



O N T H E F R I N G E

NATIVE PLANT SOCIETY OF NORTHEASTERN OHIO

Founding Chapter of

THE OHIO NATIVE PLANT SOCIETY

Thomas A Sampliner, Local President and Editor

2651 Kerwick Road

University Hts., Ohio 44118

(216) 321-3702

Volume 9

July/August 1991

No. 4

FROM THE EDITOR

Summary of the 1991 Spring Weekend for

The Ohio Native Plant Society

by Tom Sampliner

Nestled in the northwest corner of Trumbull County, just across from the Ashtabula County line, is a little known gem of a camp called "The Highlands". Forty-eight registrants representing seven different state chapters enjoyed the hospitality of Ralph and Sara Evans who manage the camp for the Presbyterian Church. Three hundred sixty acres of grounds are well maintained offering woodlands with a rich display of spring wildflowers. A meandering creek provides habitat for birds and animals as our early morning birdwalkers found out.

Cabins were clean and far more comfortable than other camps in this quadrant of Ohio. For example, it was a nice change to sleep in well built bunk beds with firm mattresses that did not sag in the middle. Food service was prepared each meal by a staff of Amish women, featuring hearty family style meals complete with fresh baked bread.

Registrants selected half-day field trips on Saturday. On Sunday, most of the group went to the North Kingsville Sand Barrens. Most of the others took advantage of Holden Arboretum's free admission offer to our registrants.

Weather was warm and clear the entire weekend. This allowed some late evening astronomy with a powerful pair of tripod mounted binoculars.

It's very hard to begin to thank all who contributed to the planning and leadership for the weekend. My best attempt is to thank in writing in this publication all the following with their roles acknowledged:

Camp Managers / Bill and Sara Evans

Field Trip Leaders / Dr. Barbara Andreas,
Jeff Knoop, Bill Hudson, Bob Bartolotta
and Tom Yates;

Camp Committee / Larry and Laurel Giblock
and John Augustine:

Registration / Ann Malmquist, Rita Walker
and Duane Ferris;

Refreshments / Kate Harrington and
John Augustine

Bird Walk Leaders / Duane Ferris and
John Augustine;

Evening Slide Show Lectures / Dan Flocke,
Bruce Mack, Gary Meszaros and Jack Selby
(slide contributors) Bob Bartolotta
(Friday evening narration) Bev Danielson
and Jim Bissell (Saturday evening program)

The coordination and cooperation of the following
institutions also made this weekend possible:

Holden Arboretum, Ohio Nature Conservancy,
Cleveland Museum of Natural History and
The Ohio Division of Natural Areas &
Preserves.

Finally, the consent of private property owners in
allowing the field trips to their lands was most welcome.

I can personally relate the experiences of the two
half day tours I led to the Grand River Terraces. This
preserve is owned and managed by the Cleveland Museum of
Natural History. The preserve is one of nine now owned
by the Museum. All are under the direction of James K.
Bissell, Curator of Botany and Director of Natural Areas
for the Museum (Jim delivered the talk Saturday evening)
All museum preserves require permission for entry.

The south portion of the preserve features rich bottomland of what was an ancient river flowing into an older larger version of what is now Lake Erie. The soil consists of deposits from this pleistocene river bed making for a rather clayey impermeable surface. These wet acid soils host many interesting plants as well as rich displays of common wildflowers. The creeks contain marsh marigold, Caltha palustris. The slopes and surface leading down to the current Grand River flood plain are rich in Trillium grandiflorum and erectum, Tiarella cordifolia, Dentaria laciniata and diphylla, Disporum lanuginosum, Smilacina racemosa, Polygonatum pubescens, Geranium maculatum, several species of viola and lesser spring ephemerals. The Cincinnati members were especially pleased to find dwarf ginseng in flower, Panax trifolium.

The actual flood plain has Erythronium albidum as opposed to the americanum higher up the trail. Also near the river, one can find Polemonium reptans, Mertensia virginica, Senecio aureus.

