ Cardinal Flower

This species' remarkable rich, deep red largely influences the color of stem and foliage. The leaves are dark green, fairly smooth, oblong lance-shaped, and slightly toothed; the upper ones stemless. The showy flower-spike has deep cardinal red flowers, the triple-lobed lips are a rich velvety color. Rarely produces deep pink or white flowers. Usually fertilized by hummingbirds as their long tongues are the only practicable means of cross-fertilization. Common in low moist ground everywhere.

Lobelia syphilitica

▸ Great Lobelia

A slightly hairy plant with a stout, leafy, and usually simple stem; the leaves light green, 2–6 inches long, pointed at both ends, nearly if not quite smooth, irregularly toothed, and stemless. The light blue-violet or rarely white flowers nearly an inch long; the calyx stiff-hairy. 1–3 feet high. Common in low moist ground along the east coast, and as far west as Kansas, Nebraska, and South Dakota.

Drawing: Cardinal Flower. Left: Great Blue Lobelia. Right: Cardinal Flower.

COMMON NAME Cardinal Flower
COLOR Light blue-violet
SEASON July–September

COMMON NAME Great Blue Lobelia
COLOR Deep red
SEASON August–September

Lobelia spicata

▸ Pale Spiked Lobelia

A still smaller-flowered species, bearing very long slim spikes of pale blue-violet flowers with a usually smooth short calyx. The stem simple and leafy, the light green leaves nearly toothless, lance-shaped (abruptly so at the base of the plant), or oblong, obtuse, but the upper ones nearly linear. 1–4 feet high. In dry sandy soil from Me., south to N. Car., and southwest to Ark. and La.

COMMON NAME Pale Spiked Lobelia

COLOR Pale blue-violet

SEASON July–August

Liatris scariosa

▸ Tall Blazing Star

A tall, stout, handsome species belonging to a beautiful genus. The showy flower-spike set with magenta-purple to pale violet, tubular, perfect flowers, the heads sometimes 7/8 inch broad. Leaves deep green, hoary, narrow lance-shaped, and alternate-growing. The flowers exhibit many æsthetic and variable tints. 2–6 feet high. In dry situations, by roadsides and in fields. Me., south, and west to S. Dak. and Tex.

COMMON NAME Tall Blazing Star

COLOR Magenta-purple

SEASON August–September

Asteraceae

Aster puniceus

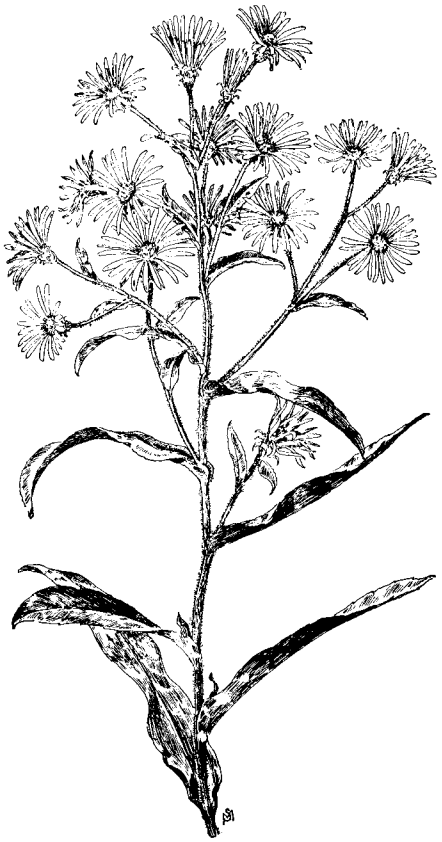
▸ Purple-stemmed Aster

A common species with usually *madder purple stem*, rough-hairy and stout. The light green leaves, lance-shaped or narrower, sparingly and coarsely toothed, clasp the upper branches. Flowers about the size of a silver quarter or larger, light violet or light lilac-purple with 20–24 rays, the tubular florets yellow. 3–7 feet high. In moist places and swamps everywhere

Aster Novae-Angliae

▸ New England Aster

A familiar and common species with numerous handsome flowers about an inch broad, which vary from light violet to light purple or white, and in the *var. roseus* to magenta. The stem stout, branched, and rough; the olive green, soft-hairy leaves lance-shaped, toothless, thin, and clasping the stem by a broad base rounded at either side. The flowers, rarely larger than a silver quarter, have usually 30–40 narrow rays, and terminate the branches in large clusters. 2–6 feet high or higher. Frequently cultivated; common northward, and south to South Carolina.



