

ON THE FRINGE

NATIVE PLANT SOCIETY OF NORTHEASTERN OHIO



Founding Chapter of
**THE OHIO NATIVE
PLANT SOCIETY**

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STATEMENT OF PURPOSE

"to promote conservation of all native plants and natural plant communities through habitat protection and other means; encourage public education and appreciation of native plants; support proper ethics and methods of natural landscaping; encourage surveys and research on native plants and publication of information; and promote cooperation with other programs and organizations concerned with the conservation of natural resources."

1995 PROGRAM SCHEDULE

by Dr. George Wilder,
Program Committee Chairman

To help insure event success we strongly urge you to call at least the day before an event to let the leader know you are coming, how many you plan to bring, and also to learn of any last minute changes or other requirements. By calling ahead you also gain for yourself a window of waiting time in the event you are late. Help our trip leaders help you! A phone number of each trip leader is listed for each event. Invite guests. It is further advised that participants bring a brown-bag lunch on all field trips and to all workshops.

SATURDAY, SEPTEMBER 23RD. 9:30AM- 7:00PM -FIELD TRIP TO OBSERVE SPECIES OF SPIRANTHES (LADIES' TRESSES; ORCHIDACEAE [ORCHID FAMILY]). Tom Sampliner will lead this trip. Participants will travel by automobile to various locations to observe different, and in some cases, rare species of this genus of elegant orchids. Meet at the Hike and Bike Trailhead parking lot on Boston Mills Road west of Route 8 but east of Riverview Road. Telephone Tom Sampliner before this trip to tell him you will be coming (216) 321-3702 or (216) 371-4454.

SATURDAY, SEPTEMBER 30TH. 9:30 AM - 12:00 PM, FALL FUNGUS WORKSHOP. (COVENTRY ROAD, SHAKER LAKES, CLEVELAND HEIGHTS, OHIO) Tom Sampliner will present this workshop. The focus of the workshop will be identification of fungi, photography and making spore prints. Telephone Tom before the

workshop to tell him you will be coming (216) 321-3702 or 371-4454. It is hoped that this trip will constitute a basis for a local fungus society.

SUNDAY, OCTOBER 8TH, 10:00AM-2:00PM - FIELD TRIP TO OBSERVE SPECIES OF FALL-BLOOMING COMPOSITAE (SUNFLOWER FAMILY). George Wilder, Professor of Biology at Cleveland State University, will lead this trip. Emphasized, will be the identification of asters and goldenrods. Participants will travel by automobile to various locations to observe diverse species of Compositae. Telephone George Wilder before this trip, to tell him you will be coming (216) 687-2395 or (216) 932-3351. At that time he will tell you where to meet him.

SATURDAY, NOVEMBER 11TH, ANNUAL MEETING AND BANQUET, CLEVELAND BOTANICAL GARDEN, 11030 EAST BLVD., CLEVELAND, OHIO. We are exceptionally pleased to announce that Dr. Anton A. Reznicek of The University of Michigan has agreed to be our speaker for the evening. Dr. Resnicek is the Curator of the Herbarium at the University of Michigan and a much sought after authority on sedges (*Carex*), pondweeds (*Potamogeton*), and grasses (*Poaceae*); . The social hour will be at 5:30 PM, the banquet will start at 6:30 PM, and Dr. Reznicek will begin speaking at 8:00 PM. The title of his presentation will be "PLANT HUNTING IN THE SOUTHERN GREAT LAKES AREA." The Cleveland Botanical Garden is located along Cleveland Oval, across from the Cleveland Museum of Natural History. The charge for dinner for Native Plant Society members is \$12.00 with \$11.00 for each additional guest. Dinner for non-members is \$13.00 with \$12.00 for each additional guest. The charge for those who would like to attend Dr. Resnicek's presentation only without dinner is \$3.00. A dinner reservation form is printed on the inside of the last page of this newsletter. Please fill it out and send it to Tom Sampliner along with a check for the dinner. Parking spaces are available directly outside of, and beneath the building of the Cleveland Botanical Garden.

POLAND WOODS **by Tom Sampliner**

On Saturday, April 29, 1995, over 20 members and invitees gathered for an early spring wildflower walk at Poland Woods. Led by teacher/naturalist Randy Jones, a third generation overseer of the property, we enjoyed a warm overcast day filled with wildflowers and migrating birds.