Across the road to the north portion of the preserve we find an entirely different habitat. After braving the extensive waist high poison ivy guarding the entrance to the forest just beyond the drainage ditch, you start crossing thickets of young trees alternating with several creeks. Once into the forest of more mature woods, continue North until you begin to sight large hemlocks. To your surprise, you'll find a true hemlock swamp. The hammocks within and around the brackish pools contain some noteworthy plants. Goldenseal, Hydrastis canadense which we saw in bloom is one. Several pools contain a bright orange fungi called swamp beacons, mitrella paludosa. Harder to find is a beautiful colony of Hobble bush, Viburnum alnifolium. Also not so easy to locate is the many named Dalibarda repens, variously called: Robin Run-A-Way, Dew drop, false violet, etc., No one found Cypripedium acaule, though these orchids are known to be in this area.

Other field trips met with similar success.

The Morgan Swamp trip saw about 25 painted trillium, Trillium undulatum in peak condition.

At Lake Cardinal, both rose shell azalea and velvet leaf blueberry were in bloom.

The endangered spreading globeflower was still blooming at Pymatuning Creek Fen, Trollius laxus.

On Sunday, at N. Kingsville we were treated to lupine, Lupinus perennis and striped maple, Acer Pennsylvanicum in bloom. Additionally a brand new discovery was made that morning by the group. Eighteen very healthy showy orchids, Galearis spectabilis were located. Two noteworthy sedges were also observed; Panicum villosissimum and Carex rugosperma.

We certainly enjoyed hosting all the chapters. We hope all of you enjoyed the weekend as much as we did. Now we turn such events over to the next chapter in line and encourage you to surpass our effort. We now know and appreciate the effort it requires.

* * * * *

EASTERN NATIVE PLANT ALLIANCE
CALL TO ACTION

INVASIVE ALIEN PLANTS
THREATEN OUR NATURAL PLANT COMMUNITIES

Alien plants, introduced from abroad, have become major components of our flora. Over 20% of plants listed in Roger Tory Peterson's Field Guide to Wildflowers are exotic.

aggressively and smother natural communities. A growing number of ecologists consider these "biological invasions" to be as threatening to biological diversity as global warming, ozone depletion, and human population growth. As a result, it is no longer sufficient to "set aside" conservation areas; many must be managed to prevent loss of their biological riches.

The spread of alien plants often begins in areas already disturbed by human activities. The danger is that the alien plant can spread from these sites into relatively pristine areas. Invasion by alien plants affects 88 National parks, including Great Smoky Mountains National Park, Everglades National Park, Hot Springs National Park, Mound City National Monument, and Cumberland Gap National Historical Park. It will cost the National Park Service \$30 million to control these infestations.

"Without an active and effective control program it seems possible that every marsh and open wetland in northern Illinois could be lost to purple loosestrife and smooth buckthorn; every mesic prairie in Illinois could be overrun by giant teasel and white sweet clover; and every forest in southern Illinois could eventually have its ground cover replaced by Japanese honeysuckle and purple winter creeper.

Effective counter measures are hampered by the public's failure to understand the threat posed by invading plants. The danger is not widely perceived for three reasons. First, most people judge an area's biological value only by the presence of large vertebrates, and many exotics provide food or shelter for these animals. Second, the exotics' takeover occurs more slowly than bulldozing. Finally, most people cannot recognize either native or exotic plant species, so they do not notice the change.

Experience has shown that biological control (introduction of natural enemies) can be the least

intrusive method for controlling invasive aliens in natural areas. Such controls, applied only after careful testing, have minimal effects on other elements in the environment, and cause no pollution. Furthermore, once the initial research and testing have been carried out, biological controls are economical to use.

Unfortunately, current federal and state "weed" control programs are focused on agricultural pest rather than plants which invade natural areas and rely heavily on herbicides. They also lack sufficient funds to carry out the research needed to make a biological control program environmentally safe and effective. An environmentally sound biological control program requires funds to locate insects or pathogens that appear to retard the target species' growth; evaluate their effectiveness; and test to ensure that the chosen control agent will not become a pest itself. This final test is expensive but crucial.

Some Examples of Invasive Alien Plants Threatening Natural Areas

woodlands:

kudzu Pueraria lobata: once planted to control soil erosion; by 1981, kudzu covered 7 million acres (area the size of Belgium); while most widespread in south, kudzu is now found as far north as New York and Massachusetts

garlic mustard Alliaria petiolata: rapidly replacing native wildflowers in 7 river drainages in Illinois; preading along river bottoms in other states

"urning bush" Euonymus alata: used in highway plantings; in Illinois; one colony doubled in number within 10 years, eventually outnumbering all other woody specis combined by 10 to 1

Japanese knotweed or Japanese bamboo
Polygonum cuspidatum introduced as
ornamental; spread by underground rhizomes;
can be controlled by frequent mowing and
herbicides

porcelain berry vine Ampelopsis
brevipedunculata introduced as ornamental;
"most serious pest" in the woods at Wave Hill
preserve in New York. Often seen draped from
trees in parks near NY City; perennial woody
vine, seeds spread by birds.

