

A LAYMAN'S GUIDE TO SUMMER WILDFLOWERS

AT THE
FITZGERALD LAKE CONSERVATION AREA

compiled by

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INTRODUCTION

Over the past several years, I've become ever more intrigued by the succession of wildflowers that appear in the spring, summer and even fall. The Fitzgerald Lake Conservation Area affords an abundance of these wonderful plants and I started taking my camera along on hikes to try to capture their fleeting beauty. This in turn inspired me to share my photos with others in a context that relates some basic information about the flowers, their growth, their habitat and their reproduction. I've become particularly interested in the folklore associated with these plants and their use for food or medicinal purposes. I hope that this brief guide will help you to identify a sampling of the many summer wildflowers, along with a few shrubs, that grow along the paths and in the woods and pastures of the FLCA. I confess that they are my favorites and the ones I look for every year; I realize that my coverage is patchy and that there are many others that merit inclusion. Furthermore, all are native to New England except Queen Anne's Lace and Common St. John's-wort which are European imports. The photos were taken by me at the FLCA or on abutting land, but all can be found within the FLCA. The present collection of flower descriptions follows a similar guide to spring wildflowers that I compiled last year. Common, family, genus and specific names follow those in *Go Botany* web site (see Sources). I am greatly indebted to Connie Parks for looking over preliminary versions of this guide and for offering numerous suggestions and corrections; while errors may persist, they are mine.

Bob Zimmermann
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TERMINOLOGY

Although I have tried to keep the plant and flower descriptions non-technical, there are a few terms in the text that need a bit of explanation. **Annuals** and **biennials** are plants that complete their life cycles within one or two years, respectively, while **perennials** continue to grow and reproduce for three or more years; most New England wildflowers are perennials. **Petals** and **sepals** are both modified leaves. Petals, which surround the reproductive apparatus of the flower and are often brightly colored to attract pollinators, are in turn surrounded by sepals, which cover the flower bud; though often green, sepals are sometimes colored and resemble petals in which case they are called **tepals**. **Bracts**, yet another modified leaf type, are usually located at the base of a flower, and are generally green. In members of the arum family, such as skunk cabbage and jack-in-the-pulpit, a spike of tiny flowers are borne on a structure called a **spadix**, enclosed by large, thick bracts. Some leaves are arranged, in pairs, **opposite** to one another, while others occur singly in an **alternate** fashion, along the stem. Still others form a **whorl** of three or more leaves, circling the stem. The base of some leaves **clasp**, or entirely surround, the stem. Leaf characteristics can often be quite helpful in identification. The reproductive parts of a flower are known as the **pistil**, which contains the ovary, and the filamentous **stamen**, which produces pollen containing the male gametes. Seeds are packaged in a **fruit**, including **capsules** or **follicles** that split open to release the seeds at maturity and fleshy **berries** or **drupes** that are often consumed and dispersed by animals (and humans!). The underground parts of perennials, such as **rhizomes**, **tubers**, **corms** and **bulbs**, store nutrients to promote regrowth of the plant in spring or summer and in many cases account for asexual reproduction. **Rhizomes** are modified, fleshy stems that grow horizontally underground and contain multiple buds that can give rise to new plants; these structures account for the spread of many wildflowers (and are responsible for the invasiveness of numerous non-native plant species). **Tubers**, also derived from stem tissue, are enlarged, fleshy structures with buds scattered over their surface from which shoots (and roots) develop. **Corms** are solid structures that form at the stem base and generally produce a single bud or shoot, while **true bulbs** consist primarily of modified leaves with many layers, like an onion, and a single bud from which the plant develops.

SWAMP MILKWEED

(*Asclepias incarnata*)



<u>Family:</u>	Apocynaceae (Dogbane)
<u>Height::</u>	2-6'
<u>Leaves:</u>	Up to 4" long, opposite, lanceolate
<u>Stem:</u>	Often multiply branched; hairy, exudes white, milky sap when cut
<u>Flowers:</u>	¼" wide, 5 petals, pink, clustered at top of stem
<u>Fruit:</u>	2-4" long pod; splits open when ripe
<u>Flowering:</u>	June-August
<u>Habitat:</u>	Wetlands, including marshes, swamps, river or lake shores
<u>FLCA Location:</u>	Boardwalk
<u>Pollination:</u>	Moths, butterflies, bumblebees
<u>Name:</u>	<i>Asclepius</i> is derived from the name of the Greek god of medicine; <i>incarnata</i> means 'flesh-colored' (Lat.)
<u>Folklore:</u>	Roots used for medicinal purposes by many Native American tribes; some consumed the flowers while others made thread, fishing line and twine from stem fibers

