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FLOWERS that BLOOM in the SPRING



VIRGINIA S. EIFERT

ILLINOIS STATE MUSEUM

STORY OF ILLINOIS-NO. 4

STORY OF ILLINOIS SERIES

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Address all enquiries to the

MUSEUM DIRECTOR
ILLINOIS STATE MUSEUM
Springfield, Illinois





The Native Violet

STATE FLOWER OF ILLINOIS

From a painting by Mrs. Frances Summers Ridgely

FOREWORD

FLOWERS that *BLOOM* in the *SPRING*, another chapter in the Story of Illinois from the pen of Virginia S. Eifert, might equally be entitled *Springtime in Illinois*. It is not a story of the flowers alone but of flowers in their natural haunts—a picture of the Illinois spring woodland, dune, and prairie, with the leafing trees, the newly returned birds, the symphony of their songs in the morning, butterflies flitting in the sunshine, fragrant mellow earth, scents of old oak leaves, the perfume of the flowers themselves, squirrels and chipmunks at play, frogs in the pool, and toads in search of breakfast. All these are a part of the flower scene—all are a part of springtime in Illinois. The booklet follows the pattern of springtime, too, starting with the earliest spring flowers and ending with those of early summer.

Some readers may be disappointed by the lack of scientific data and description. It is intended rather that the Story of Illinois will be authoritative though non-technical and serve to develop a sympathetic understanding and an abiding curiosity in the world in which we live and of which we are a part. It is hoped that each chapter of the Story, like the Museum exhibits, will stimulate the reader to discover for himself our birds, trees, ferns, butterflies, frogs and flowers, to watch their comings and their goings and to instill in him a strong urge to preserve our native plant and animal life for the pleasure and recreation of generations to come.

The main theme of the new Illinois State Museum at Springfield will be the fascinating story of Illinois with the actual birds, mammals, plants and insects, mounted and arranged in their natural settings to show close at hand how these things look and how they live in the wild. One sees best what one has seen. If you are familiar with the haunts of wildlife in the Museum you are better able to discover them in the out-of-doors.

The Illinois wild flowers, too, will be shown some day in life-like wax models in a natural woodland setting, but until a new building provides adequate space, the Museum herbarium which contains thousands of plant specimens will have to substitute for the fuller story. They have been collected from different parts of the state and represent not only the springtime flowers and those which bloom in summer and autumn, but also the sedges and grasses, the trees, the ferns, the shrubs. The colored picture on the front piece is reproduced through the courtesy of Edward J. Barrett, Secretary of State.

You are cordially invited to come to the Museum and see the story of Illinois as told by its exhibits and collections. These will tell you more about the same wildings that are part of the Illinois springtime.

THORNE DEUEL

Springfield March 1, 1947.

MORE ABOUT ILLINOIS SPRING WILD FLOWERS

- An Annotated Flora of the Chicago Region. H. S. Pepoon. Chicago Academy of Sciences, Chicago. 1927.
- Field Book of American Wild Flowers. F. S. Matthews. G. P. Putnam's Sons, New York. 1927.
- Field Book of Illinois Wild Flowers. Illinois Natural History Survey, Urbana, Ill. 1938.
- Field Book of Native Illinois Shrubs. Leo R. Tehon. Illinois Natural History Survey, Urbana, Ill. 1942.
- Flora of Illinois. George Neville Jones. University Press, Notre Dame, Inc. 1945.
- Spring Flora of Missouri. Julian Steyermark. Missouri Botanical Garden, St. Louis. 1940.
- Wild Flowers. Homer D. House. Macmillan Co., New York. 1934.
- Wild Violets of North America. Viola Brainerd Baird. University of California Press, Berkeley. 1942.
- A Spring Flora for High Schools. H. C. Cowles and J. G. Coulter. American Book Co. 1915.
- Illinois Wild Flowers. John Voss and Virginia S. Eifert. Illinois State Museum, Springfield. 1951. \$2.25.
- Vascular Plants of Illinois. George D. Fuller and G. Neville Jones, assisted by Glen S. Winterringer, Harry E. Ahles and Alice Flynn. Joint publication, Illinois State Museum and University of Illinois. In press.

THE FLOWERS OF SPRING

In the hill-woods above the river, the oaks and hickories look down on redbuds in bloom, on the sparkle of shadbush blossoms, on the drifts of spring flowers that cover the ground after months of cold and snow and barrenness.

Here on the forest floor miraculously bloom flowers whose roots and buds all winter long lay frozen beneath the surface of the earth—beneath the old oak leaves which year after year soften and crumble and add themselves to the richness and looseness of the soil. Under this, in tight fat buds, in stout crisp roots, or in plump white bulbs, the flowers of April and May, packed away in embryo, were waiting and ready to grow.

Then a mild day in March that brought out a mourning cloak butterfly from behind a shag of hickory bark and wakened the cricket frogs in the swamp, brought forth also a pale spring beauty or a cluster of lavender hepaticas, or a slender white bloodroot flower. There was no need to wait for green leaves and tall stems, as the summer blossoms do. The plant food in the roots gave strength for quick growth and sudden blossoming.

It may have all started with that first hepatica on the day when the March sun turned seventy degrees and the wind was southerly. It may have started with snow trilliums on a limestone hill that hadn't seen a beam of direct sunshine since last summer. It may have started in a city park with spring beauties that would bloom and be done long before the mowers clipped them off—it probably was one of these that opened the flowering season.

These and many others are as much a part of the picture of Illinois and its springtime as the oak woods themselves, or the river cliffs, the bottomlands, the prairies, or the rolling hills. Woods, swamp, cliff, dune, prairie—each has its own flowers which grow in definite groups with certain other plants and animals.

To know a little about this orderly plan of what-grows-where-and-why—the science called ecology—is to know what to expect in each kind of location out of doors. To know something of their story adds to the pleasure of finding flowers.

Although sunlight is important in the story of the spring flowers, almost all of them grow where they receive enough for their brief purposes. It is the soil in which they live and the amount of moisture they find there, which is most important in determining what flowers shall grow where.

Soil is the result of many thousands of years of decayed plants and finely crumbled rock and sand. Soil on a bare rock may form,

as it very likely formed ages ago when the world was very young and there was only rock and water everywhere—by the crumbling power of freezing and thawing and the first thin growth of tiny alga and lichen plants.

By and by, generations of dead lichens in the finely powdered rock surface provide enough scant soil for mosses and liverworts to root. It is but a step from the growth of these simple plants to enough shallow soil for ferns and small flowering plants to find a rooting. Sometimes on a bare cliff there may be only a teaspoonful of real soil tucked in a little hollow, but it is enough to enable a phlox plant or lip fern to grow.

As soil forms on the rock and becomes deeper and deeper, the top layer always is richest because of the dead leaves and old wood which each year fall down and are added to it. This brown or gray topsoil is loose; it is the ideal place for small spring flowers to grow beneath the sheltering trees.

The kinds of trees themselves determine the kinds of flowers which live in the woods. Just as in the oak woods where live plants which thrive in a mildly acid soil and in the early full sunlight and later deep shade, so do the pine woods and tamarack bogs, where the acidity is greatest from the decayed needles, contain a special group of flowers. Here are blossoms which are as much a part of the soil itself as the trees and rocks that helped to make it.