Asiatic bittersweet Celastrus orbiculatus
drapes over trees

tree of heaven Ailanthus altissima
naturalized throughout North and South
America; sprouts from stumps and pieces of
roots and wind-borne seeds; may produce
chemical which inhibits growth of other
plants

Japanese honeysuckle Lonicera japonica
serious pest of woods; forms dense mat on
ground, twines around trees; common
throughout eastern United States

Amur honeysuckle, shrub honeysuckle Lonicera
maackii grows in dense groves (can become
primary understory shrub) and shades out
herbaceous groundcover; berries spread by
birds

Chinese privet Ligustrum sinense in some
areas of Louisiana, this common hedge plant
has become the dominant understory shrub,
replacing all other species

wood edges and clearings: Perilla frutescens
(an Asiatic mint)

multi-flora rose Rose multiflora: promoted in
1930's for soil erosion and as living fence;
it is now classified as a noxious weed by New
Jersey, Iowa, Illinois, Ohio, and West
Virginia

autumn olive Elaeagnus umbellata: first mass-planted in 1960's; by 1981, widespread dense populations (up to 14,000 plants per acre) in east-central Illinois; West Virginia has outlawed sale and planting

crown vetch: planted on steep roadsides; despite claims, it does not halt gully erosion; its seeds are spread by mammals; the species smothers native plants of dunes along Lake Michigan and prairies throughout Illinois

wetlands and water bodies

purple loosestrife Lythrum salicaria: since 1940's, spreading at rate of about 645 km² per year; now reaches from New Brunswick to South Carolina, from British Columbia to California; spread assisted by planting as ornamental; it is of virtually no value to wildlife, crowds out important wildlife food plants and endangered wetland orchids; now illegal to plant in Illinois

Hydrilla verticillata escaped from aquarial; spreading rapidly in warmer freshwater systems, perhaps hardy as far north as Massachusetts

Egeria (Elodea) densa (giant waterweed) aquariumplant aggressively weedy in southeast, has been found as far north as Massachusetts

Chinese tallow tree Sapium sebiferum is replacing coastal prairies in Louisiana, aided by grazing and other human-caused disturbances

several grasses, including Panicum amarum (beachgrass)

various subtropical habitats (Florida):

melaleuca or punk tree Melaleuca

quinquenervia introduced into Florida in hopes of foresting the Everglades; established on almost any soil, tolerates flooding, moderate drought, and some salinity
Brazilian pepper Schinus terebinthifolius introduced as ornamental; thrives on disturbed soils and in areas drained for farming

WHAT YOU CAN DO

* Eliminate invasive exotic plants from your own property -- including public parks and natural areas under your management.

* Educate others about the threat posed by invasive exotic plant species. Write articles for gardening and conservation publications, invite speakers to address your club, etc. People responsible for nature centers, arboreta, etc. should produce educational materials about invasive plants and label examples found on their ground. Urge natural resource agencies to join this educational effort.

* Ask your members and colleagues to write to their national, state, or provincial representative urging enactment of a program with the following components:

Place responsibility for the program in an agency which represents natural resource conservation as well as agricultural interest. Require the agency to carry out the following tasks:

1) designate invasive plants (called "noxious weeds" by agricultural agencies) The law should specify that invasive plants which threaten natural plant communities are to be targeted, not just those that invade agricultural lands. The priority should be on exotic or alien species - those not native to that particular state. The federal program should focus on species alien to North America or outlying, vulnerable islands such as Hawaii.

2) outlaw sale or transport of the designated species and authorize seizure of shipments that violate the ban. The federal law should have two additional provisions:

a) a ban on importation of any additional exotic plants unless they have been thoroughly evaluated and certified as non-invasive;

b) a restriction on distribution of invasive plants already established in some parts of the country to prevent their being spread to other states.