FRINGED YELLOW-LOOSESTRIFE

(*Lysimachia ciliata*)



- Family: Myrsinaceae (Marlberry)
- Height:: 1-4'
- Leaves: 2-5" long, opposite, oval; leaf stalk fringed with spreading hairs
- Flowers: ¾" wide, 5 petals, yellow, finely toothed, each with pointed tip; often nodding downward
- Seeds: ¼" wide, roughly spherical capsule; splits open when ripe, releasing seeds
- Flowering: June-August
- Habitat: Wetland edges, floodplains, meadows, moist woods
- FLCA Location: Boardwalk
- Pollination: Bees, specifically *Macropsis labiata*
- Name: Possibly from King Lysimachus of Sicily. (Unrelated to the invasive purple loosestrife, *Lythrum salicaria*)
- Folklore: The name loosestrife comes from an old belief that certain plants could calm agitated animals (loosen their strife), such as the oxen used for farm work; leaves used to stanch bleeding and aid in healing of wounds

TALL MEADOW-RUE

(*Thalictrum pubescens*)



- Family: Ranunculaceae (Buttercup)
- Height: 2-8'
- Leaves: Compound, consisting of two or more, 3-lobed leaflets, each 1" long
- Flowers: 1/3" wide, clustered, each consisting of a "starburst" of white stamens; lacks petals
- Fruit: ~1/8" long elliptical achene with one seed
- Flowering: June-August
- Habitat: Swamps, wetlands, meadows
- FLCA Location: Marsh next to boardwalk
- Pollination: Bees and butterflies
- Name: The specific name *pubescens* refers to downy hairs on stem (from Lat., *pubens*); also, king of the meadow, muskrat weed
- Folklore: This plant was used in diverse ways by different groups of Native Americans: the Iroquois used it to treat nosebleeds and gall problems while further north in Quebec, the Montagnais (Innu) are said to have used the leaves as spice for salmon

MAPLE-LEAVED VIBURNUM

(*Viburnum acerifolium*)



<u>Family:</u>	Adoxaceae (Moschatel)
<u>Height::</u>	3-6'
<u>Leaves:</u>	2-5" long, opposite, three-lobed (maple-like), hairy , toothed
<u>Stem:</u>	Woody (shrub)
<u>Flowers:</u>	1/4" wide, 5 petals, white, in 2-3" nearly flat clusters
<u>Fruit:</u>	Blue-black, berry-like drupes, each containing a single seed
<u>Flowering:</u>	June-July
<u>Habitat:</u>	Understory of hardwood forests, especially maple-beech forests
<u>FLCA Location:</u>	Scattered throughout
<u>Reproduction:</u>	Seeds and rhizomes
<u>Name:</u>	<i>Viburnum</i> said to be of Etruscan origin; <i>acerifolium</i> mean maple-leaved (Lat.)
<u>Note:</u>	The leaves of this shade-tolerant shrub turn a lovely and unique mauve color in the autumn

ONE-FLOWERED INDIAN-PIPE

(*Monotropa uniflora*)



- Family: Ericaceae (Heath)
- Height: 3-6"
- Leaves: Scale-like, clasp stems
- Stem: Waxy, translucent, white
- Flowers: ½-1" long, 4-5 petals, white; nodding, one flower per stem
- Fruit: ¼-½" long egg-shaped capsule
- Flowering: June-September
- Habitat: Rich woodland soil (humus)
- FLCA Location: Throughout woods, trailsides
- Name: *Monotropa* (Grk.) means 'one turn,' referring to bend at top of stem; *uniflora* (Lat.) means one-flowered; also, corpse plant (black when dried)
- Notes: This unusual plant is *saprophytic*, i.e., it lacks chlorophyll and cannot carry out photosynthesis, but is nourished by decayed organic material in the soil with the help of fungi that associate with tree roots, often oaks or pines; considered a parasite; used by Native Americans as an analgesic

SPOTTED WINTERGREEN

(*Chimaphila maculata*)



