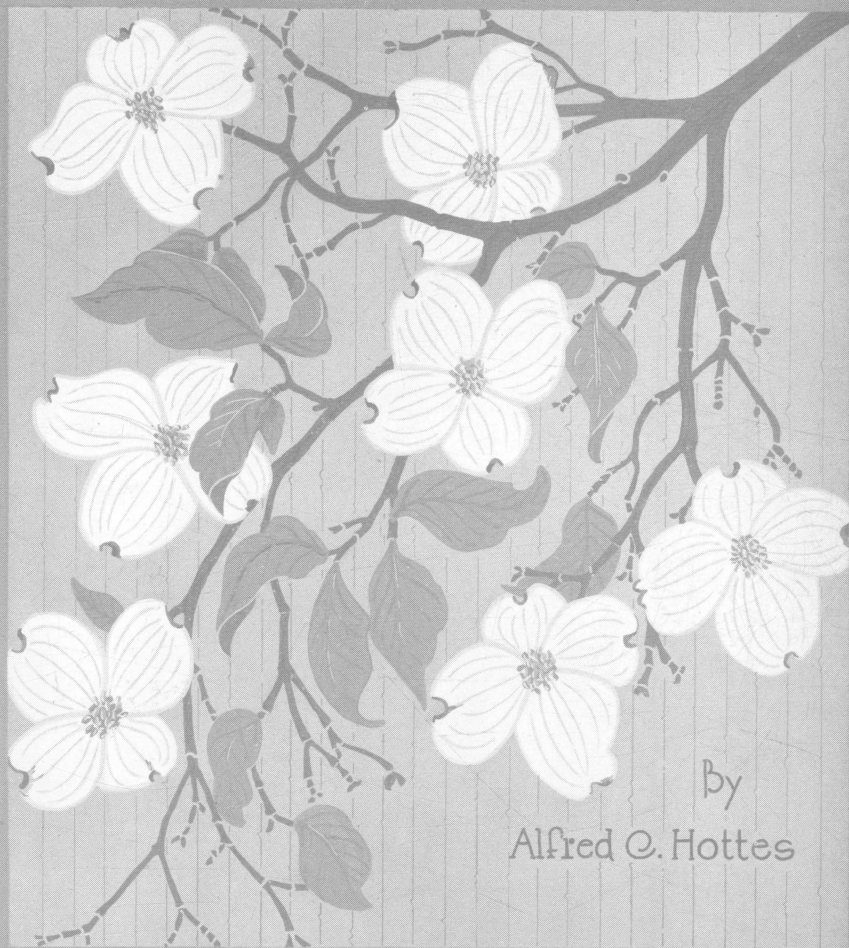


About Wild Flowers



By
Alfred C. Hottes

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Fig. 1—How could such masses of Virginia Bluebells be produced? Surely they would not grow so thickly if they were thoughtlessly gathered each year

About Wild Flowers

Wild flowers are nature's gifts to all who observe and appreciate them. They grow freely and create masses of color in meadows, on hillsides, brook banks, and mountain tops. It is as if nature hastened to cover every bare spot with greenery and flower color.

WHAT IS A WEED?

Some flowers in nature are admired, and then we call them "wild flowers." Others we call "weeds," because they encroach upon our hospitality. The weeds of one country are frequently the choicest garden flowers of another. The more interest we take in plants, the less sharply we draw the line between weeds and wild flowers. The person who is interested in a garden is apt to admire such wildlings as have showy flowers whether they are weeds to others or not.

When any plant becomes a pest to us, we call it a weed and rightly. A cornflower is a weed among lettuce, and a lettuce is a weed in our flower garden. How often persons have said, "If the Dandelion wasn't so common, I surely would like it."

Dr. L. H. Bailey once wrote: "The man who worries morning and night about the Dandelion in the lawn will find great relief in loving the Dandelions. Each blossom is worth more than a gold coin, as it shimmers in the exuberant sunshine of the growing spring, and attracts the bees to its bosom. Little children love the Dandelions; why not we? Love the things nearest at hand and love intensely. If I were to write a motto over the gate of a garden, I should choose the remark which Socrates made as he saw the luxuries in the markets, 'How much there is in the world that I do not want'."

Dr. Bailey says that children love Dandelions, because they have never been taught to consider any flower vulgar. This is clearly shown by Hilda Conkling, a little girl of nine years, who wrote as follows:

"O little soldier with the golden helmet,
What are you guarding on my lawn?
You with your little green gun
And your yellow beard,
Why do you stand so stiff?
There is only the grass to fight!"

It is not my desire, however, to give the impression that I actually want Dandelions in my lawn. I am not sentimental about them. The only point is that we miss much enjoyment when we do not take an interest in the common things about us.

LEARNING TO APPRECIATE THE WILD FLOWERS

How are the wild flowers most truly appreciated? The real enjoyment of nature depends upon ourselves. As Emerson says, "Nature reflects the

color of the spirit." Go to the woods, according to your temperament, either in groups, alone, or with some congenial companion. Go whenever the spirit moves, at any time of the year, and there will be something to delight you, if you will give yourself to the spirit of the place.

Trips may be made to the same spot season after season with added pleasure, because nature is always renewing itself. Train the eye upon some definite plants. Study at one time the Springbeauty; at another time the Wild Aster; or, if the season be late, perhaps the flower of the Witch-hazel. In the winter, the evergreen leaves and the seed vessels of trees and plants make an interesting study. Go with a book describing the wild flowers. Take a hand lens, for much escapes the unaided eye.



Fig. 2.—Bloodroots are harmonies of color and form

MISGUIDED NATURE LOVERS

Some believe that they love nature. They have a fast car, which they pack to overflowing with persons disinclined to walk, the women prepare too much to eat, and after arriving at the spot they lie about the grass and talk of every-day things—of the price of lots, and business conditions, and newspaper reports—blind to the beauties around them.

Others of these "nature-lovers" set the example to their friends and families by destroying what they can see, remarking as they pull and break the plants, "These flowers are so beautiful I am sorry we can't stay longer to take all of them."