3) fund research into measures to prevent introduction and/or control existing infestations. The control program should emphasize species-specific measures such as biological control. Legislators must ensure adequate funds to carry out this task.

Even before such a program is enacted, federal and state agencies which manage lands (including parks, forests, wildlife areas, and highway rights-of-way) should adopt a policy to control or eradicate invasive exotic plant species on their lands. We must ask legislators to provide funds to carry out this policy.

prepared by
Faith Thompson Campbell
Natural Resources Defense Council
1350 New York Avenue, N.W.
Washington, D.C. 20005

November 1990

* * * * *

THE EARLY HISTORY OF POISON IVY

by Dr. Genevieve Miller

Director Howard Dittrick Museum of Historical Medicine
(now retired)

Some years ago I spent a considerable time in the Williamsburg-Jamestown, Virginia area, and in exploring the surrounding countryside I noticed that the region was infested with poison ivy which grew thick in all the woods, climbed trees and fences, and covered old walls. Then the question occurred to me: How did the early settlers of Jamestown fare? Did they develop Rhus dermatitis and did they identify the source of their itchiness?

The answer was not difficult to find, for Captain John Smith wrote the following description in 1609, General History of Virginia, New England and the Summer Isles, Book V:

"The poisonous weed, being in shape but little different from our English yvie; but being touched causeth reddness, itchinge, and lastly blysters, the which howsoever, after a while they passe awaye of themselves without further harme; yet because for the time they are somewhate painesfull, and in aspect dangerous, it hath gotten itselفة an ill name, although questionlesse of noe very ill nature."

Similarly history records that in 1719 a Spanish expedition in the area of modern New Mexico suffered severely from contact with poison ivy which was mentioned in Hubert Howe Bancroft, History of Arizona and New Mexico, San Francisco, 1889, p. 236.

The first publication of a scientific description of the plant occurred twenty-six years after Smith's account. It was in Jacques-Philippe Cornut's *Canadensium plantarum . . . historia* which appeared in

Paris in 1635. Cornut was young physician, a graduate of the Paris Faculty of Medicine, who wrote the book primarily for medical purposes. At a time when plants were the principal sources of materia medica, the discovery of the New World and the exploration of North and South America opened up endless possible sources of new drugs. Although Cornut did not visit Canada himself, he based his studies on plants raised from seeds or cuttings which had been sent back by early settlers. For example, Louis Hebert, a former Parisian apothecary who had emigrated to Quebec, is known to have sent plant materials home. Similarly, Monardes, a Spanish physician from Seville who wrote on the medicinal plants of Florida and Mexico in the middle of the sixteenth century, had never set foot in the New World himself.

Cornut's book is illustrated, and there, as a large as life and nearly as itchy, is a picture of Edera trifolia canadensis and a scientific description. In another 17th century botanical work, John Ray's *Historia Plantarum* (2 vols., London, 1686-1688), it was designated "Arbor trifolia venenata virginiana." In 1700 J. P. de Tournefort, Professor of Botany at the Jardin des Plantes in Paris, published his *institutiones Rei Herbariae* which was a pioneer attempt before Linnaeus to group and classify plants. He described a "Toxicodendron triphyllum" growing in Virginia and Canada. The name means "poison tree" (toxikon-poison; dendron-tree) and still survives today as the species name of poison oak, *Rhus toxicodendron*.

In 1753 when Linnaeus published his *Species Plantarum* which was the starting point of modern botanical nomenclature, he classified our poison ivy under the class Pentandria (flowers with five separate stamens), order Trigynia (flowers with three pistils), genus *Rhus* (sumac), species *radicans* (rooting from stem), distinguishing it from *Rhus toxicodendron*. Even today there is still confusion about the relationship between poison oak and poison ivy. Asa Gray, the great American botanist of the 19th century, considered *Rhus radicans* a

variety of *Thus toxicodendron*. A further complication is *Thus diversiloba*, a West Coast variety of poison oak.

Whatever their names and slight difference in form, all these plants and their even more noxious relative *Thus vernix*, poison sumac, contain the substance which causes skin irritation, urushiol, a resinous oil with the formula $C_{21}H_{32}O_2$ which is found in the sticky sap. It also occurs in the lac tree, *Thus vernicifera*, which grows in Japan, China, and Indo-China. Although not volatile itself, the oil is carried on the soot in the smoke of burning plants. When exposed to air it oxidizes and turns black, creating an indelible stain in fabrics. Because of this characteristic the sap was at first recommended as an effective hair dye, and around 1770 a young American obtained a patent from the British Parliament to prepare an indelible ink from poison ivy sap.

