

ON THE FRINGE
NATIVE PLANT SOCIETY OF NORTHEASTERN OHIO

Founding Chapter of
THE OHIO NATIVE PLANT SOCIETY
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Volume 10

2nd Quarter 1992

No. 2

* Dr. John Thieret will be our annual dinner speaker,*
* Saturday, November 14th, 1992, at the Cleveland Museum of*
* Natural History. Dr. Thieret's lecture will be entitled*
* "One Man's Posy" a description of poisonous plants in the*
* home, garden, field and forest. Dr. Thieret indicated*
* that he will be taking brand new color slides this summer*
* to help illustrate his talk. Mark your calendar now.*
* Invite guests and tell other groups of this facinating*
* subject. *

FROM THE EDITOR

We are now an affiliate society with the Cleveland Museum of Natural History. This status is the same as with both Audubon and Sierra Club. We maintain complete independence in all respects. We are entitled to rent space for classes, meeting, etc., at competitive rates and we finally have an official "home". There is no obligation upon any of you to become museum members. More about this in the future.

Now is not too early to sign up for Native Plant Society classes. By the time of this publication, the March/Winter botany course will be history. Still open are "Wildflower Propagation". On May 3rd with Larry Giblock at Meyer Nature Center in Big Creek Park, Chardon; and August 22nd, "Ferns of Northeast Ohio", with Tom Yates at Lantern Court in Holden Arboretum. Both classes require pre-registration by payment of a \$5.00 fee to be mailed to me in advance of each course. See the last issue for greater details on each course as well as for suggested driving directions.

On a personal note, I gave a slide program to the "Early Morning Garden Club" in January. The ladies were very impressed with the scope and beauty of Ohio wildflowers. Several may join us. Here's my point. For those of you who have some photographic talent, give our group a plug as you present your shows to other various groups. From my experience, I can tell you such worthwhile efforts as Nature Conservancy and Sierra Legal Defense Funds are also benefiting from my shows.

The Chagrin Falls Library wildflower garden is desperately in need of volunteers to water and caretake, especially for this spring. If you are willing to help on any basis at all, please contact Karen Colini in Geauga County at 543-9396.

You may not have noticed, but the last two issues of this publication are a xerox rather than printing process. The savings from this along with the cut back to quarterly, has equalled the amount pledged to the state journal. Thus we retain the best of all worlds financially. In case of "Trillium" going bust, we have retained our journal. If

"Trillium" succeeds we still have in place a regular newsletter that can be altered to fit in with "Trillium".

By the time this reaches you, the annual statewide meeting of the Ohio Native Plant Society will have occurred. If time and space permits, a summary will appear in this issue hereafter.

Your board is currently starting selections of an annual dinner speaker and discussing annual grantee and honoree. If you members have any input on these matters, please communicate to me at your earliest opportunity.

* * * * *

WILDERNESS STATE PARK
or just south of
The Biggest of the "Big Macs"
By Tom Sampliner

Just south of the Mackinaw Bridge at the north-western tip of the lower Michigan Penninsula is Wilderness State Park. For naturalists of all different specialities, there is much to see and enjoy in any season.

From a botanical perspective, the park is particularly interesting, especially in the spring. Ohioans will be especially impressed with the extensive northern boreal plant populations so rare in our area.

Memorial weekend makes an ideal time to explore the park. Presuming a growing season not too far off normal, you can find plentiful displays of several early orchids long ago extirpated from Ohio. In particular, (*Calypso bulbosa*) and Ram's-head Orchid (*Cypripedium arietinum*) appear scattered throughout the sandy woodlands adjacent to the Lake Michigan shore. There in well-drained soils within view of the biggest of the "Big Macs", the orchids seem to be doing quite well. Frankly, their biggest threat is the heavy stream of tourist, many with such abandon they pose a threat by loving these orchids to death.

Spring brings lake effect weather to the shorelines. Fogs develop frequently and roll in over the shore, enveloping the woods in heavy, cold, and wet for extensive periods of time - almost daily in April, May and early June. This micro-climate is just what the orchids seem to want.