If it be Dogwood time, they ruin the trees as high as they can reach to break the branches. If it be a shaded, marshy spot, they step full force upon an Orchid, because they have their eyes on the path which will take them from the place as quickly as possible.

If a hillside be covered with Trilliums, they stop long enough to gather armfuls of these snowy flowers, for which they care but little except to give evidence that they shall be known to be nature lovers.

The flowers are rammed into tin buckets, choked to death, and set upon the front porch that the neighbors may behold their industry.

Or, perhaps, these persons have a bare spot of soil, hard and dry, located between two houses—a spot where neither grass nor moss will grow. They dig baskets full of wild plants where-with to make a “garden” of this bare spot. Why not dig them up? The plants are free.

It is Sunday; evening falls before the travelers reach home. About the middle of the week the plants are set out, without any preparation of the soil, under conditions which are intolerable to them. They die. “Nothing will grow in that spot,” remarks last Sunday’s visitor to the woods.



Fig. 3.—The quaint blooms of the Indian Pipe growing among the Clubmosses

Sunday after Sunday, year after year, this process repeats itself. Many regions are becoming barren of our native wildflowers through just such thoughtless actions.

“What would you have us do, let the flowers go to waste?” has been the remark of every garden beggar for years. Everyone who has a garden knows such people. They always fear the waste of beauty. They take too literally the words

“Full many a flower is born to blush unseen,
And waste its sweetness on the desert air ”

Pick flowers with knowledge, and in gaining this knowledge you will be too busy to pick the flowers in large enough quantities to ruin the native flora. If you truly love these native flowers, refrain from disclosing the location of rare things to persons who will plunder them.

It has not been the intention to be sarcastic or to scold. The only object in writing the preceding criticism has been to bring these matters to the consideration of the people of our state. The writer does not consider the preservation of our native flowers the most important matter for the residents of Ohio to consider. His feeling is, however, that there is enough luxuriant beauty in our woods to be enjoyed by all if it is not wantonly despoiled. We must not allow this generation to destroy that which should increase and be the inheritance of the future boys and girls who will desire to live in a state with its natural resources preserved.

There is much in our woods that may be picked without injury. The rare flowers, however, should be known and viewed with a reverence real enough to prevent their being destroyed. Some of these rarities are mentioned on pages 13-14. The persons who will err most in picking flowers which are rare are the ones who will never read these words, nor any article on the subject. It is hoped that the reader will realize the necessity of publishing abroad this information.

The Department of Horticulture at the Ohio State University will supply suitable placards for the protection of your woods. Might we suggest that you ask us to send a copy of this bulletin to such of your acquaintances as are thoughtlessly plundering the wild places?

HIDDEN BEAUTY THAT STUDY REVEALS

Some of the most interesting features of flowers are only seen when given careful scrutiny. Sometimes they must be watched when insects visit them; then, again, flowers reveal different characteristics at different times during the day.

It is not merely the brilliant big mallows nor graceful nodding golden-rod that should catch our attention; there is much in nature which is miniature, but none the less fascinating. At first sight, and when striding along at four miles an hour, there seems to be nothing at all interesting in

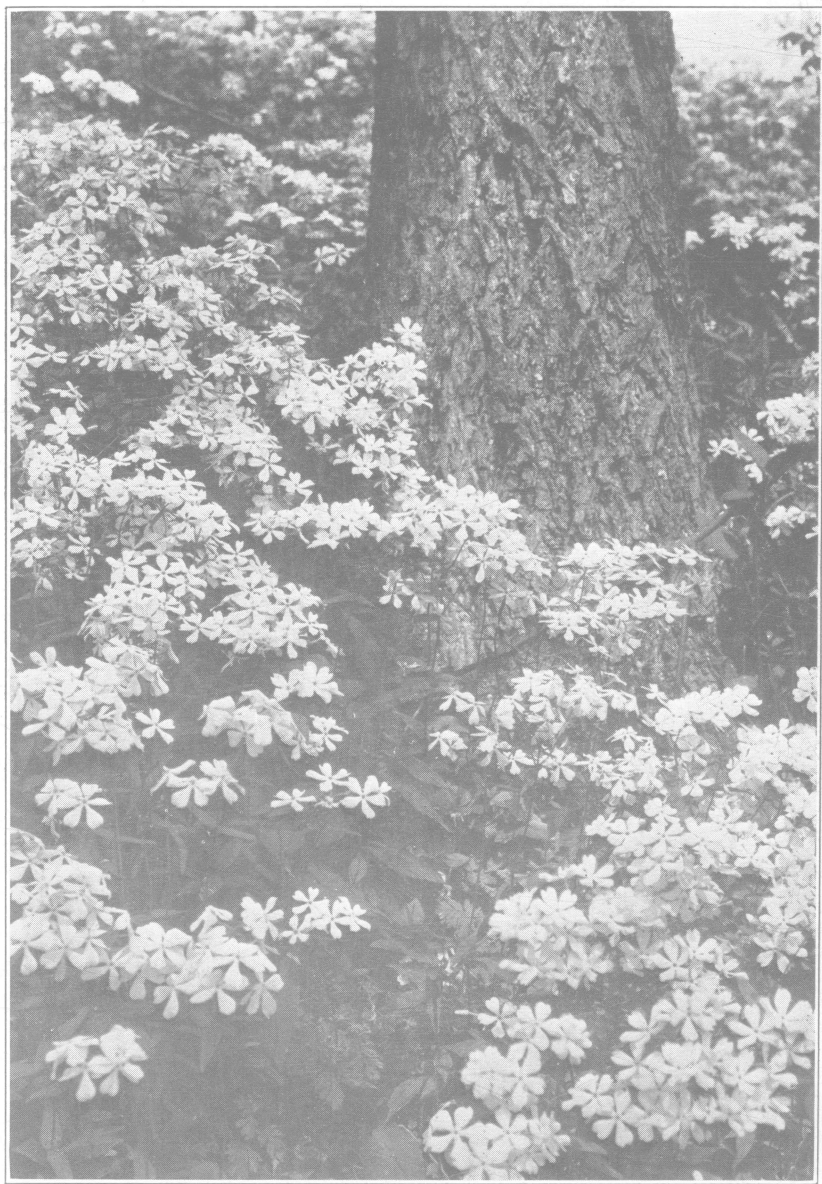


Fig. 4.—Surely this mass of Wild Sweet-williams was not born to blush unseen

an old wall. But if one stops and carefully examines the stones, there is a great deal that is interesting.