The medical potential of poison ivy interested physicians, and the literature contains many references to experiments to determine its effects, both externally and internally. At a time when counter-irritation was one of the therapeutic principles of medicine, and when blisters were made artificially on the skin in order to induce in the skin "a new disposition and state of action, which destroy the existing diseased ones," the cutaneous eruptions produced by *Rhus Radicans*, and *Rhus Glabrum*: Commonly known in Pennsylvania by the names of Poison-Ash, Poison-Vine, and Common Sumach." This gives an excellent review of the current botanical and medical knowledge of these plants. It was noted very early that *Thus vernix*, or poison sumac, was by far the most poisonous, and that symptoms developed in practically everyone who came in contact with it, while *Rhus radicans* was milder and did not affect everyone. Medical cures recommended were bloodletting, purging, copious drinking of sea-water, application of cold, and the internal use of mercury (calomel) to produce salivation. As topical remedies a solution of corrosive sublimate in water or a lead acetate ointment was used.

Home remedies in the 18th century included leaves of the Datura stramonium, jimson weed, houseleek, sempervivum, juice or decoction of roots of Sanguinaria canadensis (used by country people for all chronic ulcers), cream and water, and a solution of salt or of copperas (ferrous sulphate). Also applied externally were salt dissolved in hot soapsuds, brandy, and spirit of urine. Soot dissolved in milk and taken internally was believed to be effective. P. Kalm, a German who travelled in North America in the 1740's reported, "Some people assured me, that a person suffering from the noisome exhalations of these plants, would easily recover, by spreading a mixture of the wood burnt to charcoal, and hogslard upon the swelled parts."

Horsfield had intended to experiment with the internal effects of Rhus radicans, but like so many graduate students he had chosen too broad a topic and he therefore confined himself to a few cases in his own experience and review of the literature. His results of giving infusions of poison ivy leaves to patients with pulmonary tuberculosis were inconclusive. The principal effect seemed to be diuretic in nature. Around Carlisle "in the western part of Pennsylvania" it was commonly believed that poison ivy taken internally was an effective cure for tuberculosis. An English physician recommended doses of the powdered, dried leaves for paralytic diseases, as did a French physician who thought that he had cured palsy by this means.

By 1820, however, when Jacob Bigelow of Boston published the third volume of his American Medical Botany, he was of the opinion "that the plant under consideration is too uncertain and hazardous to be employed in medicine, or kept in apothecaries' shops." But nevertheless he included it in his book and gave us a beautiful picture, which is among the earliest color engravings to be printed in this country.

Today, while *Rhus radicans* is no longer included in lists of "useful" plants in medicine, it is still extensively discussed in pharmacological literature. Urushiol, the active agent, was not isolated until 1922. The last edition of Torald Sollmann's Manual of Pharmacology, 1948, contains a lengthy discussion and research continues (CT. Franklin A. Stevens, Status of Poison Ivy Extracts, J.A.M.A., 1945, 127: 912-921).

* * * * *

LETTER TO THE EDITOR

From Wes Williams

As a member of the Ohio Native Plant Society, I say by all means go forward on the proposed development of foundation funding to enable the publication of a journal at the state level! What a great and I might add long over due idea! A high quality state journal would be a wonderful forum for promoting the goals and objectives of our organization. It would attract new members as well as a broader spectrum of contributors. I believe such a vehicle will serve as an excellent medium to increase public awareness and sensitivity of Ohio's rich and beautiful flora.

I realize that many members, including those of our chapter here in Columbus, enjoy the "folksy" simplicity of the current system. Personally, I don't believe that this characteristic need be sacrificed in the process of upgrading and expanding to a state wide journal. On the other hand, many potential members and contributors may view this same "folksy" quality as too "amateurish" and subsequently withhold their participation. There is, I believe, an acceptable "middle ground" here!

To give a little personal background, I am currently a Horticulture major at Ohio State University with a strong interest in the responsible utilization of native

plants in the landscape. I have an equally strong interest in preservation and conservation of our native flora. Should you wish to call me for any reason my number is (614)794-3805. I would be delighted to help in any way!