The prairie soil, on the other hand, is different from woods-earth. Prairie soil came, not from decayed forest debris, but from the centuries of decayed plants and silt of ancient marshes which followed the broad post-glacial lakes. Here, as a result, is a rich, very black, dense soil matted through and through with grass and flower roots. The plants which grow here have a firm grip on their bit of earth. Neither prairie winds nor prairie storms uproot them. Their stalks usually are firm and tough, their flower colors bright. Somehow the flowers of the prairie are as different in their character and independence as the more delicate wildlings which depend upon life and shelter from the trees.

Still another type of soil is the sand—the sand fields, sand woods, the old dunes and the young dunes. Here the flowers send long roots far underground for anchorage and water. Many sand-loving plants lie close to the ground and possess leaves which, by means of dense hairs, thick leaf-structure, or waxiness, can withstand the intense heat of the sun upon the sand.

A fourth plant haunt is the rock face—the sheer cliffs above the rivers, the shaded, cool canyons where plants that require little soil may choose to grow.

Back of these varied habitats is the wonderful story of how this region came to be. The white pines and the flowers growing beneath them are relics of the last post-glacial period, just as the cypress swamps are remnants of a more tropical climate. The limestone and sandstone cliffs tell of ancient seas and lakes which for ages laid down

sediment which formed rock. These rock layers later were eroded by rivers or were heaved up or buried by earthquakes, planted with vegetation, or sheered clean of plants by the whims of weather.

Marshes grew out of ancient lakes which filled with sedges and cattails. The prairie came from marsh areas which lost even more of their moisture so that the drier-footed plants might flourish.

Hills, however, are the result of wind, glacier, or geological upheaval. Some were formed as moraines when the retreating glacier, having smoothed and sandpapered the contours of much of Illinois, left great hill-sized heaps of gravel and soil wherever the edge of ice paused and melted and dropped its load. Other hills grew up after the glaciers had departed—when some of the broad lakes dried too quickly to become marsh or prairie, but instead became vast mud flats. When the urgent west wind blew over the drying mud and picked up the dust grains, they were blown for miles upon the rock ledges east of the rivers. Year after year the wind-blown soil, called loess, piled higher in conical or rounded hills which lay in a long, low range following the curve of ancient shorelines. The loess was far different, both in its nature and in what grew in it, from that of the moraine hill or the oak woods. Still other hills, in the unglaciated parts of Illinois—in Jo Daviess, Calhoun, and certain southern counties—were limestone which became covered with shade-loving plants which thrived in the alkaline soil produced by the presence of limestone.

Many of the forests themselves grew by a different process of events from the prairie marshes which gradually filled with vegetation, fostered low shrubs, then trees. These forests are as varied as their flowers. Perhaps most common in Illinois are the mixed oak-hickory woods. In the bottomlands are elm and soft maple woods—trees which, with the sycamores, like their roots near water and can live through annual floods. On some of the hills are sugar maples; the sandy woods are populated by black-jack and black oaks and sassafras; certain northern woods have white pines or white birches and aspens. There are beech forests in the south and eastward along the Wabash hills; jack-pine woods and junipers on the low dunes near Lake Michigan¹. A few tamarack bogs are in the lakes area of the Fox River region in northern Illinois. And in each of these spots there are typical wild flowers in spring.

Since the days of the wet prairie—before men came with plows and axes—many changes have taken place to alter the wild flower population of Illinois. But the axes which cut the forests, the fires which burned the prairie roots, the livestock which grazed the undergrowth of forests, the heavy rains which washed away the precious leaf-mold and topsoil when the trees were not there to soak up moisture and hold the soil in place, the plows which broke the prairie sod, and cities that grew upon prairie and hill, only wiped out but did little actually to change the ways of plants

¹ Near Waukegan.

Now there only are fewer of them because their chosen haunts are fewer. Trilliums and Dutchman's breeches soon die out when their shady, moist woods are gone and the flowers instead find themselves in the bright sunshine and under the trampling feet of a village or a barn lot. Marsh plants soon vanish when the marshes are drained and turned into cornfields. Prairie flowers cannot live very long in the broken soil of a bean field or a truck garden. Some of the Illinois wild flowers, therefore, are gone and never again will bloom within the boundaries of this state.

But today when springtime comes, many of the same flowers which lived in the unharmed land of long ago bloom at their appointed times. The blossoms of woodland, prairie, cliff, marsh, and dune remain true to the ancient plan. From the cypress swamps of the south to the low dunes in the north, from the beech woods above the Wabash to the limestone cliffs above the Mississippi, these flowers paint a picture of the Illinois that was, and is, and—if man is wise in preserving their remaining native haunts—for many years to come shall be the delight of all who see them there.



Snow Trilliums (Small Wake Robin)
(*Trillium nivale*)

Once again spring comes to the river cliffs—the hills are coming alive. There are glossy nubbins of brittle ferns just showing above the thawed, loose, black soil. Slim, russet spears mark where the trout lilies poke through the moss; the leaves of the Dutchman's breeches are curled and still a pale, naked red; the great, colorful leaf-buds of the buckeye trees even now expand like tulips in the sun. Nothing is in bloom as yet but the white snow trilliums that now in March blossom on the north sides of river hills.

The trillium stems are only three inches long. They come up in groups along the rocks, buds already formed long before the plants leave the ground. Above the three dark green leaves, the flowers soon open to a gleaming white, with three oval petals and three narrow green sepals between. The trillium, like others of its family, carefully observes the mystic rule of three.

Small, low, and perfect, these miniature trilliums thrust up through last autumn's oak leaves and through emerald mosses, catch the chill beams of the good March sun, entertain the earliest bees, and are gone before springtime really makes its presence known.



Dutchman's Breeches (Snowboys or
Boys and Girls)
(*Dicentra cucullaria*)

The brown thrashers are back, the wild plums are full of buds, and the Dutchman's breeches are in bloom. Like a pattern that repeats itself each year, the birds, trees, and flowers that are earliest to be seen in Illinois keep their rendezvous with spring.

Now from clusters of fragile, coral-pink roots just beneath the surface of the damp woods earth, the almost transparent, pale pink stalks and the rolled up, naked looking leaves of Dutchman's breeches uncurl very early in spring. In an amazingly short space of time the leaves and buds, which come up at the same time but on separate stalks, have expanded. All at once the Dutchman's breeches are in bloom.

The tufts of gray-green, ferny leaves are everywhere in the woods. The blossoms—delightful, unforgettable blossoms. like nothing else in these woods—are ivory-white, tinged with pink, lavender, or yellow on the opened lips. They are waxen, puffy sacs suspended from a curving stem—a laundry line hung full of fairy garments. Crisp as popcorn, the Dutchman's breeches stand in the April woods, and during their brief stay they give off a faint perfume that has in it the essence of all the Illinois spring.