“The change in an old wall when one looks at it from a few inches distance is most remarkable,” writes G. F. Scott Elliot in *The Romance of Plant Life*. “The entire surface is spotted or dusted, sprinkled or entirely covered by thick lichen stains and crusts. The original color is nowhere visible. The lichens show the most delicate shades and contrasts in color. all blending together in harmonious general tones. Spread over the entire surface of the old wall is a thin layer of soil, else the lichens could not grow.”

Lichens are interesting, for they are a combination between a fungus and an alga living happily together for mutual benefit. The fungus is colorless, the alga is green, and supplies the fungus with its food. Gradually the lichen will dissolve more soil from the rock surface, until by its action and the supplementary influence of the weather, there is sufficient soil for the growth of tiny ferns; later, flowers and grasses get a start. “The story of the colonizing of rocks by plants is just as vividly interesting as the romance in the story of man’s colonies.” So has plant life progressed from deep water, to marsh, and then to dry land; from granite rock, to finest soil.

Persons who ride through the country often will not stop to see a clump of beautiful flowers, although they willingly stop to look at a very ordinary dam or bridge. Many visitors to strange cities hasten to see asylums and factories, would it be too extreme to drive to see a handsome clump of Cardinalflowers? Persons are not thought peculiar because they scan a baseball report for half an hour. Would it be strange for a manufacturer or a clerk to sit at a microscope for fifteen minutes a day, or to use a botanical guide to determine the name of a plant?

THE PRICELESS POSSESSIONS OF A NATURE LOVER

Many people do not allow their love for flowers to become known. because they fear that other people will consider them “peculiar.” He who truly enjoys flowers cares nothing for the derisive laugh which the passer-by gives him when he is discovered scaling a cliff for a dainty flower, or working in old clothes in his garden.

In Philadelphia there lives a lawyer, a man who deals with trouble, property, claims, and other prosaic things, but . . . read of the one moment in his life which he remembers with great joy.

“I had been exploring a little mountain stream, which I had fondly but mistakenly hoped might prove to be a trout-brook. The winding wood-path passed through dim aisles of whispering pine trees. At a steep place, a bent green stem stretched half across the path, and from it swayed a rose-red flower like a hollow seashell carved out of jacinth. For the first time I looked down on the Moccasinflower or pink ladyslipper (*Cypripedium acaule*), the largest of our native orchids.

"For a long time I hung over the flower. Its discovery was a great moment, one of those which stand out among the thirty-six-odd million of minutes that go to make up a long life.

"For the first time my eyes were opened to see what a lovely thing a flower could be. In the half-light I knelt on the soft pine-needles and studied long the hollow purple-pink shell, veined with crimson, set between two other tapering petals of greenish-purple, while a sepal of the same color curved overhead. The whole flower swayed between two large, curved, grooved leaves." So has written Samuel Scoville, Jr.*

He continues, "Leaving the path, I began to hunt for others under the great trees, and at last came upon a whole congregation nodding and swaying in long rows around the vast trunks of white pines which were old trees when this country was born. From that day I became a hunter of orchids, and a haunter of far-away forests and lonely marsh lands, of unvisited hill-tops and mountain-sides. Wherever the lovely hidden folk dwell, there go I."

The owner of the land through which Mr. Scoville wandered doubtless was busy with barn construction, colt breaking, farm bureau meetings, and a thousand-and-one things. To him, as to many, a lonely marsh, with the wild birds nesting in the swaying grasses, would be merely so much unproductive land. That shady woodland path would be to the many just a convenience; only to the few would it be a door opening into heaven. Many people knew the orchids were there in the wood; but only a few really looked at them. Yet so charming is this flower that it is as the "pearl of great price," or the lure of the mountains, or the quest of the extra dollar.

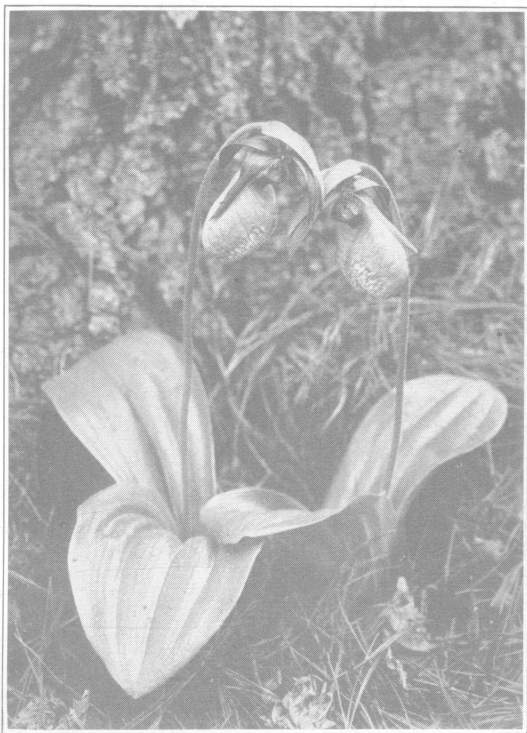


Fig. 5.—A happy couple at home enjoying each other's company—Pink Moccasinflowers

* Orchid-hunting. Samuel Scoville, Jr. Atlantic Monthly, June, 1919.