Thank you for your time and I hope to hear from you in the future. Keep up the good work and I say lets make our Society one of the best in the country!

* * * * *

BOARD MEETING AND PICNIC

From Thomas A Sampliner

B.Y.O.P. board members and their family bring your own picnic to an important business meeting to be held Saturday, August 10th. The picnic begins at 5:30pm at North Chagrin Reservation, the picnic area adjacent to the parking lot for the old interpretative center next to the A.B. Williams memorial forest. Grills are available, a shelter house for inclement weather, playground and ballfield for children, etc.

The board meeting will follow the picnic as soon as practicable.

AGENDA:

Annual \$500.00 grant
Annual dinner honoree
Changes in the by-laws
Officer terms
Officer duties
Committees

This will be your only notice. Be there. Nothing in the constitution or by-laws prevents members from attending board meetings and speaking their mind. Feel free to join s in discussing these important issues.

* * * * *

WILDFLOWERS IN THE PUBLIC EYE - II

by Dorothy V. Carney

In early May, hundreds of robust green plants with dainty white flowers lushly filled the woodland of Sheldon's Marsh. It was the floral equivalent of hordes of house sparrows. Our woodlands and edges are being overrun by garlic mustard (*Alliaria officinalis*), an invasive alien. It crowds out native species with its rampant growth and prolific seeding.

The Ron Hauser Memorial Garden, which I help maintain in the Rocky River Reservation of the Cleveland Metroparks, is weeded regularly to keep out garlic mustard. The Hauser Garden is not purely a preserve of native plants. For example, alien Dame's Rocket (*Hesperis matronalis*) is a crowd pleaser with its bold display. Our weeding combats invasive plants, whether native or alien, such as thistles (*Cirsium*), henbits (*Lamium*), and ground ivy (*Glechoma hederacea*). Plants on our not-wanted list tend to be those cited in Newcomb's Wildflower Guide as a "common weed of waste places".

So why, in mid-May, was I pulling out dozens of jewelweed plants (*Impatiens capensis*)? They are a pleasure to weed as they are easy to identify, their shallow roots permit easy pulling with no damage to neighbors, and their sap is cool and soothing . . . but it is an attractive native, why weed it out? A possible reason is that the jewelweed overrun the spring wildflowers. The real problem is that white-tailed deer love jewelweed. I am removing jewelweed from the Hauser Garden in an effort to make it less tempting to deer.

Deer are bad neighbors in the wildflower garden, as anyone at Holden Arboretum can tell you. Deer eat the immature seeds of choice woodland plants such as Solomon's seals (*Polygonatum*) and trilliums, thus deleting a year of propagation by seed. When deer browse, they deprive plants of food produced by the leaves. In a garden, they spoil the display. For example, a deer-cropped false Solomon's seal (*Smilacina racemosa*) is not nearly as attractive as an intact one with a showy red berry head. Deer repellents such as Ropel can be sprayed on plants to make them taste bitter. Unfortunately, the costly repellent will wash away in the next downpour.

Sometimes, when examining deer damage to the Hauser Garden, I wish there were no deer in the Rocky River Reservation. But they are beautiful animals; the deer may well bring more pleasure to more park visitors than does a little patch of fully-fruited false Solomon's seal.

So I'll keep pulling jewelweed out of the garden. There is too much to spray and it is very attractive to the deer. There is no shortage of jewelweed outside of the garden; I wish the deer would go browse there! As our modest budget and my volunteer schedule permit, I will continue spraying the choice wildflowers in the Hauser Garden with deer repellent.

Disclaimer: The Hauser Garden is located in the Cleveland Metroparks, but this article is in no way intended to be a statement by or about the Metroparks System.

* * * * *

SWINE CREEK BOTTOMS

By Duane F. Farris

Swine Creek Reservation has become well known for the horse drawn wagon rides that occur every weekend. For those rides, people have become accustomed to take state route 422 almost to the eastern edge of Geauga County. There they find Hayes Road and turn south. Passing Bridge Road, and the park maintenance offices, soon takes them to the entrance of the reservation. Taking the right hand road and ignoring an intersection then takes them to the wagon rides. You can do that later. Instead stay on Hayes Road past the entrance. When Hayes dead ends turn left. Use the first parking lot you come to.