Drawing: Purple-stemmed Aster. Right: New England Aster.

COMMON NAME Purple-stemmed Aster
COLOR Light Purple
SEASON August–October

COMMON NAME New England Aster
COLOR Purple or magenta
SEASON August–October

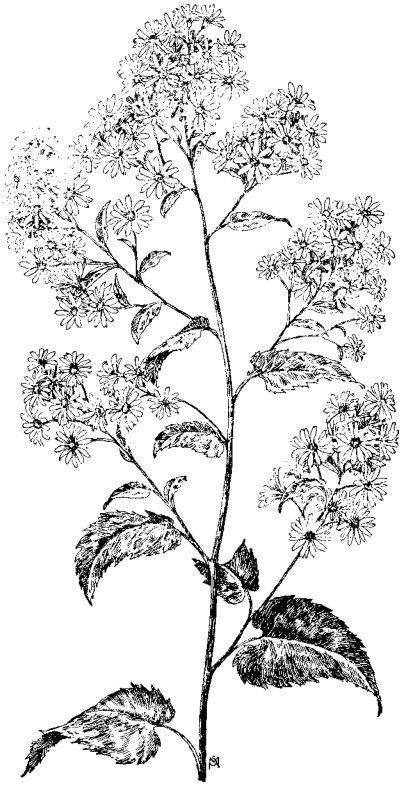
Asteraceae

Aster cordifolius
▸ Heart-leaved Aster

A familiar, small-flowered aster with variable leaves. The stem is slender, smooth and much branched, the light green leaves rough or fine-hairy, and usually pointed heart-shaped with large, sharp teeth, the upper ones short-stemmed or stemless, ovate or lance-shaped. The lilac or blue-lavender flowers about 0.6 inch broad, with 10–20 rays, are crowded in dense clusters; the disk florets turn magenta or madder purple with age. Grows 1–4 feet high and is common everywhere.

Aster sagittifolius
▸ Arrow-leaved Aster

A rather northern species. The stem stiff, erect, and with nearly upright branches. The light olive green leaves thin, broad lance-shaped, and sparingly toothed toward the top of the stem, but somewhat arrow-shaped lower down. The small, light violet flowers are not showy; there are 10–14 rays about 0.25 inch long. 2–4 feet high. In dry soil. Maine, south to Kentucky, west to North Dakota.



Drawing: Heart-leaved Aster. Right: Arrow-leaved Aster.

COMMON NAME Heart-leaved Aster
COLOR Lilac or lighter
SEASON September-October

COMMON NAME Arrow-leaved Aster
COLOR Light violet
SEASON August–October

White Aster acuminatus

▸ Sharp-leaved Wood Aster

A low woodland species with large, scrawny flowers having 10–16 narrow white or lilac-white rays, and generally magenta tubular florets. The large, sharp-pointed, coarse-toothed dark green leaves, thin, and broad lance-shaped, tapering to both ends, often arranged nearly in a circle beneath the few long-stemmed flowers. 10–16 inches high. In cool rich woods. Me. and N.Y., south in the mountains to Ga. In the White Mountains.

COMMON NAME Sharp-leaved Aster
COLOR White or lilac-white
SEASON August–September

Erigeron strigosus

▸ Daisy Fleabane

A singular common species; the hairs not spreading but close to the stem. The light green leaves are linear and toothless or nearly so, the lower ones broad at the tip. The little daisy-like flowers are 1/2 inch broad, with a large green yellow disc; occasionally the white rays are lilac-tinged, and sometimes they are extremely short or altogether absent. 1–2 feet high. Common in fields and on roadsides everywhere.