Trout Lilies (Dogtooth Violets or Adder's Tongue) (*Erythronium albidum*)

These are spring lilies—these dogtooth violets, adder's tongues, trout lilies. Between two mottled, silvery green and brown leaves that come spearing through the moss of an Illinois oak woods, a bud rises on a curved stem. Quickly now, on a day in early spring, the bud opens and there is a white lily with six flower parts curving back from the yellow stamens and the long pistil.

In Illinois, most trout lilies are white with purple shadings on the three outer flower parts; in the northern part of the state and occasionally elsewhere, and all the way to the Atlantic coast, the bright yellow kind is more commonly seen. It is the white trout lily which is truly a part of the Middle Western springtime.

The trout lily must be seven years old, usually, before it blooms. When a ripened seed falls to the moss and finally sends a small root into the soil, the young plant which grows from it year after year sends up a single leaf. Each spring the leaf manufactures food which is stored in the growing bulb, and each summer the bulb grows a bit larger and at the same time pushes deeper into the woods-earth. Then on an April in the seventh year, two leaves instead of one spring up with a bud stalk between them. The lily blooms. 11



Bloodroot

(*Sanguinaria canadensis*)

It all came about when an April rain put a soft new mildness in the air. Then certain ruddy brown roots just beneath the woods-grass and uncurling ferns sent up pale jade green shoots, each with a pair of delicate crinkled leaves, like tiny hands, wrapped tightly around it. Like a large pearl, a bud stood above the leaves. The bloodroot had come up in the night.

When the sun came forth to the tuning up of fox sparrows and purple finches in the woods, a new and delicious warmth bathed the bloodroot buds. Now they rested like snowy dove's eggs, one on each stem, above the unfolding, pale, gray-green leaves. A few blossoms opened on that first warm day. By the next day the sun shone on half an acre of white poppies with golden centers upturned to the sky.

Bloodroot is a brief and fleeting blossom of the very early spring. It is a true poppy, and most poppies last but a day. Like others in that family, the bloodroot's stems and leaves contain a sticky, yellowish juice. The stout, horizontal rootstock, when cut or bruised, exudes a blood-like juice from a flesh-like meat—this gives the bloodroot both its common and its Latin names.



Spring Beauties and Crinkleroot

(Below, Spring Beauties, *Claytonia virginica*. Above, Crinkleroot, *Dentaria laciniata*)

They are blossoms of the oak woods—small, delicate, yet sturdy blossoms which come early, depart quickly, and leave no trace of their presence except for the hosts of roots hidden just beneath the grass. Spring beauties are as much a part of the Illinois oak woods as the oaks themselves. With them in many places are the pinkish-white flowers of crinkleroot which grows from a peppery white rootstock buried in the ground. When crinkleroots and spring beauties are in bloom, they cover the woods floor with a delicate white that has a tinge of ice cream pink.

Spring beauties almost wilt in the suddenly hot rays of the spring sun; they close carefully on a rainy day and at night to preserve the precious pollen. These indeed are flowers of the sun. Under its rays the five thin petals open wide and reveal the tiny, carefully penciled, red lines that lead insects to the center.

Sometime there are spring beauties on a lawn in town, or in a farm yard, or in an open pasture. As flowers of the forest, living in an alien haunt, they still do not lie. They are there where once was an oak woods, long ago before the trees were cut to make way for man.



Golden Bellwort (Wood Merrybells)

(*Uvularia grandiflora*)

A wooded hill in Illinois in spring must have moist, rich soil and beds of emerald moss upholstering the slope. There must be snails crawling over the moss and leaving a silvery, glazed trail as they go. There must be ferns unrolling, the Christmas ferns all clothed in white fur, the brittle ferns a smooth, golden green, the spleenworts thready and black-stemmed. And to be a proper hill, there must be golden bellworts blossoming there in April.

Like so many of the spring flowers, the bellwort is a member of the lily family, and so it has six parts to form the yellow, nodding flower. The parts are twisted and sometimes tinged with green. The flower comes at the curving end of the stalk, and hangs on a thin stem that appears to have grown through the leaf.

Bending in silent grace, in groups and singly on the side of the hill, the golden bellwort blooms and goes, and the flower is followed by a three-sided green seed pod. The leaves at last turn yellow and disappear, so that only the ripened seeds and the brown roots in the hill earth are there to tell that in April golden bellworts bloomed.



Hepaticas (Liverleaf)

(*Hepatica acutiloba*)

Splashed with spring sunshine and the early dappling of shadow from the new buckeye leaves, the path winds under the trees to a sandy bottomland where a creek slides between gnarled white sycamores. On the rocky slopes of the hill are the small, gray-barked, shadbush trees that cast a flutter of white against the bare hill, for the shad is one of the earliest trees to bloom.

Here on the hill the hepaticas early came into bloom. The three-lobed, bronzy leaves withstood the winter, and now among them the silky gray new leaves, clothed in fur, unfold in the sun. From the base of the plant, well hidden beneath the leaves, there are furry stems, curled down and bent, with a furry oval bud that grows larger as the stems, under the urging of the April sun, stand erect.

One day, so suddenly and without warning that even the mourning cloak butterflies are caught unaware at the sight of this early blossoming, the hepaticas on the hillside are in bloom. In the sunshine of midday they spread their oval petals wide—white, or pink, or lilac, or lavender-blue, or deep purple blossoms with a cluster of white stamens in the center. The hepaticas are in bloom. It is spring.



Swamp Buttercups

(*Ranunculus septentrionalis*)

In that broad, open sunniness which comes in early spring before there are leaves to temper the sudden warmth of sunshine, the buttercups bloom with a brilliance which seems to attract hordes of little blue butterflies.

The tiny, flitting, silvery blues, the tailed blues, and the spring azures, with scarcely an inch of wing-spread, gather in the wet sunny places where buttercups thrive. Here the soil is always wet, for a spring runs out of the ground under the matted marsh grass that grows here. There are a few sedges, and frogs sing here at night. A song sparrow each year builds a nest in the low willow that grows at the head of the spring.

Here at the edge of mud come the little blue butterflies to sip mud-juice—a dozen or more eager, delicate little butterflies, their wings tight together and upright, tiptoe on the mud and uncoil long, thin tongues to sip the delicious moisture. They flit suddenly to the shining buttercups, come down on the glossy, clustered stamens full of pollen. Off they go, come back again, flit from flower to flower, as the song sparrow carols an exultant melody in the warmth of noon, or explores the shade of a buttercup tangle.



Anemones (Wind Flowers)

(Left, False Rue Anemone, *Isopyrum biternatum*. Right, Rue Anemone, *Anemonella thalictroides*)

All winter, the old elm stump in the bottomland had the company of the squirrels that, with daring leaps, always came to the flat top of the stump to shell their nuts and acorns.

It was in April, though, that the old stump suddenly was surrounded with life and motion, for the false rue anemones were in bloom and they were everywhere. They and the spring beauties really made the woods all around the old stump as white as if a late spring snow had fallen, and they fluttered and danced in the slightest breath of wind.

These are flowers of the breeze—even the old Greeks saw this long ago in the woods around Athens, for they named them “anemones”, which means wind flowers. In the northern part of Illinois there are white wood anemones, low, small, with narrow, dark-green toothed leaves. Over most of the remainder of Illinois, in almost every bit of oak woods and bottomlands forest, there are false rue anemones in great colonies. On deeply shaded, mossy hills there are others, the pink and white true rue anemones with their narrower, more colorful petals and their more bronzy leaves.