(From this point I am going to condense all the seasons into one. After all, I don't know when you might visit these trails.)

As you get out of your car, spare a moment for the big cutbank south of you. Exposed is a huge record of two advances of the Wisconsin Glaciation. Fifteen and thirty thousand years B.P. might not be far wrong. Scan the top of the cliff for Rose Azalea. Once in a while a bush gets undercut and slides down the slope. You might want to check that.

I want you to take the narrow trail going east from the parking lot to the shelter house. Along there is a conifer that I have never identified for sure. It certainly isn't native to this part of the world. If you recognize it, I'd like to know.

Past the shelterhouse pick up the service road that goes parallel to the creek. Columbine blooms at the start of the road, and several species of violets soon after. Further along are some tall yellow composite, the most interesting of which is Oxeye. Where the road swings away from the creek, a short detour is in order. You are going to swing right and cross the creek, but first peep around the corner and enjoy a nice station of Bee Balm and, a bit further, of Black Walnut.

Back at the creek, Chamomile finds a precarious living amid the gravel. Now cross the stream on the handy duckboards and pass through Horse Balm as you climb the far bank. As soon as the canopy opens overhead watch for Closed Gentian trailing up to the left side. A few steps further, on the right side in a patch of poison ivy, is found a nice Ebony Spleenwort. Further on the right as very big Nannyberry is worth a second look. Nearby is one of the odd Figworts, but, for the best of me, I can't remember which one. In the spring, several stations of Horse Gentian are along the left side.

You enter thw woods again over a little footbridge and proceed to a nice twin oak. There you have to make a decision. You can turn left and wander through the flatland watching for Shinleaf Pyrola. If you are up to a bit of climb, however, go up the hill to the old RR right of way. (Through an effort of will, I've not mentioned birds thus far, but my conviction falters. You are climbing above a ravine which gives you a wondrous chance to look down on flying birds like Ruffed Grouse and Scarlet Tanagers. Perhaps that is why I can't remember the botony of this section).

When you reach the right of way turn left and search among the dogbanes for those with reflexed petals. Look into the bell. Under a handlens, Spreading Dogbane may very well be the most handsome wildflower in Ohio. Where gravel remains, watch for Dwarf Snapdragon and Viper's Bugloss. Beside the trail, there is some Sumac among the Staghorn.

A small sign marks the point where the trail leaves the old railway. You will go down the slope you just climbed through hepatica and Foamflower until you see the creek again. Turn right and proceed through more Bee Balm, avoiding the poison ivy, to a nice gravel bank. This is the source of the once-famed "Swine Creek Diamonds". These crystalline quartz prizes have so far eluded me, - but I always spend a few moments searching. Cross the creek, admire the Giant Blue Lobelia, and walk out to the road.

Turn left. Your car is just down the way a bit. You're going to share this road mostly with Amish Buggies, but there will be the occasional Yankee in his pickup. Stay to the side of the road as you admire the Shad Bush, the hickories, walnuts, and Basswood.

How many things did I forget? Go find out for yourself, and enjoy the walk!



NATIVE PLANT SOCIETY OF NORTHEASTERN OHIO

2651 Kerwick Road, University Hts., OH 44118

Founding Chapter of
THE OHIO NATIVE PLANT SOCIETY

NON-PROFIT
ORGANIZATION
U.S. Postage
PAID
Cleveland, OH
Permit No. 1184

Dated Material - Do Not Delay

ADDRESS CORRECTION REQUESTED

Memberships are **DUE FOR RENEWAL** on JANUARY 1, 1991. Please continue to support your Society and renew at the **highest** possible category. Those of you who send us Sustaining and Patron memberships are enabling us to go on with our worthwhile projects. An active membership just about pays for the newsletter costs. However, economics aside, we need **EACH** of your memberships and each year we get stronger and better. The 1991 Program and Field Trips schedule will be worthwhile.

Please enroll me as a member of the Native Plant Society of Northeastern Ohio

() ACTIVE.....\$10.00 () SUSTAINING.....\$25.00
() FAMILY.....\$15.00 () PATRON.....\$50.00

Membership runs from January through December and is not pro-rated.

Make checks payable to Native Plant Society of Northeastern Ohio, 17670 Farmington Road, W. Farmington, OH 44491

Name: _____ Phone _____

Address _____

City/State _____ Zip _____