COMMON NAME Daisy Fleabane

COLOR White

SEASON May–September

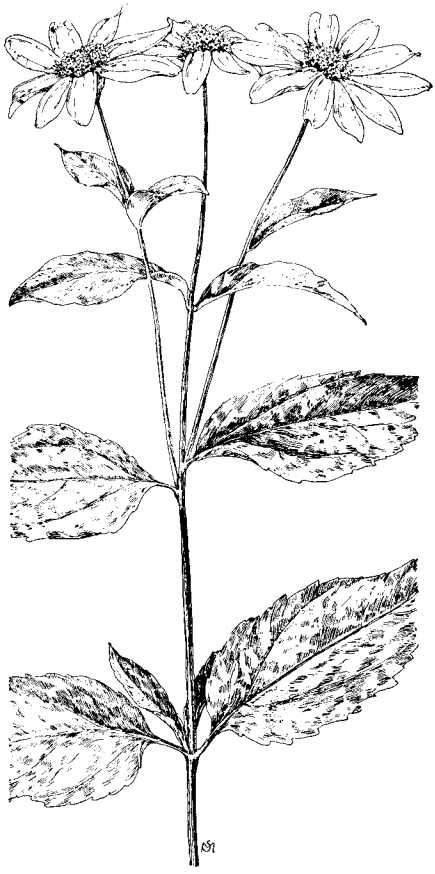
Asteraceae

Helianthus tuberosus
▸ Jerusalem Artichoke

A species extensively grown for its edible roots, now running wild in fence-rows and roadsides. The name Jerusalem is a corruption of the Italian *Girasole*, sunflower. The stem is stout and rough-hairy, the ovate lance-shaped, three-ribbed, rough leaves grow oppositely (a few upper ones alternately). The golden-yellow flowers, sometimes 3 inches broad, have 12–20 rays. It grows 5–12 feet high in damp soil from Maine, south to Georgia, and west to South Dakota and Arkansas.

Bidens Chrysanthemoides
▸ Bur Marigold

An annual with light golden-yellow rays, which, when perfect, are rather showy; the flowers sometimes over 2 inches broad. The leaves are narrow lance-shaped and coursely toothed. The seed vessels have 2–4 prongs. Grows 10–24 inches high in swamps and wet places in New England, south and west to Minnesota.



Drawing: Jerusalem Artichoke. Right: Bur Marigold.

COMMON NAME Jerusalem Artichoke
COLOR Golden yellow
SEASON September-October

COMMON NAME Bur Marigopld
COLOR Yellow
SEASON August-October

Asteraceae

Echinacea pallida

▸ Purple Cone-flower

A showy species with handsome flowers whose light or deep magenta petals gracefully droop and are two-toothed at the tip. The disc is madder purple, its florets perfect. The ray-flowers are pistillate but sterile. The leaves are long lance-shaped, very rough, without teeth, and three ribbed. The flowers are a deeper color when they at first expand. It is rare in New England, where it has come from the west.

Helenium autumnnale

▸ Sneezeweed

A nearly smooth plant with toothed, lance-shaped, alternate leaves and decoratively handsome flowers, 1-2 inches broad, with the toothed, golden-yellow rays turned considerably backward. The globular disc is yellow and chaffy, the drooping petals pistillate and fertile; cross fertilization done mostly by bees. Grows 2-6 feet high and commonly found in wet meadows and on riverbanks.

Drawing: Purple Cone-flower. Right: Sneezeweed.