Bluebells (Cowslips or Lungwort)

(*Mertensia virginica*)

In spring, the creek is full and noisy as it gallops on its way to join the river. Tangles of old corn stalks and rubbish gather where a fallen tree lies in the water, so that the rushing creek must tumble and splash in miniature rapids and whirlpools before it can go on its urgent way. The grass is thick and lush on the creek banks. The elms are tall and fine. And here, beneath the elms which now in April bear small new green leaves, the bluebells are in bloom.

At a distance there is a mass of pale blueness which is almost like that of water in the sun but is not—it is all flowers. To stand among them, one sees the beauty of each flower, the crispness of each bell, the changing colors of each cluster from tiny bud to blossom. For the bluebell buds are coral-pink, the color of apple buds. Then as they grow they change to lavender or purple or pink-purple, and when the fluted bell opens wide below its slender tube, the flower is a splendid October-blue. Sometimes an entire bluebell cluster will remain pink from bud to blossom; others are all white. But the bluebell to be its proper self must have that splendid blueness which paints these April lowlands.



White Trilliums (Wake Robin)
(*Trillium grandiflorum*)

The April sun shines on hosts of great white trilliums that have sprung up and have opened everywhere in the northern woods. Three broad, heart-shaped, glossy green leaves at the top of a stem, and a splendid white flower made up of three curving petals and six yellow stamens deep in the cup—this is the magnificent great white trillium. With the splendid simplicity of the glistening three-parted trilliums, the marsh marigolds are in bloom, the skunk cabbage leaves have grown tall, and the great woolly white fronds of the cinnamon ferns slowly unroll in the thin sunshine.

Southward through the state, on the limestone hills and in ravines between the hills where the soil is black and rich with plant food, the great stalks of nodding trilliums sometimes stand more than two feet tall. The broad, tapered leaves are wide and glossy, and the flower, with triangular petals sharply bent backward, bends down on its long stem from the center of the three leaves. Betony, larkspur, and columbine are in bloom on the slopes when the nodding trilliums open in southern Illinois.

North or south, trilliums are a splendid part of the Illinois spring.



Marsh Marigolds (Cowslips)

(*Caltha palustris*)

That night the black swamp behind the dune was loud with the throaty piping of the spring peeper frogs. Everywhere—by dozens, by hundreds—the tiny brown frogs hidden in the swamp shrilled their urgent calls. Spring! Spring! Spring! they cried.

The peepers shrilled, and all night long the woodcocks filled the fragrant spring darkness with their nasal calling and with the whirring of their wings. With the dawn, the peepers and the woodcocks ceased, and so did the barred owl that had talked jovially and a bit plaintively all night long. The mists moved through the dune woods and across the amber waters of the swamp. The air was cold.

Now as the sun comes into the swamp, it shines upon the golden hosts of marsh marigolds. The sun is reflected from their polished petals, strikes highlights in the curve of each flower cup, gleams with sun-sparks on the tight clusters of yellow stamens in each flower center, illumines the thick, heart-shaped, leathery leaves that stand in tufts above the shallow amber waters. The marsh marigolds are in bloom, and in all the woods just now there is nothing more golden nor as bright as these great glorified buttercups.



The Wild Orchids

(Showy Orchis, *Orchis spectabilis*)

In the hilly oak woods in April the pink and white flowers of the showy orchis bloom above a pair of glossy green leaves. Wild orchids in Illinois are rare, but the showy orchis is one of the commonest. Of the others, there still are very few—a few where once there were thousands. Never again will there be as many as in the days when acres of white lady's slippers bloomed in the prairie wind; when yellow lady's slippers grew in great golden colonies in the woods; when there were thousands of pink moccasins in northern bogs where cities and factories of the Chicago region now stand. Today many wild orchids are all but gone.

Yet here and there are still a few. The showy orchis still opens fragrantly in the spring woods. Lady's tresses still bloom on dry slopes in autumn. And in lonely, unpastured oak woods, where the seclusion is great and the shade is deep, there still may be a yellow lady's slipper. The triumph of this perfect blossom on a day in spring is the magical fulfillment of a tiny seed that was allowed by all the forces of nature and of man to grow. It is a long, slow process from seed to flower; yet in it there lies the hope of more wild orchids in the years to come.



Blue Violets

(*Viola papilionacea*)

For many thousands of years the violets have held a special niche of affection in man's history. Poets wrote about them. Children picked bouquets of them. Perfumes were made of the scented kind. A color was named for them. They were made the state flower not only of Illinois but of New Jersey, Rhode Island, and Wisconsin.

The blue violet is well fitted for all this attention. It is a long-suffering flower that seems able to withstand any amount of picking and lack of care. The flowers begin to bloom rather early and in October the violets in moist places bloom lavishly once more. But all this bloom is merely ornamental. It is as if the violet blossomed for the benefit of children, for the gay blossoms seldom or never make seeds. Instead, in midsummer certain short-stemmed fat buds, which are merely seed-producing receptacles, grow plump with seeds. It is an ideal arrangement for a plant whose flowers are so well beloved. It has kept the blue violets from joining the ranks of the lady's slippers and white trilliums on the downgrade toward extinction, has kept them among the commonest and most abundant of wild flowers.



The Branching Violets

(Left, Pale Violet, *Viola striata*. Right, Prairie Pansy
Viola rafinesquii)

In sunny oak-hickory woods where the downy woodpecker hammers the hackberry trees and the blue jays jeer loudly on a pleasant spring day—the pale violets are white with flowers. They begin to bloom in April and continue with a scattering of flowers into mid-June. The ivory blossoms are marked with finely drawn blue lines which lead to the furry white centers.

Pale violets are the common white violets of Illinois. Each flower stands on a thin stem which springs from the axil of a leaf on the branching plant stalk, for unlike the blue violets whose flowers and leaves rise on separate stems from the root, the stems of pale violets bear both leaves and flowers.

In manner of growth, the smooth yellow violet (*Viola scabriuscula*) is much like the pale, but the leaves are brighter, yellow green, are glossy in the sunshine, and the small flowers are a bright yellow with brown lines.

A third branching-stemmed violet is the tiny prairie pansy which grows in fields and in prairie soil. The tiny white, pale blue or purple blossoms are like the garden Johnny-jump-ups in the Old World, to which they are directly related.



Bird-foot Violets (Crowfoot Violets)

(*Viola pedata* and *Viola pedatifida*)

There where the loess hills and the sand hills stand up in the sun with the Mississippi or the Illinois or Lake Michigan beyond, the bird-foot violets grow.

They are creatures of open sun and prairie hills. The compact, finely cut leaves are small and hug the earth. The blossoms are large and are almost like pansies or violas. Some are all lavender, others have two upper petals purple and the three lower lavender. These are "super" violets on miniature plants.

Bird-foot violets are part of the picture of the sunny loess or sandy hills in Illinois, part of the picture of the prairie spring. On the tops of many of these same rounded hills that foster violets, prehistoric Indians long ago came to bury their dead. Here archaeologists of today come to carefully excavate and learn more of these little-known and vanished people.