We should have known the day held promise as John Augustine identified singing warblers to Duane Ferris, trip organizer, and myself while we waited for the group to assemble.

The woods is a rich bottom land that certainly hasn't been logged in a long time, if ever. The park was established about 1937.

Shortly into our morning excursion, we encountered some of the very large old sycamore trees that guard the trail. One particularly catches the fancy as it is hollow from ground level to some 10-12 feet up so that a person can easily take refuge within. Duane Ferris relayed to a few of us that as a teenager, this same tree was his shelter during a

violent storm. The contortions of these gentle giants was wonderful to behold. Colorful grays, greens and whites are the bark. Huge thick side limbs were common.

The forest floor was tightly packed almost throughout with spring beauties (*Claytonia virginica*), wood phlox (*Phlox divaricata*) in shades of blue to almost pure white, lots of dwarf ginseng (*Panax trifolium*) but mostly in bud, emerging stalks generally 6" high of Solomon's plume (*Smilacina racemosa*), and to a lesser extent but still plentiful, red trillium (*Trillium erectum*) also in a creamy yellow form; great white trillium (*Trillium grandiflorum*), sessile trillium (*Trillium sessile*), wind flower or wood anemone (*Anemonella canadensis*), blue cohosh (*Caulophyllum thalictroides*), common blue violet (*Viola papilionacea*), halberd-leaved (yellow) violet (*Viola hastata*), and rue-anemone (*Anemonella thalictroides*).

On creek banks and in wet areas, impressive stands of emerging light blue trumpets of Virginia bluebells (*Mertensia virginica*) graced the slopes and flood plain mostly still in tight bud upon expansion of the florets, a delicate pink outside of each floret bud accents the expanded floret sky blue.

Right in the wet areas, clusters of beacon yellow marsh marigolds (*Caltha palustris*) called out to each photographer. Frequently, the lacy greenery of false mermaid (*Floerkea proserpinacoides*) provided additional scenic backdrop.

Our timing was perfect to see the smallest of Ohio's two populations of spreading globe flower (*Trollius laxus*). In contrast to *Caltha* the chartreuse color is so delicate. Even the deeply lobed palmate leaves contrast to cordate shaped and darker green of *Caltha*. Growing right in the wet you could spot these flowers from the trail. *Trollius* is state and federally listed.

For us east side Clevelanders, the frequency and mix of *Trillium sessile* among the other species was a welcome treat. For reasons I don't understand, only the west side Metroparks has this species in our county.

I'm sorry to report that there appears to be little or no management effort. Multiflora rose (*Rosa multiflora*) invades much of the forest. Its cohorts in crime (invasion) are all too frequently Japanese honeysuckle (*Lonicera japonica*) and barberry (*Berberis vulgaris*). Gee, if they introduced myrtle (*Vinca minor*) the woodland pests will be complete. Early spring is a perfect time to visit this park.

CHAMBERLAIN WOODS

by Tom Sampliner

Clippity Clop. The black buggy drawn by two sturdy horses carries a young Amish farmer along Parkman-Mesopotamia Road just south of State Route 87 in Trumbull County. Faster they go, past the newly acquired rich upland forest now owned by the Cleveland Museum of Natural History. A 95-acre tract, the trailed preserve is open when access permission is obtained from the Natural Areas Department of the Museum.

Initially, the forest from road level up to house setback distance is not particularly interesting. Thereafter, things change fast for the better. A rich woods heavily carpeted with wildflowers makes walking almost criminal if you go off the path. A solid mass covers the slopes of mixed woods with spring beauties (*Claytonia virginica*), yellow trout

lilies (*Erythronium americanum*), both red and white trillium (*Trillium erectum* and *grandiflorum*), and purple cress (*Cardamine douglasii*).

Lesser quantities but still impressive stands of dwarf ginseng (*Panax trifolium*), bloodroot (*Sanguinaria canadensis*), halberd leafed violet (*Viola hastata*), add further interest and color.

Hepatica (*Hepatica acutiloba*) is present, but in surprisingly sparse quantities. Grape vine tangles are also present. I well know this from just this first visit as one tangle reached out and literally yanked my lower plastic Bogen tripod legs right off. Sure don't make 'em like they used to.

Towards the southern end of the tract, there were rolling hillsides covered with the largest patch of squirrel corn (*Dicentra canadensis*) mixed with lesser amounts of Dutchman's-breeches (*Dicentra cucullaria*) that any of us had ever seen or probably imagined.