COMMON NAME Purple Cone-flower
COLOR Magenta
SEASON July-September

COMMON NAME Sneezeweed
COLOR Yellow
SEASON August-September

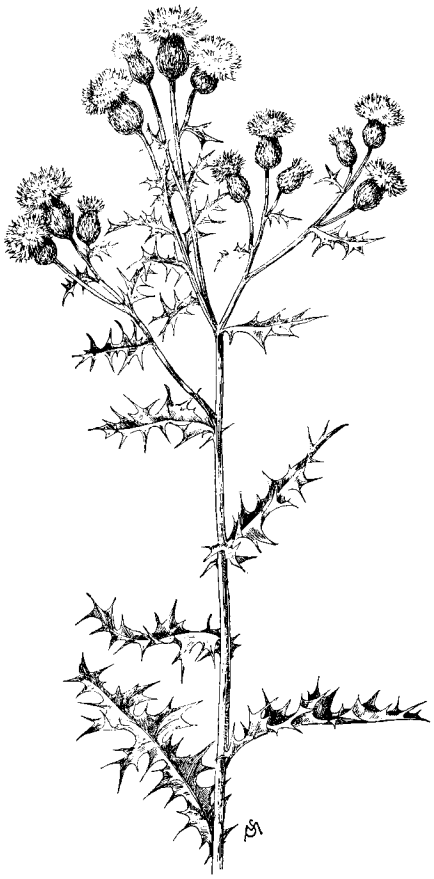
Asteraceae

Cirsium pumilum
▸ Pasture Thistle

The largest-flowereed thistle of all, with solitary heads 2–3 inches broad, the florets light magenta-lilac or nearly white. They are exceedingly fragrant, tich in honey, and are frequented by the bumblebee, who imbibes to the point of of abject intoxication! The slightly glutinous scales are nearly smooth and tipped with slender prickles, and at the base are tiny leaflets. The light green leaves narrow and frequently cut into three-prickled lobes, the prickles shorter than those of the common thistle and very numerous. Stem only 12–30 inches high, growing in dry pastures and fields from maine to Delaware and Pennsylvania, near the coast.

Cirsium armens
▸ Canada Thistle

A species with small lilac, pale magenta, or rarely white heads about 0.8 inch broad. The dull, gray-green, whitish-ribbed leaves are deeply slashed into many very prickly ruffled lobes. The flowers are staminate and pistillate and also fragrant. Grows 1–3 feet high in pastures, fields and roadsides, south only to Virginia.



Drawing: Canada Thistle. Right: Pasture Thistle.

COMMON NAME Pasture Thistle
COLOR Lilac or pale magenta
SEASON July–September

COMMON NAME Canada Thistle
COLOR Lilac or pale magenta
SEASON July–October

Glossary

Anther The pollen-bearing organ, usually yellow

Bracts Small leaf-like formations

Calyx A flower-envelop, usually green, formed of several divisions called sepals, protecting the bud

Cleistogamous Flower A flower closed to all outward agencies and self-fertilized in the bud

Corolla The flower-cup composed of one or more divisions called petals

Filament The stalk-like support of the anther

Ovary The seed-bearing organ

Perfect Flower A flower complete in all the common parts

Petal One of the divisions of the corolla

Pistil Ovary, style, and stigma combined

Pistillate With pistils and without stamens.

Polygamous Pistillate, staminate, and perfect flowers on the same plant or on different plants.

Pubescent Covered with soft short hairs

Regular Flower Generally symmetrical and uniform in the number of its parts

Rostellum The receptacle of the anther, and the termination of the style in flowers of the orchid family

Sepal One of the divisions of the calyx

Spadix A fleshy spike of flowers

Spathe A leaflike formation enclosing a floral growth

Stamen Anther and filament combined

Staminate With stamens and without pistils

Stigma The generally sticky and sometimes branching termination of the pistil through which fertilization by the pollen is effected

Stipule Small leaflike formations confined to the base of the leaf

Style The stalklike projection proceeding from the ovary and terminated by the stigma

Appendix: Families

Water plantain family. Alismaceœ.

Marsh herbs with long-stemmed leaves, and flowers of three orders, thus:1. With stamens and pistil, 2. Staminate and pistillate growing on one plant, 3. Staminate and pistillate growing on different plants. The flowers have three conspicuous petals and generally six stamens; they are visited by numerous insects which undoubtedly assist in the process of fertilization.

Arum family. Araceœ.

Perennial herbs possessing a sharp, peppery juice, and with sometimes perfect, but generally only two orders of flowers; i.e., 1. Staminate and pistillate on the same plant, 2. Staminate and pistillate on different plants. The flowers crowded on a club or spadix enclosed within a hood or spathe. Fertilization assisted by insects.