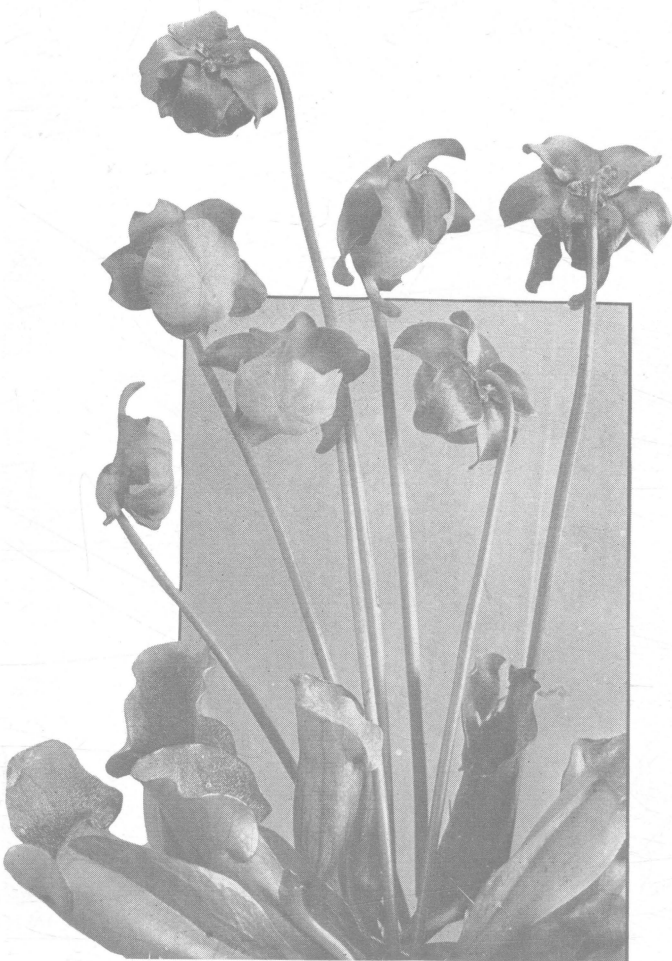


Fig. 6.—Strange as enchanter's cups stand the leaves of the Pitcher-plant. The beautiful but curious flowers are madder red in color

Many of the priceless possessions of life are ours because we have eyes to see them, ears to hear them, and other powers to sense them.

An acre upon the brow of a hill may belong to you, but the land itself is the least of your possessions. The view it commands of the winding river is also yours to enjoy; the wild flowers are there to thrill you with their beauty; and the birds in the trees pour forth "their profuse strains of unpremeditated art" for you.

"Wildflowers are fairest on neglected by-ways, and for him who still tramps the by-ways they are garden enough," writes Walter Pritchard Eaton. "What need has he of vast estates whose way lies where the mountain laurel climbs the hills, or the purple of

flowering raspberry and the tiny jewels of gold thread are the foreground for a vista of falling brook and emerald vale? What gardened estate will ever satisfy him, indeed, that does not hold something of the simplicity and wild grace and pictorial naturalness of this rural America, of this landscape which shall always be to him as the thought of home?"

THE INTANGIBLE WEALTH THAT IS OURS

Gardeners on large private estates feel, and rightly, that the flowers, ponds, woods, and hills are more their possessions than those of the acknowledged owner. Follow this thought farther with Charles Wing, who asks questions which one may answer for oneself:

"Who owns the blue vault overhead? Who owns the south wind? Who owns the sun's rays that make our planet a comfortable place in

which to live? Who owns the rain that refreshes our plants and makes them grow? Who owns the energy that changes cold soil to living plants, and thence to animals? Who owns the birds and flowers? Who owns the brush that transforms the leaves from their summer green to garnet, carmine, copper, and gold? Is this not wealth that is not capable of being made private property, certainly not transferable, and all the better that it can not be so?"

And if these features of nature can not actually belong to the owner of the land, how much less do they belong to us who merely tour the land? It is hoped that the reader realizes without greater emphasis that the writer is not opposed to the gathering of some remembrance of his trips, but it is urged that destruction need not necessarily follow his pilgrimages.

"Hast thou named all the
birds without a gun,
Loved the wood-rose and
left it on its stalk?"

CULTIVATION OF WILDFLOWERS

Wildflowers are of unusual charm in the home grounds. However, many sorts have short blooming seasons. They often die down to the soil and the foliage effect is not lasting. This is especially true of the spring flowers. Rather than try to dig these plants from the wild, it is usually wiser to order the plants from some specialist. Plants purchased from these commercial concerns often will be better rooted than flowers one could collect. If quantities are desired, they can be bought cheaper than they can be dug from the woods. Surely a hundred plants would cost less than gasoline for the automobile, and one's time.

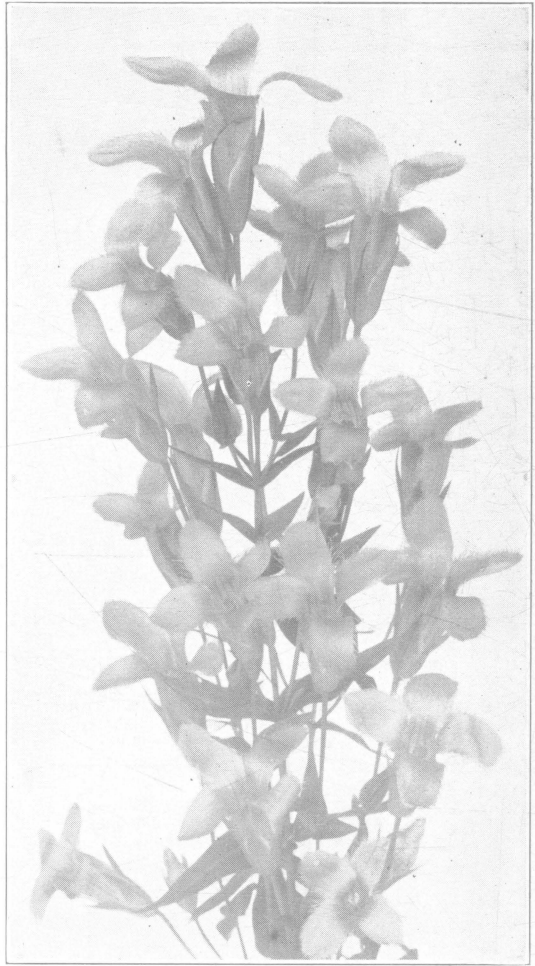


Fig. 7.—The choice blue Fringed Gentian, a gem to be seen in our wanderings when Indian summer comes

Trees in the wild almost never have balanced root systems. The roots of seedlings from the earliest age must range widely in search of food. When dug, these trees have long, unmanageable roots. Nursery trees are constantly transplanted and root-pruned so that they transplant successfully.