Not to high up the trail and also not far north of it stands a truly majestic giant magnolia (*Magnolia acuminata*). We all agreed this certainly approached state record in circumference.

Everywhere was the promise of the next wave of wildflowers just emerging. Solomon's-plume (*Smilacina racemosa*) competed with Solomon's-seal (*Polygonatum biflorum*). Wild geraniums (*Geranium maculatum*) still close to the ground few even in bud yet showed off deeply lobed leaves only.

Close to the road, where wetness was greatest, the bright yellow clusters of marsh marigolds (*Caltha palustris*) flashed brilliance. Brighter still was only lovely small but quite fresh fire engine red specimen of scarlet elf cup mushroom (*Sarcoscypha coccinea*).

A road perpendicular to Parkman-Mesopotamia takes one west and upland to reach an upper separated portion of the tract. This passes through a very wet woods loaded with spicebush (*Lindera benzoin*) and several pools ideal for frogs, salamanders and other small amphibians. The dark wet earth was solid pastel of white and pinks of both the spring beauties and purple cress.

This tract abuts a farm pasture. It contains pools, debris from old or incomplete projects of the former owners. However, it opens to a view from the heights overlooking the valley where perhaps time has almost stood still for the local Amish farmers. Neat white houses, shutterless, adjacent livestock pastures and grain fields. These folk are glad to have the Museum as neighbor to hopefully preserve, protect and study one of the better remaining rich upland woods.

THE STRANGE CASE OF *EPIPACTUS*

by Tom Sampliner

According to Carlyle A. Luer, in his orchid epic, *The Native Orchids of the U.S. and Canada*, 1975, *Epipactus* consists of about 20 temperate species which are in turn closely related to the genus *Cephalanthera*. The two differ in large part with the former having a third stigma that evolved into a rostellum. Only one species is native to North America; namely, *gigantea*, and that is in the far west. However, a common European

species has been introduced and become quite widespread in an aggressive expansion. It is with this latter species, *Epipactus helleborine*, that I start this discussion.

Luer comments that this species was well known in Europe for centuries. Written record goes back to the 1500's. In 1753 T innaeus named and formally described the orchid. It was not until 1879 near Syracuse, New York, that *helleborine* was reported to be in North America. By 1890 it had already spread so as to be noticed near Toronto, Buffalo and Montreal. Recently, it has become so widespread and aggressive that it can readily be found throughout the Northeast, the Midwest, and especially now in our area.

Perspective to the recent local invasion is obtained by referring to E. Lucy Braun in "The Monocotyledoneae", 1965, wherein she comments that as of that writing the only Ohio specimens had been collected from Summit County dating from 1958 and 1959. However, she does acknowledge that the species had become widely distributed as an adventive roadside weed and denizen of the woods.

Fred Case in his "Orchids of the Western Great Lakes Region", 1987, has a very readable and personal account of the progressive distribution and variable habitats selected by this progressive pilgrim. I especially enjoyed his reference to a clump he introduced into his own yard in Michigan in 1965 discovering four years later that the species had invaded flower beds, lawn, and even a driveway. A noteworthy observation by Case is that this orchid can live saprophytically from germination until flowering - a period that can take several years.

R. E. Whiting & P. M. Catling in their *Orchids of Ontario*, 1986, comment that by 1950 *helleborine* had spread throughout most of southern Ontario, but not yet into the Canadian Shield region. Later in that decade, even the shield had to yield to the onslaught.

A color form specific to exposed serpentine is described by Paul Martin Brown in his "A Field and Study Guide to the Orchids of New England & New York", 1993. His key distinguishes a red *helleborine*, *Epipactus atrorubens*, from *helleborine* as follows:

1a. inflorescence and ovaries pubescent, flowers cranberry-red; a plant of dry, sunny serpentine = *atrорubens*

versus

1b. inflorescence and ovaries glabrous, flowers greenish-white to shades of greenish-pink, plants of various habitats and widely distributed = *helleborine*

Just a few years ago, *Epipactus helleborine* was not all that common locally. Now, it may be necessary to concede that we must surrender for we have been conquered. Perhaps 4 to 5 years ago, the beds at the Cleveland Botanical Garden became host to our weedy friend. At that time, this guest appearance was welcomed by the staff. During the last several years, the orchid has invited itself to Shaker Lakes. This year, a large colony has made an appearance at North Chagrin Reservation in the Metroparks along a particularly lovely upland forest trail on the bluff overlooking a small tributary to the Chagrin River. I am also aware of this orchid being west of the city in Lakewood. All of the reported sites exhibit the typical colors in the florets. They range from all white to white-greenish on the sepals and petals with occasionally pink lines or blotches. Parts of the column show yellow, i.e. the anthers and pollinia, while a rich brown lines the entire visible surface of the innermost division of the lip. The lip is constricted so that the two

slipper-like portions are created. The innermost brown portion is called the hypochile while the outermost, triangular in shape but still saccate, is the epichile.