Pickerel weed family. Pontederiaceœ.

Aquatic herbs with perfect (i.e. Having stamens and pistil), more or less irregular flowers issuing from a spathe or leaflike envelop, which are mostly fertilized by insects.

Lily family. Liliaceœ.

Mostly perennial herbs with a flower-cup of generally six parts remarkable for its simplicity and beauty. Flowers with six stamens each of which stands before one of the divisions. In the case of allium the flowers spring from a spathe or leafy inclosure, like the flowers of most of the species already described.

Amaryllis family. Amaryllidaceœ.

Perennial herbs, with generally showy, perfect flowers—with stamens and pistil—having six generally equal divisions of the flower-cup. Mostly fertilized by bees, the beelike flies (syrphidœ), and small butterflies (hesperia).

Iris family. Iridaceœ.

Perennial herbs found in damp or moist situations, having straight straplike leaves and showy, perfect flowers of three and six parts. Commonly cross-fertilized by honeybees, bumblebees, and the beelike flies (syrphidœ).

Orchid family. Orchidaceœ.

Perennial herbs having perfect flowers, the various parts of which are irregular in structure but symmetrical in arrangement. There are three similar sepals colored like petals, two lateral petals, and below these a third unique petal called the lip, conspicuously colored, often spurred, and containing nectar for the attraction of insects. The latter in the effort to reach the nectar invariably dislodge the peculiarly adhesive pollen-clusters and eventually carry them to the next blossom. The ingenious mechanical device of the flower to ensure cross-fertilization is simple but effective. The orchids, except the cypripedium, have but one stamen which is united with the style into one common column placed at the axil of the flower facing the lip. The stigma, the usual termination of the style, is a gummy surface located directly below the so-called rostellum, the receptacle of the anther, and the actual termination of the style. In the two anther-cells above the

rostellum there are two pollinia, or stemmed pear-shaped pollen-clusters, each composed of several packets of pollen tied together by elastic threads; these threads running together form the stem terminated by a sticky disc. It is these discs which attach to the tongues or heads of insects and insure the transportation of the pollen-masses to the gummy stigma of another flower. The orchids as a general rule are incapable of self-fertilization, and are wholly dependent upon long-tongued insects for the transportation of their pollen. In cypripedium, the stigma is not a gummy surface but is in a cavity between the anther-cells.

Birthwort family. Aristolochiaceœ.

A small family of twining or low herbs, having perfect flowers—with six or more stamens and a pistil. The leaves stemmed, and either alternate or proceeding from the root. The flower-cup or calyx, without petals, united with the ovary or fruit receptacle, and lobed or irregular. Assisted in the process of fertilization by various smaller insects.

Purslane family. Portulacaceœ.

A small group of low herbs with thick juicy leaves, and perfect but unbalanced flowers—that is, with two sepals and five petals and as many stamens as petals, or more sepals, or an indefinite number of stamens, or sometimes the petals altogether lacking. Cross-fertilization is largely effected by bees and butterflies. Fruit a capsule filled with several or many shell-shaped or kidney-shaped seeds.

Water-lily family. Nymphœaceœ.

Aquatic perennial herbs, with floating leaves, and solitary flowers with 3–5 sepals, numerous petals, and distinct stigmas or these united in a radiate disc. Fertilized by bees, beetles, and aquatic insects.

Crowfoot family. Ranunculaceœ.

A large family of perennial or annual herbs, with generally regular but sometimes irregular flowers; with stamens and pistil, or with staminate and pistillate flowers on different plants; 3–15 petals, or none at all; in the last case the sepals petal-like and colored. Generally fertilized by the smaller bees, butterflies, and the beelike flies.

Barberry family. Berberidaceœ.

A family of shrubs and herbs with perfect flowers having one pistil, and as many stamens as petals (except podophyllum) arranged opposite each other. The flowers of the barberry are especially adapted to cross-fertilization; but other members of the family are self-fertilized, or cross-fertilized by the agency of insects, chiefly bees.

Poppy family. Papaveraceœ.