In planting any of these flowers study the natural conditions under which they grow. The nearer you can imitate these conditions, the greater chance of success you will have.

Most of the forest flowers will require a quantity of leaf mold, whereas the prairie and meadow flowers require but ordinary good soil.

There is a line that almost divides the State of Ohio into two equal areas, extending almost north and south, passing through the state a little west of Columbus. On the west side of the state a limestone formation is found; on the east a shale, a soil which lacks lime. Rhododendrons, Azaleas, Partridgeberry, Wintergreen and members of the Heather family (*Ericaceæ*) dislike lime in the soil.

Transplant in earliest spring or else wait until September, or even as late as November. Severely cut back plants set at any other season. Plants collected may usually have the soil shaken from the roots, after which they are wrapped in damp moss.

The culture of ferns is indicated in the table which is found on page 16. Most of the good ferns desire shade and a soil better than the poor soil so generally found around city homes. Be willing to dig out this old soil and bring in some leaf mold; then you will find that the ferns will not only exist but will thrive. Most ferns need moisture; for the greater number, this means also good drainage and a loose, humus soil which retains its moisture. Transplant them either in the fall or earliest spring for best results.

SUGGESTIONS ON GATHERING WILD FLOWERS

It is desirable that these instructions be read by all who have a sincere desire to preserve our native flora. They are revised from "A Key to the Flowering Plants of Cincinnati and Vicinity," by Professor O. T. Wilson.

- (1) Exercise the same care in picking wild flowers that you would in picking flowers in your garden.
- (2) Whenever possible, do not walk on the plants—you would not walk on your home garden.
- (3) The leaves of the plant are its food factories; if you remove all the leaves in picking any flower you are destroying the factory, and taking away from the plant the opportunity to store food in its rootstock or bulb for the next season's growth.
- (4) Picking flowers removes potential seed. This is especially important in the case of annuals and biennials.

- (5) If you see only a few of some kind of flower in the woods you are in, leave them, even though that particular plant may not be classed as rare or disappearing.
- (6) Do not pick flowers, even common ones, if you do not intend to take them home with you. There is no excuse for picking flowers only to throw them away an hour later.
- (7) Pick flowers by breaking their stems sharply, or cutting, not by pulling. Pulling loosens the roots and may cause permanent injury to the plant.
- (8) Avoid excessive picking.
- (9) We do not advocate no picking of wild flowers; we advocate discriminate, thoughtful, loving picking.

DO NOT PICK THE FOLLOWING FLOWERS

The reasons are stated in each case. The recommended plants are compiled from lists of the Wild Flower Preservation Society of America, Mrs. E. G. Britton, Professor O. T. Wilson, and Herbert Durand.

SPRING FLOWERS

- Azaleas. The Azaleas are becoming scarce in many parts of the country. The remaining plants are being ruined by the breaking off of large branches.
- Bloodroot (*Sanguinaria canadensis*). Picking the leaves destroys the plant.
- Blue-eyed-Mary (*Collinsia verna*). An annual which depends upon seed production to persist.
- Columbine (*Aquilegia canadensis*). Picking the flowers carefully will not injure the plants, but when pulled carelessly the plants are uprooted.
- Dragonroot (*Arisaema dracontium*). Related to Jack-in-the-pulpit. Becoming rare.
- Ferns:
- American Maidenhair (*Adiantum*). Generally destroyed by thoughtless persons who pull the plants when gathering leaves.
 - Climbing Fern (*Lygodium palmatum*). Rare. There is a New England law against collecting this fern.
 - Walking Fern (*Camptosorus rhizophyllus*). Found on rocky ledges. Difficult to transplant. Useless to pick but of great charm to see.
- Flowering Dogwood (*Cornus florida*). The broken trees of this incomparable little tree are too common in our woods.
- Gerardia, False-foxglove. Some species, being annual, depend upon seed production to persist. They are generally parasitic on roots of other plants. Almost eradicated.
- Ginseng (*Panax quinquefolia*). For supposed medicinal properties.
- Goldeye-grass (*Hypoxis hirsuta*). Becoming rare.
- Groundnut (*Apios tuberosa*). Roots are edible. One of the surviving native plants with edible roots. Use reason in digging them so that they shall not be exterminated.
- Hepatica, often called Liverwort (*Hepatica triloba* and *H. acutiloba*). Picking flowers does little harm except to prevent seeding. Don't pick where scarce.
- Iris, Crested, (*Iris cristata*). Being exterminated in Ohio. Buy plants.
- Jack-in-the-pulpit (*Arisaema triphyllum*). Picking the leaves destroys the plants.

Marsh-marigold (*Caltha palustris*). The drainage of swamps has eliminated proper conditions for growth.

Merrybells, Bellwort. (*Uvularia*). Removing the stems results in poor growth for another year.

Mountain-laurel (*Kalmia latifolia*). The total destruction of this incomparable flower is a disgrace to some districts in which collectors have been allowed to break it by the wagon load.

Orchids:

Ladies-tresses (*Spiranthes*).

Purple Fringed Orchid (*Habenaria fimbriata*).

Showy Orchis (*Orchis spectabile*).

Moccasinflower (*Cypripedium acaule*).

Ladyslipper Orchid (various *Cypripediums*).

Pitcherplant, Saddleplant. (*Sarracenia purpurea*). Rare. Unusual.

Puttyroot (*Aplectrum hyemale*).

Rosegentian (*Sabatia*). Member of Gentian family, therefore must produce seed. Grows in either sun or shade. A biennial.

Shootingstar (*Dodecatheon meadia*). Grows in either sun or shade.

Toothwort, Crinkleroot (*Dentaria diphylla*). May be picked if abundant.