A pleasant surprise is the North Chagrin population. Here, some unusually large florets exist, and a significant percent of the entire population manifests heavy suffusion of pink throughout the florets. Some orchids have the entire lip pink, while others have the entire floret pink. The large floret specimens opened earlier, including those heavily suffused with pink; i.e. visits July 9 & 11, 1995; whereas at the other sites the more typical white-green specimens had yet to open for the most part since only a few lower most florets on the largest specimens had reached anthesis (flowering.) In fact, as of July 10th, at a site in Richmond Heights in a raised bed with a considerable portion of the day's sun, the largest specimen had only the 4 lowest florets open. As of that date, no specimen at either the Cleveland Botanical Garden or Shaker Lakes had opened. The literature does not reference pink florets or even all pink lips; however there is mention of pink lines, blotches or suffusion; but not all pink as I saw. Therefore, if appropriate, I will call the all pink lip form: *forma roseus*.

Two years ago [1993], the orchid first appeared in Richmond Heights as a single plant. Last year the number jumped to 10. On July 10th I counted and got 73. They range from full to partial shade for 68 stalks while 5 are in a raised bed receiving most of the day's sun arc. I concede separate stalks does not necessarily mean separate tubers.

The Metropark population is much more heavily shaded. Twenty-nine scapes are on the south side of the path while 13 were north. The trail follows the river gorge. Pink floret specimens were on both sides and generally seemed to be the more robust.

Some measurements of floral parts were noted. At Richmond Heights, the lateral sepals mostly measured 1 3/4 mm. The lips were 1/2 mm. The ovaries were 1 1/2 mm. The dorsal sepal averaged 1/2 mm. The spread or gap between the apical points on the lateral sepals and petals was 1/2mm. The largest lip was 2 mm. As you would expect, the shaded specimens sported larger measurements; for example, most stalks were only 12" high and the ovaries were slightly less than 1 mm.

In the Metropark population, the tallest scape was 24" high and most were at least 12" or higher. Floret dimensions were equally dramatic. For example, the spread between the apical points on the lateral sepals and petals was 3/4 to a full 1 mm. The lateral and dorsal sepals averaged 1 mm here compared to 1/2 to 3/4 mm range for the Richmond Heights population. Ovaries of all plants at all sites was pretty much a constant.

Location and description of the pink to madder coloration is interesting. As previously mentioned, the pink was variously in streaks, blotches, stripes or lines throughout. However, most frequently, it would be on the underside or upperside lowermost portion of the surface of the floret part being examined. Several specimens with solid pink epichile are present. So heavily suffused with pink were some specimens, that the total impression was at first that of a different orchid.

As for pollinators, various types of bees paid visits to the florets at each location. I am omitting the populations at Shaker Lakes, because this year, they have ballooned to large numbers at several different spots. At one spot on the north side of the lower lake, there were a few specimens suffused with some pink, but not like those in the Metroparks.

No discussion of the genus would be complete without mention of the beautiful, rather uncommon native species of our far west. *Epipactus helleborine* is from the wrong

side of the tracks when compared to the color rich, large florets of *Epipactus gigantea*. While on a far west orchid hunt with a group led by Paul Martin Brown, we had the good fortune to find a large healthy population of the *gigantea* in prime condition on the shoreline along Crescent Lake in the Olympic National Park in Washington. I am somewhat concerned for that population, as the roped off swimming beach for the Lake is quite close. There is also a trail that apparently circles the Lake which makes pedestrian access too easy. Well, maybe the rocks which make walking difficult and the adjacent water will save them.

I enjoyed the reference to some of the common names given this species, as noted by Luer. Chatterbox is the most appealing, referring to a resemblance of each floret to a talkative person.