Although many of the prairie hills now are pastured or are badly eroded through removal of the thick mat of prairie grass, the bird-foot violets continue in many places to blossom faithfully each spring.



Carolina Anemones (*Anemone caroliniana*)

The moon was so brilliant that soft spring night, that the foxes whose den was on the side of the bare prairie hill turned their noses to the moon and barked a shrill, excited yipping which stirred to wakefulness the field sparrows and the woodchucks. The woodchucks in their burrows inside the hill were safe, but the field sparrow, sitting on her small new nest in the clump of old turkey-foot grass, sat tighter, and the moonlight glinted for an instant on her wide, dark eyes.

Up on the crest of the hill, high above the river valley, the anemones were in bloom. In the moonlight their petals all were closed, but the whiteness gleamed on the slim, pale flowers.

When the sun comes up, the Carolina anemones open wide. The sixteen slender petals, pinkish-white above and lilac below, have yellow centers of many stamens and are delicately fragrant. The short stems are finely silky and grayish, pinkish near the base of the plant, where the low, divided, dark green leaves with their purplish stems almost hug the ground. These anemones are compact plants which belong to the haunts of prairie winds, to the broad hot sun that shines on loess hills, to the floods of moonlight on an April night.



Pussy Toes (Cat Foot)

(*Antennaria plantaginifolia*)

To the beetle scrambling its six-legged way through the forest of the moss plants, the frosted white stems of pussy toes are obstacles to climb around or over or under. Rasping its clawed feet across the moss plants, the beetle goes on its busy way through the pussy toes jungle.

Pussy toes are everlastings which are related to dandelions, and, like their yellow kinfolk, they are very common where other flowers may not grow. They are spring flowers whose mats of thick leaves, dark green above and silky white below, remain all winter and in early spring thrust forth furry white stalks which hold clusters of woolly, queer little blossoms.

Pussy toes are plants of the sour soil on partly shaded slopes, plants of the moss banks and lichen beds, where the traveling roots yearly add to their territory. Green moss and silvery pussy toes—these, like the purple violets and the flutter of anemones in the oak woods, are a part of the Illinois spring. Low, inconspicuous, not always thought of as flowers, the pussy toes are beloved by small children, to whom the likeness of these flowers to the soft paws of kittens is not too far-fetched.

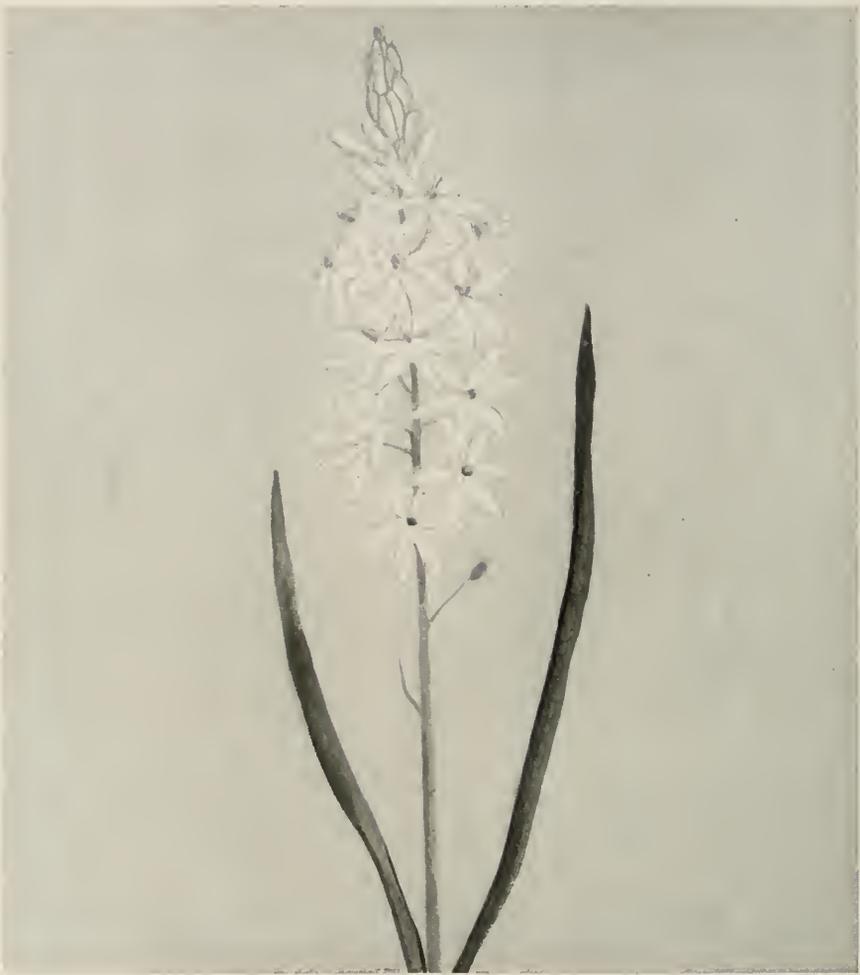


Wild Phlox

(Above, Sweet William or Blue Phlox, *Phlox divaricata*.
Below, Cleft Phlox, *Phlox bifida*)

Long ago in Aprils that are past, when Abraham Lincoln lived on New Salem hill, the oak woods around the pioneer village were full of delicate April blossoms. In the New Salem woods the cleft phlox bloomed like lace near the old quarry, and the blueness and the perfume of sweet william, the wild blue phlox, was everywhere in the woods. When the whip-poor-wills came back, they found, as they almost always did each year when they arrived from their winter in Mexico, that the phlox was in bloom. All day the whip-poor-wills sat among the flowers and were hidden by them and by the protective coloration of the old oak leaves which were just the color of whip-poor-will feathers. At night when the April darkness was filled with the scent of unseen blossoms, the whip-poor-wills flitted about, ralled their plaintive, insistent cries, and by dawn were back again among the sweet william flowers.

Today the sweet william and cleft phloxes still bloom in the New Salem woods, and the whip-poor-wills still sleep all day among the flowers. Elsewhere, sweet william is one of the commonest of Illinois wildings; cleft phlox is found in sandy woods and upon cliffs.



Wild Hyacinth (Camass)

(*Camassia scilloides*)

The prairie lay broadly in the sunshine and the sky was a great pale arch. The damp, black soil was covered for miles with new, thick grasses, and with acres of wild hyacinths that were like the sky turned upside down. The herds of bison were back from their southern migration, and millions upon millions of curlews and golden plovers, back from South America and passing over Illinois on their way to the Arctic to nest, came down on the prairie to feed.

This was the old prairie, the black, rich soil which once was the bottom of ancient marshes.

Only scant areas of the original prairie today have never felt the bite of the plow. Much of this last bit of untouched soil is found along the railroad right-of-way in many parts of Illinois, especially where the highway parallels the railroad. Here in spring, as in days gone by, the wild hyacinths bloom. But where the Indians saw them as broad lakes of lavender-blue, the hyacinths are scattered now. The slim spikes of six-petalled lilac flowers with their six white stamens, grow from onion-like bulbs which were called Camass by the Indians, who gathered them for food.