Solomonseal, False (*Smilacina racemosa*).

Trailing-arbutus (*Epigaea repens*). Becoming rare. Frequently, when flowers are picked, the whole plant is pulled up. Cutting a few sprays with a knife or shears will not injure the plant, but everyone should do his best to preserve this gem. It does not generally transplant no matter how carefully it is treated. Dealers grow the plants from seed and sell them in pots.

Trillium. Picking these flowers destroys the roots because the leaves are also taken.

Troutlily, Dogtooth-Violet or Yellow Adderstongue (*Erythronium americanum*). It requires six or seven years for these to grow from seed. Although abundant they should be picked sparingly.

Twayblade (*Liparis liliifolia*). Rare. Plants are ruined if leaves are cut. One of the orchids.

Twinleaf (*Jeffersonia diphylla*). An interesting and handsome flower. Pick but few.

Violet, Birdsfoot (*Viola pedata*). Becoming rare.

SUMMER FLOWERS

Cardinalflower (*Lobelia cardinalis*). These charming flowers are never too plentiful. Let us have more of them. Pick a few, but no more.

Indianpipe (*Monotropa uniflora*). This is a strange colorless plant which is not valuable for cutting as it turns black.

Meadowbeauty (*Rhexia virginica*). These dainty flowers wilt upon picking. Good in boggy places.

Rhododendron. Cut the blooms sparingly. They were once very abundant in the acid soils but are now being ruined throughout most districts.

Shinleaf (*Pyrola elliptica*).

AUTUMN FLOWERS

Gentians (*Gentiana andrewsi*, *G. crinita*, *G. quinqueflora*). These are rare flowers which depend for their life upon seed production.

WINTER PLANTS

Collect sparingly the following: Holly (*Ilex opaca*), Laurel (*Kalmia*), Partridgeberry (*Mitchella*), Winterberry (*Ilex verticillata*), and Ground-pine (*Lycopodium*).

MAY BE PICKED IF ABUNDANT IN YOUR NEIGHBORHOOD

IN SPRING OR EARLY SUMMER

Baneberry (<i>Actaea</i>).	Lilies (<i>Lilium</i>). Cut the stems short so that a good quantity of leaves remain.
Bearded-tongue (<i>Pentstemon</i>).	
Bellflower (<i>Campanula</i>).	
Butterflyweed (<i>Asclepias tuberosa</i>).	Lobelia, Great (<i>Lobelia syphilitica</i>).
Coralberry or Indian-currant (<i>Symphoricarpos vulgaris</i>).	Lupines (<i>Lupinus</i>).
Dutchmans-breeches (<i>Dicentra cucullaria</i>).	Mayapple (<i>Podophyllum peltatum</i>).
Take care not to pull the plants.	Roses, Wild (<i>Rosa</i>).
Geranium or Cranesbill (<i>Geranium maculatum</i>).	Shadblow (<i>Amelanchier canadensis</i>).
Honeysuckle, Coral (<i>Lonicera sempervirens</i>).	Snowberry (<i>Symphoricarpos racemosus</i>).
Jersey-tea (<i>Ceanothus americanus</i>).	Springbeauty (<i>Claytonia virginica</i>).
	Turtlehead (<i>Chelone glabra</i>).
	Violets (<i>Viola</i>).
	Windflower (<i>Anemone</i>).

IN AUTUMN

Bayberry (*Myrica*).
Ferns. Don't uproot the plants in picking the fronds.
Sea-lavender (*Limonium*).

MAY BE PICKED IN LARGE QUANTITIES

IN SUMMER

Alfalfa (<i>Medicago sativa</i>).	Hawthorn (<i>Crataegus</i>).
Balm (<i>Mellisa officinalis</i>).	Houndstongue (<i>Cynoglossum</i>).
Bedstraw (<i>Galium</i>).	Honeysuckle (<i>Lonicera</i>).
Beebalm (<i>Monarda</i>).	Jerusalem-artichoke (<i>Helianthus</i>).
Black-eyed-susan (<i>Rudbeckia</i>).	Meadowsweet (<i>Filipendula</i>).
Bouncing-bet (<i>Saponaria</i>).	Mint (<i>Meniha</i>).
Buttercup (<i>Ranunculus</i>).	Mullein (<i>Verbascum</i>).
Buttonbush (<i>Cephalanthus</i>).	Mustard (<i>Brassica</i>).
Camomile (<i>Anthemis</i>).	Queen Anne's Lace or Wild Carrot (<i>Daucus carota</i>).
Celandine (<i>Chelidonium</i>).	Selfheal (<i>Prunella</i>).
Dandelion (<i>Taraxacum officinale</i>).	St. Johnswort (<i>Hypericum</i>).
Daylily (<i>Hemerocallis fulva</i>).	Sweetfern (<i>Comptonia</i>).
Elder (<i>Sambucus</i>).	Tansy (<i>Tanacetum vulgare</i>).
Evening-primrose (<i>Oenothera</i>).	Toadflax (<i>Linaria</i>).
Ground-ivy (<i>Nepeta hederacea</i>).	Trumpet creeper (<i>Bignonia</i>).
Groundselbush (<i>Baccharis halimifolia</i>).	Verbenas, Wild (<i>Verbena</i>).
Hawkweed (<i>Hieracum</i>).	

IN FALL

Asters (<i>Aster</i>).	Joe-pye-weed (<i>Eupatorium purpureum</i>).
Bittersweet (<i>Celastrus scandens</i>).	Loosestrife, Purple (<i>Lythrum salicaria</i>).
Boneset (<i>Eupatorium perfoliatum</i>).	Sunflowers (<i>Helianthus</i>).
Compassplant (<i>Silphium laciniatum</i>).	Thistles (<i>Cirsium</i> and <i>Cnicus</i>).
Goldenrod (<i>Solidago</i>).	Yarrow (<i>Achillea millefolium</i>).
Grasses.	