Luer puts in words the description of this colorful species. He gives the overall appearance as up to 1 meter tall with about 15 colorful flowers. Sepals are greenish yellow with purple veining while the ovate-oblique petals are rose at the apex fading to green. The constricted lip has hypochile exhibiting red, warty elevations while lateral lobes are yellowish with nerves of purple to brown. The epichile has a pink apex with fleshy orange in the calli. Luer has done well with words, but even the eloquence can not compare with what I saw in nature.

In order to give the reader a feel for *gigantea* florets, I refer back to Luer. The 1 meter tall scapes are foliated with 4 to 12 ovate to lanceolate, plicate, green leaves alternately clasping the stem. Sepals measure 15-20 x 6-8 mm. The ovate petals measure 13-15 x 6-8 mm. The lip is 16-22 mm across when spread out. Luer makes an interesting comment in observing that *gigantea* can be locally abundant and persistent, flourishing for decades in suitable habitat. I hope this bodes well for those gorgeous specimens we saw in the Olympics. Wonder if we could trade them a few thousand *helleborine* for just a few of their *gigantea*; better yet, we'll play for them as a world series prize.

Seriously, as we wind down this discussion, it will be interesting to see if the local pink lipped specimens thrive or disappear. Comments and observations pertinent are most welcome.

So goes the strange case of *Epipactus*.

NATIONAL NATIVE PLANT COALITION by Brian Gilbert

The California Native Plant Society is spearheading an effort to explore the feasibility of forming a National Native Plant Coalition, a proposed name for the organization. They have surveyed the leadership of various native plant organizations to determine if there is any interest in forming a national or North American association of native plant societies.

The National Native Plant Coalition is envisioned as an affiliation of native plant societies so as not to divert local members away from local groups and toward a national affiliation. The exact purpose, function and structure of a National Native Plant Coalition (NNPC) would be determined at an organizational meeting. Cleveland has been proposed as a possible host site for such a meeting.

The NNPC was born during a meeting in March 1994 in Phoenix, Arizona, of the Native Plant Conservation Committee (NPCC). The NPCC consists largely of federal agencies. The NNPC would be a complementary NGO (non-governmental organization) not a duplication of NPCC.

If you have any thoughts on the possible need for a national or North American voice for native plants concerns, please call Tom Sampliner and let him know your thoughts. Two possible purposes for the NNPC are (1) a vehicle for communication and information exchange between local groups and (2) a unified national voice of native plant concerns to all levels of government.

WILDFLOWER SEED FOR HOME GARDENS
by The New England Wild Flower Society

Across North America wildflowers from woodlands and prairies to wetlands and mountains are thriving in home landscapes under conditions similar to their natural habitats. By propagating these handsome natives, gardeners can acquire a wide variety of familiar and unusual wildflowers.

The New England Wild Flower Society is selling seeds or spores of over 100 varieties of wildflowers and ferns in their 1996 seed and Book Catalog. Included in the Catalog are spring-blooming wildflowers for shade gardens .



ON THE FRINGE
Quarterly Newsletter of the
NATIVE PLANT SOCIETY OF NORTHEASTERN OHIO
2651 Kerwick Rd.,
University Heights, OH 44118

MEMBERSHIP APPLICATION/RENEWAL

Annual Dues and Membership Category - Check One

- Active \$10.00
- Family \$15.00
- Sustaining \$25.00
- Patron \$50.00
- Life Membership \$500.00

Make Check Payable to the NATIVE PLANT SOCIETY OF NORTHEASTERN OHIO
and mail with this form to:

Thomas A. Sampliner, President
Native Plant Society of Northeastern Ohio
2651 Kerwick Road
University Hts., Ohio 44118

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ANNUAL DINNER RESERVATION FORM

Name _____

Address _____

Phone _____

NPS Members @ \$12.00 _____

No. of Guests @ \$11.00 _____

Non-members @ \$13.00 _____

No. of Non-member Guests @ \$12.00 _____

TOTAL _____

Please send check and reservation form to Tom Sampliner, 2651 Kerwick Road,
University Heights, Ohio 44118. Please make check payable to the Native Plant Society
of Northeastern Ohio.

SATURDAY, NOVEMBER 11, 1995
Cleveland Botanical Garden
11030 East Boulevard
Cleveland, OH 44106

Cocktail Hour	5:30 PM
Dinner	6:30 PM
Dr. Reznicek's Talk	8:00 PM