Herbs with a milky or yellow sap, and regular or irregular perfect flowers with 4–12 petals, generally two early-falling sepals, and many stamens. The irregular flowers spurred at the base of the petals. Fertilized mostly by bees. Fruit a dry capsule usually one-celled. Not honey-bearing flowers.

Mustard family. Cruciferœ.

The latin name of this family, from crux, a cross, arose from the resemblance of the four opposing petals of its flowers to the form of a cross. There are also four deciduous sepals, one pistil, and six stamens, two of which are short; rarely there are less than six. The flowers are generally small and not showy, but they produce honey, and are accordingly frequently visited by the honeybees, the smaller bees, and the brilliantly colored flies of the family syrphidœ.

Pitcher plant family. Sarraceniaceœ.

Swamp plants with pitcherlike leaves, and nodding flowers with 4–5 sepals, five petals, numerous stamens, and one pistil; represented by only one species in the northern united states.

Sundew family. Droseraceœ.

Bog plants with sticky-hairy leaves which are coated with a fluid designed to attract and retain insects—they are, in fact, carnivorous. The small flowers are perfect, with five petals, and few or many stamens, with the anthers turned outward. Fruit a 1–5-celled capsule. The tiny red filaments of the leaves curl and clasp about a captured insect, and ultimately its juices are absorbed.

Saxifrage family. Saxifragaceœ.

A large family of herbs or shrubs related to the family rosaceœ, but differing from it by having albumen in the seeds, and opposite as well as alternate leaves. The flowers are mostly perfect with usually five petals, fertilized by the aid of the smaller bees, and the flies (syrphidœ), or in some instances butterflies.

Rose family. Rosaceœ.

An extensive family highly esteemed for its luscious fruits, and for its most beautiful flowers, which are dependent in a great measure upon the bees for cross-fertilization. The flowers are extraordinarily rich in pollen and honey, the raspberry yielding the finest flavored honey which is known. The leaves are alternate-growing, and accompanied by stipules, or small leafy formations at the base of the leaf-stalk. The flowers are regular and generally perfect, with usually five sepals and as many petals (seldom more or less), numerous stamens, and one or many pistils. Rarely the petals are absent. The family is very closely allied to saxifragaceœ and leguminosœ. It is mostly composed of trees and shrubs, although the herbaceous members are many.

Pulse family. Leguminosœ.

A very large family of food-producing plants, with butterfly-like flowers, and alternate, usually compound leaves, generally without teeth. The flowers are perfect and are borne singly or in spikes; they are fertilized largely by bees and butterflies.

Geranium family. Geraniaceœ.

A small family of plants with symmetrical and perfect flowers of mostly five parts, viz.: five petals, five sepals (usually distinct), and five stamens or twice that number. Fruit a cap-

sule. Cross-fertilized by bees, butterflies, and the beelike flies.

Sorrel family. Oxalidaceœ.

A small family of low herbs in our range, with trifoliate leaves and perfect, regular flowers of five parts; the ten stamens united at the base. Fruit a five-celled capsule. Juice sour and watery. Cross-fetilized by the smaller bees and the beelike flies.

Milkwort family. Polygalaceœ.

Mostly herbs with generally alternate leaves, and perfect but irregular flowers with five sepals, the two lateral ones petal-like, large, and colored, the others small. The three petals are connected with each other in a tubelike form; the lower one is often crested at the tip. The generally eight stamens are more or less united into one or two sets and in part coherent with the lower petal, but free above. Stigma curved and broad; the anthers generally cup-shaped and opening by a slit or hole at the apex. Cross-fertilization effected by the agency of bees and the beelike flies.

Mallow family. Malvaceœ.

Herbs or shrubs with alternate, more or less cut or divided leaves. The flowers perfect, regular, and rolled-up in the bud; rarely the staminate flowers are on one plant, and the pistillate on another, thus necessitating cross-fertilization; or rarely there are all three kinds of flowers, showing a stage of development. There are generally five sepals and five petals; the stamens are indefinite in number. The fruit generally a capsule. Fertilization assisted by bees and butterflies.