TABLE OF FERNS, COMMONLY NATIVE OR WORTHY OF CULTIVATION

Scientific Name	Common Name	Height (In Inches)	Soil Preferred	Sun or Shade	Remarks
<i>Adiantum pedatum</i>	Maidenhair Fern.....	8-20	Moist, neutral.....	Shade.....	Keep well drained but medium moist. Buy plants.
<i>Aspidium</i> (See <i>Dryopteris</i> .)					
<i>Asplenium trichomanes</i>	Maidenhair Spleenwort	4-8	Rather dry.....	Shade.....	Needs moist atmosphere. Evergreen. Plant shallow.
<i>Athyrium</i> (<i>Asplenium</i>)					
<i>angustifolium</i>	Narrowleaf Spleenwort	24-36	Neutral as to acidity..	Shade.....	Use good soil for good growth.
<i>felix-femina</i>	Lady Fern.....	24-36	Not particular.....	Sun or shade..	Yellow-green leaves. Stems pinkish in Spring.
<i>Botrychium</i>	Grape Fern.....	12	Moist, subacid.....	Sun.....	Strange fruiting habit. See sketch.
<i>Camptosorus rhizophyllus</i>	Walking Fern.....	Creeping	Moist rocks.....	Dense shade..	Rare. Found on limestone rocks.
<i>Cystopteris bulbifera</i>	Bladderfern.....	12-24	Moderately moist, said to like lime.....	Shade.....	Very dainty. Produces bulbs on leaves.
<i>Dennstedtia punctilobula</i>	Hay-scented Fern.....	25-30	Not particular.....	Sun.....	Forms tough sod of roots.
<i>Dicksonia</i> (See <i>Dennstedtia</i> .)					
<i>Dryopteris marginalis</i>	Leather Woodfern.....	12-30	Not particular.....	Shade.....	Evergreen. In planting do not bury the rootstock.
<i>spinulosa</i>	Toothed Woodfern.....	12-36	Not particular.....	Shade.....	Lacy fronds. Commonly used by florists.
<i>Lygodium palmatum</i>	Hartford Fern.....	Climbs to 36	Moist, acid.....	Shade.....	Water and keep mulched.
<i>Onoclea sensibilis</i>	Sensitive Fern.....	6-24	Even dry.....	Sun.....	Spreads rapidly.
<i>struthiopteris</i>	Ostrich Fern.....	72	Moist.....	Shade.....	Do not plant deeply.
<i>Osmunda cinnamomea</i>	Cinnamon Fern.....	48-72	Wet.....	Sun.....	Characterized by black exposed root stock.
<i>claytoniana</i>	Interrupted Fern.....	36	Any.....	Sun or shade..	Successfully cultivated with ease.
<i>regalis</i>	Royal Fern.....	24-72	At least moist or wet..	Partial shade..	Don't plant deeply.
<i>Pellaea atropurpurea</i>	Purple Cliffbrake.....	4-20	Not particular.....	Will grow in sun	Rather rare. Plant shallow. Rock garden.
<i>Polypodium vulgare</i>	Common Polypody..	4-15	Not particular.....	Sun or shade..	Forms dense mats on cliffs.
<i>Polystichum acrostichoides</i>	Christmas Fern.....	8-30	Not particular.....	Sun or shade..	Evergreen. Common. Easy to grow.
<i>Pteridium aquilina</i>	Bracken.....	12-24	Moderately acid.....	Sun or shade..	Often becomes weed. Plant deeply.
<i>Pteris</i> (See <i>Pteridium</i> .)					
<i>Woodwardia</i>					
<i>areolata</i> (<i>angustifolia</i>)....	Narrowleaf Chainfern.	12	Acid.	Partial shade	Buy plants. Rare.
<i>virginica</i>	Virginia Chainfern...	24-36	Wet.	Partial shade	Can be grown in garden soil.
<i>Woodsia obtusa</i>	Common Woodsia.....	6-12	Not wet.....	Shade.....	Plant in front of other ferns.



ALFRED C. HOTTES

FERN GROUPS

1. Sensitive Fern—(a) frond; (b) spore bearing frond.
2. Hartford or Climbing Fern.
3. Grape Fern—(a) frond; (b) modified frond producing spore cases; (c) detail of spore cases.
4. Cliffbrake—(a) frond; (b) spore cases like pockets above veins.
5. Common Polypody—(a) frond; (b) large fruiting dots.
6. Interrupted Fern—(a) spore bearing pinnae (leaflets) confined to a few in middle of frond; (b) and (c) details of spore cases.
7. (a) Cinnamon Fern—Fertile frond.
8. Royal Fern—(a) frond; with (b) the modified pinnae at tip producing spores.
9. Maidenhair Fern (a) Pinnae; (b) detail showing spores beneath the folded margins of pinnae.
10. Bracken—(a) Entire frond; (b) detail of pinnae; (c) spore bearing folded margins of a pinnule.
11. Chainfern—(a) Pinnae; (b) Spore areas in chains.
12. Christmas Fern—(a) frond; (b) spore cluster; (c) detail of spore clusters.
13. Bladderfern—(a) frond; (b) fruit dots.

PLANTS FOR SHADY BUT MODERATELY MOIST PLACES

The following wild flowers should only be planted if you have a good soil composed of loam and a liberal amount of leaf mold. During dry summers these sorts will benefit by abundant watering:

Baneberry (<i>Actaea rubra</i> and <i>alba</i>).	Hobblebush (<i>Viburnum cassinoides</i>).
Bloodroot (<i>Sanguinaria canadense</i>).	Harebell (<i>Campanula rotundifolia</i>).
Bluebells (Ohio name) (<i>Polemonium reptans</i>).	Jack-in-the-pulpit (<i>Arisaema triphyllum</i>).
Bluebells, Virginia (<i>Mertensia virginica</i>).	Mayapple (<i>Podophyllum peltatum</i>).
Bluet (<i>Houstonia caerulea</i>).	Meadowrue (<i>Thalictrum</i>).
Blue-eyed-grass (<i>Sisyrinchium angustifolium</i>).	Partridgeberry (<i>Mitchella repens</i>).
Columbine (<i>Aquilegia canadensis</i>).	Shootingstar (<i>Dodecatheon meadia</i>).
Gentian, Closed or Bottle (<i>Gentiana andrewsi</i>).	Solomonseal (<i>Polygonatum biflorum</i>).
Gentian, Fringed (<i>Gentiana crinita</i>).	Trillium (<i>Trillium variegatum</i>).
Ginger, Wild (<i>Asarum canadense</i>).	Troutlily called Dogtooth-violet (<i>Erythronium americanum</i>).
Hepatica (<i>Hepatica triloba</i> and <i>H. acutiloba</i>).	Violets (<i>Viola</i>).
	Viburnum, Mapleleaf (<i>Viburnum acerifolium</i>).