- Family: Ericaceae (Heath)
- Height: 3-9"
- Leaves: $\frac{3}{4}$ -2 $\frac{3}{4}$ " long, whorled, lanceolate, white stripe along midvein, evergreen
- Flowers: $\frac{2}{3}$ " wide, 5 petals, white, waxy, nodding
- Fruit: $\frac{1}{4}$ - $\frac{3}{8}$ " capsule, brown; splits open when ripe releasing many tiny seeds
- Flowering: June-August
- Habitat: Dry woodlands
- FLCA Location: Throughout forested areas, Lakeside Trail
- Pollination: Bumblebees
- Name: *Chima* from 'winter' and *phila* from 'to love' (Grk.); also spotted prince's-pine, striped wintergreen, pipsissewa
- Folklore: Used by Native Americans for a wide variety of illnesses; known for its antiseptic, analgesic and diuretic properties; a tea made from leaves was used to treat digestive problems

DWARF GINSENG

(*Panax trifolius*)



- Family: Araliaceae (Ginseng)
- Height: 4-8"
- Leaves: 1-1½" long, whorled; compound, with 3-5 stalk-less, ovate, toothed leaflets
- Flowers: ⅛" wide, 5 petals, delicate, white, in ~¾"-wide clusters at top of stem
- Fruit: ⅔" fleshy yellow berry with 2-3 seeds
- Flowering: May-June
- Habitat: Moist woods and damp clearings
- FLCA Location: Off Lakeside Trail
- Pollination: Solitary bees and robber flies
- Name: Ginseng derives from Chinese *jin-chen* referring to shape of root; *Panax* means 'all-healing' (Grk.) and *trifolius*, 'three-leaved' (Lat.); also, ground nut
- Folklore: Though this is not the famed ginseng of herbal medicine, Native Americans made tea from the whole plant to treat indigestion, hives, gout, colic and rheumatism, and chewed the tubers for headaches, fainting and nervous disability; globular tuber can be eaten raw or boiled

MOUNTAIN LAUREL

(*Kalmia latifolia*)



<u>Family:</u>	Ericaceae (Heath)
<u>Height::</u>	3-15'
<u>Leaves:</u>	2-4" long, alternate, dark green, elliptic, leathery, glossy, evergreen
<u>Stem:</u>	Woody (shrub)
<u>Flowers:</u>	¾-1" wide, 5 petals, fused, white with pink highlights, in clusters
<u>Fruit:</u>	brown capsule containing 2 or more seeds
<u>Flowering:</u>	June
<u>Habitat:</u>	Woodland understory, forest edges
<u>FLCA Location:</u>	Throughout open forested areas
<u>Pollination:</u>	Bees; anthers are spring-loaded, spraying pollen on bee when dislodged
<u>Name:</u>	<i>Kalmia</i> named for Pehr Kalm, a student of Linnaeus who collected plants in North America; <i>latifolia</i> means broad-leaved (Lat.); also, spoonwood
<u>Folklore:</u>	Though poisonous, the Cherokee used an infusion of leaves to sooth the pain of scratches and cuts, and to make small wooden objects such as spoons

BLUE VERVAIN

(*Verbena hastata*)



<u>Family:</u>	Verbenaceae (Vervain)
<u>Height::</u>	2-6'
<u>Leaves:</u>	4-6" long, opposite, lanceolate, doubly toothed
<u>Stem:</u>	Square, grooved
<u>Flowers:</u>	1/8" wide, 5 petals, violet-blue, clustered at top of stem,
<u>Seeds:</u>	~3/4" long, eaten by songbirds
<u>Flowering:</u>	July-September
<u>Habitat:</u>	Meadows, marshes, wetland edges
<u>FLCA Location:</u>	Dam
<u>Pollination:</u>	Bumblebees and others
<u>Name:</u>	<i>Verbena</i> means 'sacred plant' (Lat.)
<u>Folklore:</u>	Thought to be a cure-all in ancient times, though the Iroquois are reported to have used an infusion of mashed leaves as a witchcraft medicine "to make obnoxious persons go away"

FOXGLOVE BEARDTONGUE

(*Penstemon digitalis*)