Violet family. Violaceœ.

A small family of generally low herbs with perfect, but rather irregular flowers of five petals, the lowest of which is spurred. There are five perfect stamens whose anthers turn inward and lie touching each other around the pistil. It is a family of nectar-yielding flowers commonly visited by many species of bees and a few butterflies, and cross-fertilization is effected by their assistance and by structural contrivances. The name is latin.

Loosestrife family. Lythraceœ.

Herbs or shrubs in our range, with four-sided branches and generally toothless, opposite leaves and perfect flowers, though these are occasionally in two or even three forms, i.e., with long filaments (the stem part of the stamen minus the anther) and a short style, or vice versa. Petals 4–7. Stamens 4–14, sometimes the petals are absent. Cross-fertilization effected in a number of instances through the agency of bees and butterflies.

Meadow-beauty family. Melastomaceœ.

Herbs (in our range) with opposite leaves of 3–7 veins, and perfect, regular flowers having four petals, and as many calyx-lobes; there are either four or eight prominent stamens; in o

ur species the anthers open by a pore in the apex. The stigma being far in advance of the anthers, the flower is cross-fertilized, and mostly through the agency of butterflies and bees. The seed are in a four-celled capsule.

Evening primrose family. Onagraceœ.

Herbs, or sometimes shrubs. The perfect flowers commonly with four petals and four sepals (rarely 2–6), and with as many or twice as many stamens; the stigma with 2–4 lobes. Fertilized by moths, butterflies, and bees.

Dogwood family. Cornaceœ.

Shrubs or trees, with opposite or alternate toothless leaves, and generally perfect flowers—sometimes they are dioœcious; that is, the two kinds of flowers grow on separate plants; or polygamous, that is, perfect, staminate and pistillate flowers growing on the same plant or different plants. The genus cornus, within our range, which is represented here by two species, has perfect flowers. Cross-fertilization is effected mostly by bees and the beelike flies.

Pyrola family. Pyrolaceœ.

Formerly classed as a suborder under the heath family. Generally evergreen perennials with perfect, nearly regular flowers, the corolla very deeply five-parted, or five-petaled; twice as many stamens as the divisions of the corolla; the style short, and the stigma five-lobed. Fruit a capsule. Visited by numerous flies and bees, as well as smaller butterflies.

Primrose family. Primulaceœ.

Herbs with leaves variously arranged, and with perfect, regular flowers. The corolla (usually five-cleft) is tubular, funnel-formed, or salver-formed. Stamens as many as there are lobes to the corolla and fixed opposite to them, but the corolla lacking in the genus named glaux. Seeds in a one-celled and several-valved capsule.

Gentian family. Gentianaceœ.

Smooth herbs with generally opposite leaves, toothless and stemless; menyanthes and limnanthemum are two exceptions to this rule. Flowers regular and perfect, the corolla with 4–12 lobes; alternating with these are a corresponding number of stamens. Fertilized mostly by the bees and the beelike flies.

Phlox family. Polemoniaceœ.

Herbs with alternate or opposite leaves and perfect, regular or nearly regular flowers with a five-lobed corolla which is rolled up in the bud, the lobes of the mature flower remaining somewhat contorted. Stamens five. Cross-fertilized most generally by butterflies and bumblebees. The name phlox is from the greek xxxxx, meaning flame.

Borage family. Boraginaceœ

In our range annual or perennial herbs with rough-hairy stems and generally alternate, toothless, rough leaves. The blue-violet flower perfect and regular with a five-lobed corolla (echium excepted), and five stamens.

Flowers mostly in one-sided spikes, which at first are somewhat rolled up, straightening as the blossoms expand. Cross-fertilized mostly by butterflies and bees.

Vervain family. Verbenaceæ.

Generally herbs (at least in our range) with opposite leaves and perfect, more or less irregular flowers in terminal clusters. The corolla with united petals, uniform in shape, or two-lipped, the tube generally cylindrical and spreading into 4–5 lobes. Four stamens, two long and two short, or very rarely only two. Probably self-fertilized, though cross-fertilization may occur, assisted by the honeybee, bumblebee, and the beelike flies.