PLANTS FOR SUNNY PLACES (USE GOOD GARDEN SOIL)

Anemone (<i>Anemone thalictroides</i>).	Goldenrod (<i>Solidago</i>).
Asters, Wild.	Helenflower (<i>Helenium autumnale</i>).
Blue-eyed-grass (<i>Sisyrinchium</i>).	Phlox, Blue (<i>Phlox divaricata</i>).
Bluets (<i>Houstonia caerulea</i>). The plants readily self sow.	Phlox, Moss (<i>Phlox subulata</i>).
Butterflyweed (<i>Asclepias tuberosa</i>).	Rosemallow (<i>Hibiscus moscheutos</i>).
Cardinalflower (<i>Lobelia cardinalis</i>).	Senna, Wild (<i>Cassia marilandica</i>).
Cranes-bill (<i>Geranium maculatum</i>).	Speedwell, Common (<i>Veronica officinalis</i>).
Culvers-physic (<i>Veonica virginica</i>).	Makes a good ground cover.
	Spurge, Flowering (<i>Euphorbia corollata</i>).

PLANTS FOR WET PLACES

Arrowhead (<i>Sagittaria latifolia</i>).	Joe-pye-weed (<i>Eupatorium purpureum</i>).
Boneset (<i>Eupatorium perfoliatum</i>).	Loosestrife, Purple (<i>Lythrum salicaria</i>).
Cardinalflower (<i>Lobelia cardinalis</i>).	Marsh-marigold (<i>Caltha palustris</i>).
Ferns (See list on page 16).	Meadowbeauty (<i>Rhexia virginica</i>).
Dragonhead, False (<i>Physostegia virginiana</i>).	Milkweed, Swamp (<i>Asclepias incarnata</i>).
Flag, Blue (<i>Iris versicolor</i>).	Monkeyflower (<i>Mimulus ringens</i>).
Forget-me-not (<i>Myosotis palustris</i>).	Rosemallow (<i>Hibiscus moscheutos</i>).
	Turtlehead (<i>Chelone glabra</i>).

SHRUBS FOR WET PLACES

Blueberry, Highbush (<i>Vaccinium corymbosum</i>).	Meadow Spirea (<i>Spirea latifolia</i>).
Buttonbush (<i>Cephalanthus occidentalis</i>).	Pussy Willow (<i>Salix discolor</i>).
Cinquefoil, Shrubby (<i>Potentilla fruticosa</i>).	Spicebush (<i>Benzoin aestivale</i>).
Hardhack (<i>Spirea tomentosa</i>).	Summersweet (<i>Clethra alnifolia</i>).
	Winterberry (<i>Ilex verticillata</i>).

PLANTS FOR DRY AND SUNNY PLACES

Asters

Columbine (*Aquilegia canadensis*).

Everlasting, Pearly (*Anaphalis margaritacea*). Attractive. Easily established.

Gayfeather (*Liatris pycnostachya*). Grows especially well in sand.

Goldenrod (*Solidago*).

Saxifrage, Virginia (*Saxifraga virginiana*).

Speedwell, Common (*Veronica officinalis*).

Springbeauty (*Claytonia virginica*).

Wild-indigo, Yellow (*Baptisia tinctoria*).

PLANTS FOR ACID SOILS

(From "Taming the Wildlings," by Herbert Durand.

Bluebead (*Clintonia borealis*). Difficult to transplant.

Moccasinflower (*Cypripedium acaule*). Grows in both dry and moist places.

Trailing-arbutus (*Epigaea repens*). See "Do not pick" list, pages 13-14.

Twinflower (*Linnaea borealis*). Extremely dainty. For cool soil.



Fig. 8.—Group of Marsh-marigolds and Jack-in-the-pulps

REFERENCES

DURAND, HERBERT. Taming the Wildlings. Excellent cultural notes.

MATTHEWS, F. SCHUYLER. Field Book of American Wild Flowers.

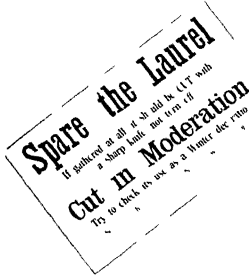
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WHEN YOU SEE THESE POSTERS, RESPECT THEM



"Solomon In All His Glory Was Not Arrayed Like One Of These"

All will want to Enjoy these Flowers. Let us be satisfied with picking only a few. Some of the choicest of the Wild Flowers have been almost exterminated. They will return if everyone will do his part.

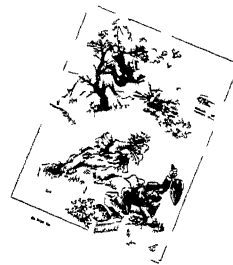
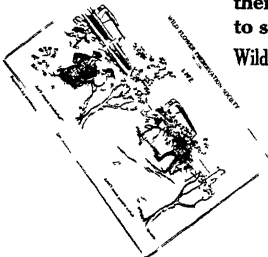
Agricultural College Extension Service The Ohio State University



SPARE THE FLOWERS

Thoughtless people are destroying our native Wild Flowers by pulling them up by the roots or by picking too many of them. Weeds will replace them if there are not plenty left to go to seed. Will you help to save them?

Wild Flower Preservation Society of America



The Ohio State University has prepared a poster "Solomon in all His Glory" (see above) to help prevent the wanton waste of Ohio wild flowers. A copy will be sent to anyone on request.

Cover Design by C. E. Wilson