- Family: Plantaginaceae (Plantain)
- Height: 2-5'
- Leaves: 3-5" long, opposite, lanceolate, finely toothed
- Flowers: 1" long, 5 petals fused into a trumpet-like structure, white or purple-tinged; upper lip 2-lobed, lower lip 3-lobed
- Fruit: ~½" long capsule; splits when dry releasing numerous seeds
- Flowering: May-July
- Habitat: Fields, meadows, forest edges
- FLCA Location: Dam
- Pollination: Bees, bumblebees, hummingbirds
- Name: The common name refers to a clump of hairs on one of the flower's five stamens, which is sterile; also, white beardtongue
- Note: Owing to its poisonous constituents, this plant was not generally eaten or used for medicinal purposes although other members of the genus were used to relieve toothaches and fever

SPOTTED JOE-PYE WEED

(*Eutrochium maculatum*)



<u>Family:</u>	Asteraceae (Aster, Sunflower, Daisy)
<u>Height::</u>	2-6'
<u>Leaves:</u>	3-8" long, usually in whorls of 3; lance-shaped, toothed
<u>Stem:</u>	Purple, or purple-spotted, hairy
<u>Flowers:</u>	4-5½" wide clusters of flower heads, each ~⅓" wide; pink
<u>Reproduction:</u>	Pollinated by numerous insects; ~⅙" long seeds eaten by birds in fall
<u>Flowering:</u>	July-September
<u>Habitat:</u>	Damp meadows, fields and thickets or other wetlands
<u>FLCA Location:</u>	Dam, Cooke's Pasture
<u>Name:</u>	Also called gravel root or kidney-root
<u>Folklore:</u>	Joe Pye, a Mohican healer who lived in Stockbridge, MA, in the mid-1700s, reportedly used this plant to cure fevers. The roots, in various forms, were used by many tribes for flavoring or medicine. American colonists are said to have treated typhus with Joe-Pye weed extract

BROAD-LEAVED MOUNTAIN-MINT

(*Pycnanthemum muticum*)



- Family: Lamiaceae (Mint)
- Height: 2-4'
- Leaves: 1½-3" long, opposite, lanceolate to ovate, toothed; upper leaves and bracts beneath flower clusters are whitish
- Stem: Square, hairy
- Flowers: ½" wide, 5 petals, white tinged with purple, in dense clusters at top of stem
- Flowering: July-September
- Habitat: Meadows, fields, woodlands (not restricted to mountains!)
- FLCA Location: Dam
- Pollination: Butterflies and many other insects; produces copious aromatic nectar
- Name: *Pycnanthemum* means "densely flowered" (Grk.); *muticum* or "blunt" (Lat.) refers to shape of bracts
- Folklore: Tea made from fresh or dried leaves used in herbal medicine for a variety of disorders; crushed flowers applied to an aching tooth said to relieve pain

SHOWY TICK-TREFOIL

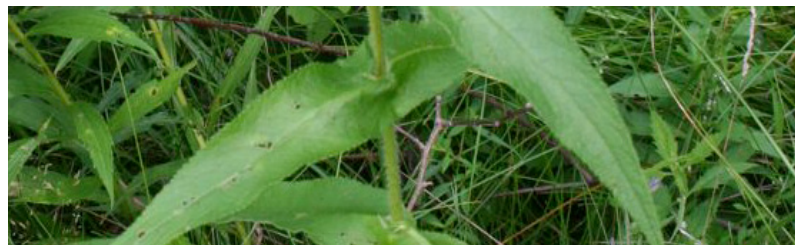
(*Desmodium canadense*)



- Family: Fabaceae (Pea or Bean)
- Height: 2-6'
- Leaves: Compound leaf divided into 3 oblong leaflets, each ~3" long, untoothed
- Stem: Hairy
- Flowers: ~½" long, 5 pea-like, purple-pink petals; in clusters at top of stem
- Fruit: Segmented pod with 3-5 joints, hairy; readily stick to animal fur, clothes
- Flowering: July-August
- Pollination: Bumblebees and bees
- Habitat: Moist meadows, fields, forest edges
- FLCA Location: Dam
- Name: Tick refers to clinging seedpods, facilitating seed distribution
- Notes: Seeds are eaten by various insect larvae and foliage consumed by game birds and rodents

BONESET THOROUGHWORT

(*Eupatorium perfoliatum*)