Flowers Among The Grass

(Left, Blue Eyed Grass, *Sisyrinchium albidum*, right, Yellow Star-Grass, *Hypoxis hirsuta*)

Their leaves are like grass and their flowers are like lilies—small blue or gold lilies springing from the thin, blade-like leaves that grow among the real grass on April hills. Blue-eyed grass and yellow star-grass are two of the small, fragile flowers which come with spring and vanish with the arrival of summer.

Blue-eyed grass is a member of the iris family, and, like them, it blooms but a day. A sheath on the side of the thin, grass-like stem conceals the small buds on their thready stalks. Until these buds open on a pleasant April morning when the dew is on all growing things and the spiderwort opens its silken flowers, the blue-eyed grass appears to be only a clump of grass. Then, suddenly, there are a dozen or more small, pale blue or darker blue, six-petaled flowers which are as graceful as miniature Japanese irises.

Perhaps nearby, or in heavy clay soil where not many other things thrive, the yellow star-grass opens its six-parted bright yellow flowers. Yellow star-grass is an amaryllis, perhaps the smallest and least conspicuous of that prominent and conspicuous tribe.



Jack-In-The-Pulpit (Lords and Ladies)

(*Arisaema triphyllum*)

Crisp as wax above the moss, there stands a jack-in-the-pulpit in the woods of late April and early May. When the mayapples sent up their white-sheathed spears through the moist earth, the jack-in-the-pulpit emerged in much the same manner, but with a difference which became more obvious as the plant grew. There came forth two stems with three folded leaflets on each; these soon expanded and between them stood the "jack" itself, pale green, perhaps marked with purple lines beneath the flap of the "pulpit." No other plant in the woods, not even the dragon arum (*Arisaema dracontium*), its closest kin, could be mistaken at this season for the inimitable jack-in-the-pulpit.

Some of the jack-in-the-pulpit flowers are all pale green; certain others are marked with purple. The latter are the seed-making flowers, the former produce only pollen. Insects visit the pollen-laden jacks and carry it to the small pistils at the base of the spadix or jack, and here soon develop firm, shiny green seeds.

With the passing of spring, the flower and leaves shrivel away; only the sturdy club of seeds continues to grow, and when autumn comes upon the land, the spikes of jack-in-the-pulpit seeds stand glossy scarlet beneath the October sun.



Greek Valerian (Jacob's Ladder or Bluebells)

(*Polemonium reptans*)

Bluebells, the children called them, when they found those pale blue, bell-shaped blossoms above their tufts of dark green leaves. Each spring when the valerian bloomed in the woods back of the clay-chinked cabin, the children gathered bouquets for their mother—small, tight bouquets with perhaps some sweet william and yellow violets mixed with the valerian because they all grew together here in the woods.

It is a long time since pioneer days when the lone cabins in the clearings here and there meant food and warmth and companionship in Illinois. It is a long time since pioneer children walked long miles to school, and on their way home gathered wild flowers for their mothers—a long time indeed, yet today these same wild flowers still bloom, and children still gather their tight bouquets.

The valerian each spring still blossoms in the sunny woods. The pale, shallow bells with the curling white pistils and white stamens nod from the angled, squarish stems. The leaves are compound, many leaflets on a stalk. They rise from a matted root which increases in size each year, until the valerian plant may cover a foot in diameter and contain a dozen stalks of flowers.



Celandine Poppies

(*Stylophorum diphyllum*)

The gray-trunked beech trees are huge and tall; the fine spray of their thin gray twigs is like smoke against the springtime sky. Now, when the new leaves are on the beeches, the southern and eastern hills in Illinois come to life with springtime blossoms. And when the lichen rosettes are fresh and moist on the beech trunks, when the acadian flycatcher is in the shady ravine, the celandine poppies bloom.

Where there are beech trees, there are celandine poppies. The combination usually is as simple as that. In the deep shade which comes to a beech wood, and in the soil that is peculiar to it, the brilliant, fragile, golden poppies are at home.

The plants are very juicy, almost translucent, with large, thin, lobed leaves. The stems and leaves are covered with long, scattered, prickly hairs. On a sunny morning the oval buds split their sheaths and crumpled yellow petals quickly expand to three inches in diameter—four petals with a cluster of fluffy golden stamens in the middle.

For a brief day they shine in the sun. Almost before the day is over, the petals fall, and tomorrow's buds have grown to a size which is almost ready to open when the sunshine filters through the trees.



Waterleaf

(Left, *Hydrophyllum virginiana*; right, *Hydrophyllum appendiculatum*)

The ravine is cool and fragrant and quiet at dawn when the wood mouse comes back to its nest under the mossy log. Up the side of the ravine a phoebe has plastered a nest of mud and grass against a ledge, and has ornamented the outside of the nest with bits of knight's plume moss picked from the log. And today there are four white eggs in the nest.

The sun shoots sparks in the dew. The new waterleaf flowers open. They are a drift of pale lavender on the sides of the ravine, flowers like shallow, fluted bells on watery, hairy, translucent stems. The leaves are thin and hairy, some with white blotches. Higher on the hill are banks of palest pink Virginia waterleaf.

The phoebe dashes about catching mosquitoes that hover above the flowers. The wood mouse has hunted seeds beneath their juicy stems. The dogwood petals drift down and rest among them. And on the day when the first egg hatches in the phoebe's nest, the bird carefully and with great caution brings the remains of the white shell and drops them under the waterleaf plants so that no one who passes will guess the secret on the ledge.



Shooting Star

(*Dodecatheon meadia*)

From the clay soil of a north slope—there in the woods where the leaves are coming on the oaks—burst the rocketing, fireworks flowers of shooting star. Yet these flowers are as much at home in the deep, black, matted soil of the open prairie as they are in the heavy clay of the hilly woods.

Shooting star is a cluster of pink or white flowers with five petals which, almost like those of cyclamen, bend back sharply from the tight cluster of yellow stamens enclosing the pistil. At the base of these, where the petals begin, the flower is marked with yellow and brown.

Shooting star in the woods comes at the time of sweet william and pink and white true rue anemones—the time of the soft, brown-purple, silken papaw flowers, and of the songs of newly returned rose-breasted grosbeaks and wood thrushes. Shooting star on the prairie is one with the matted prairie grass, one with the prairie crayfish that digs its burrow there. one with the Franklin's ground squirrel that hunts for seeds. one with the redwings that sing from the telephone wires beside the railroad tracks. Here in the prairie wind and sun the shooting star flowers reach their finest bloom.



Red Trilliums and Wild Ginger

(Above, *Trillium recurvatum*, Below, *Asarum reflexum*)

Where an old wagon trail winds down through the hilly woods, there are two wild flowers which have three petals and which are dark red—the erect red trillium and the wild ginger.

The beds of wild ginger spread their heart-shaped, satiny, dark green leaves only a short distance above the ground, and each year they cover a wider area as the ginger-flavored stems extend outward all around. Where the two leaf-stems of each plant come together at the base of the plant, there is a very short stalk, only half an inch long at times, on which the flower appears. It is a dark red, three-parted blossom with a white cup finely marked with black and accented with black-purple stamens.