Mint family. Labiatæ.

A large family of aromatic herbs, the foliage of which is covered with tiny glands containing a strong-scented volatile oil of a peppery character; the different species superficially resemble one another. The flowers are usually small, tubular, with an entire or two-lobed upper lip and a three-lobed lower lip. The stem is generally square, and the leaves grow opposite each other. The tiny flowers are gathered in more or less conspicuous spikes, or are clustered at the base of the leaves; they are honey-bearing, and are almost exclusively cross-fertilized by honeybees, bumblebees, and the smaller bees. The name from labiœ, the lips.

Figwort family. Scrophulariaceæ.

Commonly herbs with opposite or alternate leaves, and perfect, irregular flowers with two sets of stamens, 2–5, longer and shorter ones; corolla two-lipped or nearly regular. Fruit a two-celled and generally many-seeded capsule. A large family of bitter-juiced plants; some are narcotic-poisonous. Cross-fertilized by moths, butterflies, and bees.

Broom-rape family. Orobanchaceæ.

Fleshy parasitic herbs having yellowish scales instead of leaves; the flowers perfect, or pistillate and staminate on the same plant. Stamens four. The tiny seeds borne in a capsule. Visited by various flies and bees.

Madder family. Rubiaceæ.

Shrubs or herbs with toothless leaves growing oppositely or in circles; the regular flowers perfect, or staminate with rudimentary pistils, or pistillate with rudimentary stamens; the corolla funnel-formed with 4 (sometimes 5) lobes and as many stamens. Cross-fertilized mostly by bees and butterflies. A large family in the tropics, to which belong the coffee, the cinchona tree from which is obtained quinine, and the madder (rubia tinctorum) whose roots furnish the red dye and the artist's permanent pigment of that name.

Honeysuckle family. Caprifoliaceœ.

Shrubs, vines, or sometimes herbs with opposite leaves, and perfect regular (occasionally irregular) flowers, with generally a funnel-shaped corolla, five-lobed, or sometimes two-lipped. Cross-fertilized by the larger long-tongued bees, moths, butterflies, and the hummingbird.

Valerian family. Valerianaceœ.

Herbs with opposite leaves, and perfect, or sometimes staminate and pistillate, flowers; the corolla tube narrow and five-lobed; stamens 1–3. Commonly visited by bees. The genus valeriana is remarkable for its strong-scented roots.

Bellflower family. Campanulaceæ

Herbs, in our range, with alternate leaves and acrid, generally milky, juice; the perfect flowers in a spike or solitary. The corolla usually bell-shaped and five-lobed. Stamens five, alternating with the corolla-lobes. Fruit a many-seeded capsule. Cross-fertilized mostly by bees and the beelike flies (syrphidæ). A tribe now included in lobeliaceæ by engler and prantl, but one which, in our range, lacks those connecting links which make the close relationship evident.

Lobelia family. Lobeliaceœ.

A family of perennial herbs with milky acrid juice. The perfect but irregular flowers with a five-lobed tube-shaped corolla; the five stamens united in a tube. Cross-fertilized by bees, the beelike flies, and the hummingbird. Named for de l'obel, an early dutch herbalist; it now includes the tribe campanulaceœ.

Composite family. Asteraceae.

Mostly perennial herbs. A great family remarkable for its compound flower-heads which are often radiate in character, with a central disc composed of tiny tubular florets surrounded by brightly colored rays; in some cases the florets are strap-shaped. They are variously perfect, polygamous, and staminate and pistillate on the same or different plants; in chicory and dandelion the florets are perfect and strap-shaped; in coneflower and sunflower the tubular florets of the central disc are perfect and the ray-flowers neutral (without stamens and pistil); in aster and goldenrod the inner tubular florets are perfect and the outer ray-florets are pistillate; in thistle and burdock the florets are all tubular and perfect but lacking rays; in antennaria the tubular florets are staminate and pistillate on different plants, and in ragweed the staminate and pistillate florets are on the same plant. The family is largely dependent upon insects for cross-fertilization.

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