- Family: Asteraceae (Aster, Sunflower, Daisy)
- Height: 2-4'
- Leaves: 2-6" long, lanceolate, toothed; opposite leaves joined at base to surround stem (lower picture at left)
- Flowers: 1/4" long, white, in dense clusters at top of stem
- Seeds: ~1 1/4 long, including hairy tufts
- Flowering: July-October
- Habitat: Wet meadows, wetland margins
- FLCA Location: Dam, boardwalk
- Name: Also known as agueweed, feverwort, thoroughwort or Indian sage
- Folklore: Used by Native Americans and early settlers for a variety of ailments; the way in which the leaves surround the stem suggested that this plant could help to set bones when wrapped around a fracture; boneset tea, made from an infusion of leaves was thought to be a cure for colds, fever, constipation, rheumatism, and kidney problems--a veritable cure-all!

COMMON AGRIMONY

(*Agrimonia gryposepala*)



<u>Family:</u>	Rosaceae (Rose)
<u>Height::</u>	2-5'
<u>Leaves:</u>	2-4" long leaflets, compound, alternate, ovate, coarsely toothed
<u>Stem:</u>	Hairy; emits spicy odor when crushed
<u>Flowers:</u>	~1/4" wide, 5 petals, yellow; extend along stem spike
<u>Fruit:</u>	~1/8" long, spherical, with hooked barbs that stick to fur and clothing
<u>Flowering:</u>	July-August
<u>Habitat:</u>	Fields, forest edges
<u>FLCA Location:</u>	Dam
<u>Pollination:</u>	Bees and flies
<u>Name:</u>	Derived from <i>argemone</i> (Grk.) meaning plant used to treat cataracts; also, tall hairy agrimony
<u>Folklore:</u>	Used by Cherokee, Iroquois and other Native Americans to treat a wide variety of ailments; an infusion of roots said to be effective as diuretic and for treating liver and kidney diseases

COMMON ARROWHEAD

(*Sagittaria latifolia*)



<u>Family:</u>	Alismataceae (Water Plantain)
<u>Height::</u>	1-4'
<u>Leaves:</u>	2-12" long, arrow-shaped, 2 long backward-facing lobes; leaves grow from base of plant
<u>Flowers:</u>	$\frac{2}{3}$ " wide, 3 petals, white, in whorls of 3
<u>Fruit:</u>	$\sim\frac{1}{8}$ " long, single-seeded
<u>Flowering:</u>	July-September
<u>Habitat:</u>	Marshes, along lake/stream margins
<u>FLCA Location:</u>	Fitzgerald Lake, Broad Brook Marsh
<u>Pollination:</u>	The nectar and abundant pollen attract a variety of pollinators, including bees, wasps, flies and beetles
<u>Name:</u>	<i>Sagittaria</i> derives from "arrow" (Lat.); also known as duck-potatoes
<u>Folklore:</u>	Much of plant is edible, especially the starchy tubers prized by ducks, geese and muskrats; Native Americans are said to have broken into muskrat dens to harvest their cache of tubers

QUEEN ANNE'S LACE

(*Daucus carota*)



- Family: Apiaceae (Carrot)
- Height:: 1-3'
- Leaves: 2-8" long, deeply cut, fern-like
- Stem: Hairy
- Flowers: 3-5" wide flat-topped clusters of tiny white flowers with 5 petals; red floret at center; biennial, flowers only in second year
- Fruit: ~1/8" long, in bristly 'goblet'; biennial
- Flowering: May-October
- Habitat: Meadows and fields
- FLCA Location: Cooke's Pasture
- Name: Also, wild carrot, bird's nest
- Notes: Introduced from Europe as medicinal herb; ancestor of cultivated carrot; seeds believed to have contraceptive properties; root of young plants edible when cooked but becomes woody and fibrous with age

COMMON ST. JOHN'S-WORT

(*Hypericum perforatum*)



<u>Family:</u>	Hypericaceae (St. John's-wort)
<u>Height::</u>	1-2½'
<u>Leaves:</u>	1-2" long, opposite, elliptic with translucent dots
<u>Stem:</u>	Multiply branched
<u>Flowers:</u>	¾-1½" wide, 5 petals, bright yellow with black dots on margins and protruding stamens; clustered at top of stem
<u>Seeds:</u>	~¼" capsule; splits open when ripe
<u>Flowering:</u>	June-September
<u>Habitat:</u>	Fields, meadows, roadsides
<u>FLCA Location:</u>	Dam, Cooke's Pasture
<u>Pollination:</u>	Bumblebees, bees and others
<u>Name:</u>	Flowers said to bloom on June 24, marking the feast of St. John the Baptist
<u>Folklore:</u>	Introduced from Europe where it was used in medicine for at least 2400 years; believed to counter mild depression; traditionally hung above pictures or doorways to ward off evil spirits