The red trillium also has purple-black stamens, but the three dark red petals stand stiffly upright above the recurved sepals. Three mottled leaves spread at angles away from the base of the flower. The red trillium is common in Illinois. It is found in all the oak woods and in cut-over pastures where once there were oak woods. The ginger, fonder of deep, untouched north slopes in hilly woods or in bottomlands, dies out more rapidly when the woods are gone.



Wild Columbine

(*Aquilegia canadensis*)

Everywhere spring is at its height, and the glory of the dogwood and the singing of many birds is all about. The white snow of the dogwood, the last rosiness of redbud, the opening pink buds of wild crab apple, the velvet new leaves on all the oaks—it is all as glorious as if it happened now for the first time in the world.

Now on the sunny ledges of limestone that in many places rise sheer above the river, the columbines hang out their honey trumpets for the hummingbirds. The blossoms, lightly dangling on long, wiry stems, are made up of five flaring horns, golden at the mouth and shading to ruby and coral at the curved little knob where the honey lies.

Here the hummingbirds, on their way north from Yucatan, glint in the sunshine and whir their wings so fast the eye sees only a blur, as they pause to probe the trumpets of the columbine for their store of sweets. Here also, when dusk creeps in a purple haze over the cliffs and the river gleams with the last reflected light of the sky, the hummingbird hawk moths, like their namesakes, deeply thrust long tongues to garner the nectar the hummingbirds have left.



Mayapple or Mandrake

(*Podophyllum peltatum*)

They start up through the damp brown oak leaves on the woods floor—mayapples in the springtime of the year. They grow from a yellowish, rubbery sort of jointed rootstock which is poisonous. The leaves, while not quite as poisonous as the roots, nevertheless are inedible.

When the conical white shoot starts forth from the root in April, the sheath around the shoot soon splits and the plant pushes upward. A blossoming plant is known even now by the small greenish white bud which is perched at the top of the stem, with the two bronzy leaves neatly rolled and wrapped below it. Younger, non-blooming plants have only one leaf.

In a few days of mild moist weather, the leaves unfurl, so that soon the mayapple colony is covered with bright green umbrellas. There in the pleasant springtime morning the flowers open their white, waxen petals around the cluster of golden stamens and stout pistil.

For a week or so the mayapples are in bloom. Then the petals fall and the pistil expands greenly all summer long. By early autumn the fruits are the size and color of a small lemon; their silvery, slightly acid, sweet pulp may be eaten raw or prepared as a marmalade.



False Spikenard (False Solomon's Seal)

(*Smilacina racemosa*)

In the sandy woods, the black oaks and pignuts cast a deepening shade as springtime moves onward into May.

Now the Kentucky warbler is back in the woods, and already, among the tangles of bedstraw by the sandy path, a nest is made and there are brown-speckled, ivory eggs within its cup. The warblers, golden beneath and green-brown above, with a black mask through the eye, run on their pink legs under the greenery, or sing a loud and ventriloquial song from the undergrowth.

Bending above the nest is a plummy spikenard flower. Everywhere through the woods the spikenard is in bloom — fluffy, cream-colored plumes of tiny stamen-filled blossoms at the top of a bending stem. Along the stem are alternate, oval, veiny leaves, and the horizontal root-stock buried in the ground is marked with joints and scars for each year's growth.

In autumn, when again the warblers are migrating and the Kentucky warbler's young are on their way to South America, the spikenard holds clusters of translucent crimson or red-spotted grayish berries for the late robins to enjoy.



Solomon's Seal

(True Solomon's Seal, *Polygonatum biflorum*. False Solomon's Seal, *Smilacina stellata*)

The Solomon's seal has a certain architectural beauty, a quietness, a motionless rhythm of bending stalks and dangling green bells beneath the ribbed leaves.

Although the Solomon's seal is a native of Illinois woodlands, its name connects it with the far past of a foreign land. For on the jointed white rootstocks of this plant there are certain scars, marks that remain to show where old stalks once grew. These curiously shaped scars once were compared to the six-sided, mystic symbol called the Seal of Solomon. It was composed of two inter-locking triangles, one black, one white, which were symbolic of the union of soul and body. In ancient days this sign was used on amulets and charms to protect the wearer from fevers and other ailments of the body.

When superstitious folk among American colonists saw this magic sign on the root of the native Solomon's seal plants, many dug the root and used it as a fancied protection against diseases.

In certain sandy woods there are the plants of false Solomon's seal—stiff stems with tapering leaves and a few small, white six-petaled flowers at the tips of the stems.



Wild Geranium (Cranesbill)

(*Geranium maculatum*)

Pale pink cups upturned to sunshine that streams through the new May leaves announce that once again the wild geraniums are in bloom. On tall plants topped with stiff stems, the five-petaled flowers open briefly and in a few days are gone. In colonies and small patches, on hillsides and in sunny thickets, along shaded country roads where once there were woods, the wild geraniums bloom.

The geranium is akin to a widely scattered group of flowers. To this family belongs the little herb Robert of England and America; the bright-blossomed, low-stemmed alpine geraniums in the Swiss Alps; the low, brilliant, mountain geraniums of the Colorado Rockies; the wild red geranium of South Africa.

Although they may differ exceedingly in manner of growth and in their habitat—from Illinois oak woods to the plains of South Africa, from the Rockies to the Alps—they all have the same general characteristics. The seeds, closely pressed against a central column, when ripe spring away from this column and shoot into the woods. The shape of the seed container has given the native wild geranium its other name—crane's bill.



Spiderwort

(*Tradescantia virginiana*)

It is the bluest thing in all the world just now, the bluest, the sheerest, the most delicate and fleeting—the flower of the spiderwort. Three petals as thin as the thinnest silk that vanish when the sun grows hot and high; six purple-feathered stamens with plump golden-orange anthers; long, narrow, grass-like leaves; a stout, juicy stem whose juice runs out as slime when the stem is broken—this is the spiderwort.

When the spring morning breaks, with dew heavy on all the grass-blades, studding the hearts of the violets and weighting the buttercups until they are draggled with wetness, the spiderwort is open. It is a creature of the fragrant, breathless, early morning hours. The flowers open when the jumbled songs of many birds greet the dawn, when the piping of white-throated sparrows on their way to Canada strike through the medley, and the doves coo in the trees. But by late morning, the flowers which opened so crisply have faded away in a drop of purple ink.

This common early spiderwort has brilliant dark blue flowers, variations of which range from purple and lavender to a bright pink and a pure white.



Wild Larkspur

(*Delphinium tricorne*)

From the river's edge to the top of the hill, the flowers of spring-time spread the glory of their blossoming. Along the swampy edges near the water are buttercups and blue violets. Then, on the way up the slope are crinkleroots and spring beauties, bluebells and wild geraniums, yellow violets and red trilliums—they all bloom lavishly beneath the redbud trees that now are rosy with flowers. And from the bottom of the hill to the grassy clearing on the crest, the wild larkspurs bloom.

Scarcely a foot high, their spikes of large blossoms rise above a few deeply divided leaves. The flowers are deep purple, or blue, or lavender, and occasionally are white or pink. At the center of each flower with its five petals is a furry white rabbit head. It is this part of the flower which conceals the tiny black stamens and the pistel.

The purple of wild larkspurs is everywhere. The sun lies warmly on the woods and the cardinals sing madly in the wind. Up from the bottomland comes the warm scent of the spice flowers, and out beyond lies the shining river, forever flowing southward to the Gulf.



Wild Iris (Blue Flag)

(*Iris shrevei*)

In the marsh there had been no real silence all that short May night. The frogs had clamored endlessly, the first night insects had jingled, and the calls of birds had sounded all through the night. At midnight the yellow-breasted chat awoke in his dew-drenched willow, cackled a while, and slept fitfully but with sleepy chucklings until dawn.

In the wet acres of cattails and sedges and grass, with open pools of still water that reflect the dawn, life stirs and awakens. There are the dry wing-beats of redwings rising out of the cattails, the chirrupings of robins, the ghostly laughter of the rails saluting the dawn.

Now among the dew-studded spears of wild iris there are certain deep blue, tapered buds that stir, that slowly unfold, that soon, as the morning sun shines upon them, with a sudden motion open wide. The day's iris flowers are in bloom.

They are fresh, crisp, shining, silky blue marked with dark veins on the white throat. The bees that forage in the marsh come here as soon as their wings are dry, and buzz all day on the furry doorsteps of the irises. And when sundown comes, the day's flowers slowly and juicily curl up and are done.



Foxglove Pentstemon

(*Pentstemon digitalis*)

It is truly almost the end of spring and almost the beginning of summer when the pentstemon blooms. On sunny banks and in poor soil are the plummy, lavender-white spikes of hairy pentstemon with their inch-long tubular flowers with bees bumbling in them. And in the woods are the tall, crisp spikes of the larger, more elegant, white foxglove pentstemon.

These are blossoms of garden quality. They are almost two inches long, pure white with purple lines in the open mouth of each tubular blossom, and there are dozens of them arranged loosely on each spike. The leaves are dark green, glossy, slightly toothed, opposite on the stem, which rises from a tuft of basal leaves that remains all the year around.

For many days the pentstemon blooms, and when the flowers at last have browned and fallen away, and the round green seed pods are forming on the tall stalk, then indeed is springtime over and the summer well at hand. Now it is June, and in the deeply shaded woods, in the open fields and roadsides and marshes, an entirely different group of wild flowers begins its sunny period of bloom.



Prickly Pears (Illinois Cactus)

(*Opuntia rafinesquii*)

It is June, and now where the fine sands of old dunes in the river regions bake under the summer sunshine, the silky yellow petals of prickly pear cacti bloom briefly and are done.

The cactus plant is well suited to far more arid regions than this. The plant has no leaves to wilt in the heat; instead the stems are enlarged as fleshy pads in which much reserve water is retained. True leaves come forth as tiny sprouts which fall off almost at once. The clusters of thorns and bristles on the cactus are modified leaves. Since these cannot manufacture food from the sunlight, the broad fleshy stems take over this function.

The shining yellow flowers are at their best in mid June. At the base of each tapered petal there is a dull red-orange blotch, and the center is occupied by a great cluster of quivering, dusty yellow stamens. After the brief blossoming, the fruits appear. They are oblong and a dull green which ripens to a dull red; they are edible.

But now it is June, and over the dunes and in sandy fields the prickly pears are in bloom to tell that spring is past and summer is at hand.

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Woodland Scene by Paul Marchand in Museumobile of the Illinois State Museum. From left, Dutchman's Breeches, Jack-In-The-Pulpit, Red Trillium, Bird-Foot Violet and Snow Trillium modeled in plastics and wax.

The Protection of Illinois Wild Flowers

After the great destruction of many Illinois wild flower communities, efforts were made, especially by the Wild Flower Preservation Society, Friends of our Native Landscape, and the Illinois Federation of Garden Clubs, to protect what was left.

Finally there appeared in the Illinois Statutes in 1923 (see Chapter 38, Illinois Revised Statutes 1939) an act for the conservation of certain wild plants:

"579a. Sale.] 1. Any person, firm or corporation who knowingly buys, sells, offers or exposes for sale any bloodroot (*Sanguinaria canadensis*), lady's slipper (*Cypripedium parviflorum* and *Cypripedium hirsutum*),¹ columbine (*Aquilegia canadensis*), trillium (*Trillium grandiflorum* and *Trillium sessile*), lotus (*Nelumbo lutea*),¹ or gentian (*Gentiana crinita*¹ and *Gentiana andrewsii*), or any part thereof, dug, pulled up or gathered from any public or private land, unless in the case of private land the owner or person lawfully occupying such land gives his consent in writing thereto, is guilty of misdemeanor, and shall be punished by a fine of not less than \$10.00 nor more than \$100.00 and costs.

¹The correct spellings of the following words have been substituted for those where typographical errors appear in the Statutes: *Cypripedium*, *lutea* and *crinita*.

579b. Limitation.] 2. All prosecutions under this Act shall be commenced within six months from the time such offense was committed and not afterwards."

The following flowers and/or plants need protection.²

These wild flowers should not be picked in Illinois:

Yellow Adder's Tongue	Lady's Slipper
Bearberry	Turk's Cap Lily
Bellflower	Lotus
Birdfoot Violet	Meadow Beauty
Bloodroot	Orchids
Blueberry	Painted Cup
Bluets	Partridge Berry
Bunchberry	Pipsissewa
Cardinal Flower	Pitcher Plant
Columbine	Pyrola
Ferns (small)	Rose Mallow
Fire Pink	Sabatia
Flowering Dogwood	Shadbush
Gentians	Shooting Star
Gerardia	Squirrel Corn
Ginseng	Trailing Arbutus
Golden Seal	Trillium
Goldthread	Twinflower
Grass of Parnassus	Twinleaf
Ground Pine	Wild Crab
Harbinger of Spring	Wild Plum
Harebell	Wild Hyacinth
Indian Pipe	Wintergreen

*These may be picked sparingly in Illinois:*³

White Adder's Tongue	Lupine
Anemone	Marsh Marigold
Arrowleaf	Mayapple
Asters	Meadowsweet
Blazing Star	New Jersey Tea
Bittersweet	Phlox
Blue Lobelia	Puccoon
Blue-eyed Grass	Pussy Willow
Butterfly Weed	Redbud
Buttercups	Sand Cherry
Cranesbill	Spring Beauty
Dutchman's Breeches	Spring Cress
False Foxglove	Turtlehead
Hawthorn	Violets
Hardhack	Water Lily
Hepatica	Wild Bergamot
Iris	Wild Rose
Ironwood	Witch Hazel
Jack-in-the-Pulpit	Yellow-eyed Grass
Jacob's Ladder	

In a leaflet, issued by the Wild Flower Preservation Society, Illinois Chapter, the following precautions about picking wild flowers are given:

"Cut wild flowers with scissors or pocket-knife; never pull them. Never strip a plant of all its flowers; leave enough to perfect seed. None of the above flowers should be sold or purchased by florists."

² See Note 1, p. 48.

³ Adapted from lists furnished the author by the Wild Flower Preservation Society, Illinois Chapter.



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