COMMON MILKWEED

(*Asclepias syriaca*)



<u>Family:</u>	Apocyanaceae (Dogbane)
<u>Height::</u>	2-6'
<u>Leaves:</u>	4-10" long, opposite, oval
<u>Stem:</u>	Unbranched; hairy, exudes white, milky sap when cut (as do leaves)
<u>Flowers:</u>	½" wide, 5 petals, purplish white; in 2-4" clusters at top of stem
<u>Fruit:</u>	3-4" long pod; splits open when ripe, releasing seeds with tufts of silky hairs used in pillows and beds
<u>Flowering:</u>	June-August
<u>Habitat:</u>	Fields, meadows, roadsides
<u>FLCA Location:</u>	Cooke's Pasture
<u>Pollination:</u>	Monarch butterflies, bees, other insects
<u>Name:</u>	<i>Asclepius</i> derived from name of Greek god of medicine; <i>syriaca</i> reflects erroneous belief that plant native to Syria
<u>Notes:</u>	Foliage is sole source of food for monarch butterfly larvae; ingested compounds make larvae toxic to predators; many uses as food, medicine and fiber have been chronicled

BLACK-EYED SUSAN

(*Rudbeckia hirta*)



- Family: Asteraceae (Aster, Sunflower, Daisy)
- Height:: 1-3'
- Leaves: 2-7" long, lance-like, lightly toothed, with 3 prominent veins
- Stem: Rough, hairy
- Flowers: 2-3" wide, each flower head has 8-15 yellow ray flowers surrounding a cone of tubular disk flowers at center; as a biennial, it flowers only in second year
- Seeds: Tiny, less than 1/8" long
- Flowering: June-October
- Habitat: Meadows, fields, woodlands
- FLCA Location: Dam, Cooke's Pasture
- Name: Also, black-eyed coneflower
- Folklore: Legend has it that the name for this native flower was appropriated from a poem of the same name by the early 18th century English poet John Gay; the genus name *Rudbeckia* was conferred by Linnaeus in honor of two pioneering 17th century Swedish botanists, Olof Rudbeck and his son

WHITE MEADOWSWEET

(*Spiraea alba*)



<u>Family:</u>	Rosaceae (Rose)
<u>Height::</u>	2-5'
<u>Leaves:</u>	1½-3" long, alternate, lanceolate, coarsely toothed
<u>Flowers:</u>	¼" wide, 5 petals, 5 sepals; white or pale pink, in roughly conical clusters
<u>Fruit:</u>	~¾" long, brown seeds; follicles split open when dry
<u>Flowering:</u>	June-September
<u>Habitat:</u>	Moist soils in marshes, meadows, fields and wetland margins
<u>FLCA Location:</u>	Boardwalk, Cooke's Pasture
<u>Pollination:</u>	Bumblebees, bees and wasps
<u>Name:</u>	<i>Spiraea</i> derived from Grk. word for 'wreath'; <i>alba</i> means 'white' (Lat.)
<u>Folklore:</u>	Infusion of leaves reported to have been used as a medicinal tea by Abenaki and Algonquin Indians

ARROW-LEAVED TEARTHUMB

(*Persicaria sagittata*)



- Family: Polygonaceae (Buckwheat)
- Height:: 3-6'
- Leaves: Up to 4" long, alternate, arrow-shaped; wrap around stem (see inset)
- Stem: Square with small sharp prickles pointing downward that can literally tear the unsuspecting thumb; often grows as sprawling vine
- Flowers: ¼-½" wide, 5 petals, pink or white
- Fruit: ~⅛" long, oval
- Flowering: July-September
- Habitat: Wetlands, marshes, meadows, shores of streams and lakes
- FLCA Location: Dam, Broad Brook Marsh
- Pollination: Bees, wasps and flies
- Name: *Persicaria* means 'peach-like' (Lat.); *sagittata* pertains to the arrow-like shape of the leaves
- Notes: This plant does not appear much in folklore; it is, however, an annual, unlike most New England wildflowers which are perennials

ELLIPTIC-LEAVED SHINLEAF

(*Pyrola elliptica*)



- Family: Ericaceae (Heath)
- Height: 5-10"
- Leaves: 1-2" long, alternate, elliptic; grow only at base of plant (basal)
- Flowers: ½" wide, 5 petals, waxy, white, clustered on stem
- Seeds: Capsule, ~½" long; splits open when dry
- Flowering: June-August
- Habitat: Forests
- FLCA Location: Woods along Boggy Meadow Road
- Name: *Shinleaf* refers to the use of this plant's leaves as shin plasters
- Folklore: Leaves contain an aspirin-like substance said to relieve pain when applied to bruises and wounds; leaves reportedly used by the Cherokee for skin cuts, while infusions were used by the Iroquois to relieve rheumatism and by Mohegans for treating mouth sores

CARDINAL-FLOWER

(*Lobelia cardinalis*)



- Family: Campanulaceae (Bluebell)
- Height: 2-4'
- Leaves: 6" long, alternate, lanceolate, toothed
- Flowers: 1½" long, bell-shaped, with 5 petals fused into tubular base, bright red
- Seeds: ~½" long capsule containing two or more seeds
- Flowering: July-September
- Habitat: Wetland edges, esp. along streams, lakes and marshes
- FLCA Location: Wetland off Boggy Meadow Road
- Pollination: Hummingbirds
- Name: Common and Latin names refer to resemblance of flower color to that of Cardinal's robes; also, red lobelia
- Folklore: Used extensively by Native Americans: crushed leaves as poultice for headaches, leaf infusions for fever, ground roots for food and to end disputes

ALLEGHENY MONKEY-FLOWER

(*Mimulus ringens*)



<u>Family:</u>	Phrymaceae (Lopseed)
<u>Height::</u>	1-3'
<u>Leaves:</u>	2-4" long, opposite, clasping, lanceolate or oblong, toothed
<u>Stem:</u>	Square
<u>Flowers:</u>	1" wide, asymmetrical, pale purplish-blue; upper lip 2-lobed, lower lip 3-lobed with 2 yellow spots inside
<u>Fruit:</u>	½" long capsule, splits when ripe
<u>Flowering:</u>	June-September
<u>Habitat:</u>	Wetlands, marshes, lake shores, swamps
<u>FLCA Location:</u>	Boggy Meadow Road
<u>Pollination:</u>	Bumblebees
<u>Name:</u>	<i>Mimulus</i> is derived from <i>mimus</i> (Lat.) meaning 'mimic'; common name denotes resemblance to monkey's face
<u>Note:</u>	Although a host of medicinal properties have been attributed to monkey-flower, it does not appear to have been used extensively for such purposes

SOURCES

General

Go Botany (<https://gobotany.newenglandwild.org>), New England Wildflower Society, Framingham, MA, 2011-2017.

The Audubon Society Field Guide to North American Wildflowers (Eastern Region), W.A. Niering and N.C. Olmstead, Alfred A. Knopf, New York, 1979.

Newcomb's Wildflower Guide, L. Newcomb, Little, Brown, New York, 1977.

USA Phenology Network Botany Primer, P. Guertin, L. Barnett, E.G. Denny and S.N. Schaffer, USA-NPN Education and Engagement Series 2015-001, www.usanpn.org, 2015.

http://www.oardc.ohio-state.edu/weedguide/list_weeds.php?st=0

http://westboroughlandtrust.org/wildflowers/flowers/fl_tp2.htm

<http://gardenseyevue.com/favorite-native-plants/>

<http://www.wildflowerinformation.org/WildflowerFolklore.asp>

Individual Plants

Arrowhead (http://www.illinoiswildflowers.info/wetland/plants/cm_arrowhead.htm)

Black-eyed Susan (<https://www.americanmeadows.com/about-black-eyed-susan>)

Dwarf Ginseng (https://www.fs.fed.us/wildflowers/plant-of-the-week/panax_trifolius.shtml)

Indian Pipe (<http://wildadirondacks.org/index.html>)

Queen Anne's Lace (https://en.wikipedia.org/wiki/Daucus_carota)

Shinleaf (<http://wildadirondacks.org/adirondack-wildflowers-shinleaf-pyrola-elliptica.html>)

St. John's-wort (http://www.herballegacy.com/Nelson_History.html)