Amidst the orchids, also scattered in the shoreline woods are other noteworthy plants. Gay wings, (*Polygala paucifolia*) which are endangered in Ohio; Bunchberry, (*Cornus canadensis*), which is threatened, is also quite common. Dwarf crested iris, (*Iris lacustre*), in some areas is the ground cover. One of my favorites is found, not in the woods, but in the open sandy areas near the beach. I refer to Bearberry, (*Arctostaphylos uva-ursi*), extirpated from Ohio. Near that tree-shrub border between beach and the woods, has also been a good site to find morel mushrooms; especially the yellow morel, (*Morchella esculenta*).

On the beaches, you should have no trouble finding Harebells, (*Campanula rotundifolia*), blowing in the wind; a threatened plant in Ohio.

On the marls, glacial grooves and other calcareous open ground lining pools within the beach you should have no trouble finding the carnivorous Butterworts (*Pinguicula vulgaris*).

There is one marl at the end of a vehicular trail to a parking lot used heavily by fishermen that presents a wet

meadow loaded with the Butterworts along with Indian Paintbrush, (*Castilleja coccinea*), Silverweed, (*Potentilla anserina*), which is potentially threatened in Ohio; and some lesser populations of (*Drosera rotundifolia*), (*Sarracenia purpurea*), (*Campanula rotundifolia*), and (*Cacalia tuberosa*); respectively Round-leaf Sundew ("P" in Ohio), Northern Pitcher Plant ("T" in Ohio), Harebells (T in Ohio) and Indian Plantain. These wet meadows with masses of such different colored flowers in close proximity to each other is a stunning visual display for the nature photographer, it presents a challenge.

The ditches along the road into the park are filled with water in Spring. Several spots have impressive populations of that striking white star shape flowered relative of the Gentian family, (*Menyanthes trifoliata*), buckbean, threatened in Ohio. Those spots feature enough plants to make an impressive display that will quickly catch your eye even as you whiz by in a car.

I'm always impressed with the intricate inner structure on the flowers. To me they seem as delicate and interesting

as the smaller flower of Miterwort, (*Mitella diphylla*). If any of you can figure how to photograph these flowers close up, since the water level in the ditches is usually near the top of knee boots, let me know.

There are trails at Wilderness the width of vehicles used to create these openings in the past. These offer great opportunities for botanizing provided you are willing to walk in a mile or two along a wet, rutted trail. Be prepared with mosquito/fly headnets too.

I find the effort will be worth it, even loaded down with heavy Bogan tripod, camera pack, etc. For example, you'll find gorgeous specimens of the Dwarf Lake Crested Iris in both white and blue forms, (*Iris lacustre*). *Pyrolas* are everywhere, primarily; (*Pyrola rotundifolia*, *virens**, *elliptica*, and *asarifolia*), respectively; Round-leaved; greenish-flowered, shin leaf and pink or bog wintergreen. Mixed in are some of the finest Gay wings, (*Polygala paucifolia*), I've seen. Commonplace are blue bead lily, (*Clintonia borealis*); Star flower; (*Trientalis borealis*)

* now called (*Pyrola chlorantha*) and endangered in Ohio.

Bunchberry, (*Cornus canadensis*), red and white Baneberries, (*Actaea rubra* and *pachypoda*) and several viburnums and conifers of interest here in Ohio.

Any discussion of this park should also mention the protected beach nesting grounds of the Piping Plover. Take your spotting scopes or binoculars. However, access is restricted during nesting seasons.

Officially, (*Arethusa bulbosa*) is also a park resident. Though I've been there at bloom time, I've yet to even see the plant coming up. It's a big park though and the purported sites are not well known or easy to find. Perhaps the wetness factor discourages me as they are supposed to be "way in" and all the going very wet.

Through the park you'll see many other plants not so common in our area. The extremely weedy orchid, (*Epipactis helleborine*) is everywhere. I can't think of another orchid so aggressive and variable as to habitat. Those deeply veined leaves are both attractive and intriguing to me, you even see them growing on well worn trails and next to sidewalk or street.

As you hike around in the park, you should notice a fragrant aroma from one of the conifers, especially if you brush up against some branches. Probably, you've just encountered Balsam fir (*Abies balsamea*), a common perimeter to open area dennison of the north woods.

At the feet of several species of northern conifers is a small strange white flowering scape. This tiny, maybe a couple inches high, plant with white tubular flowers is the saprophytic one-flowered cancer root (*Orobanche uniflora*).

Based upon my prior visits, if you're to be anywhere near this area, plan on a look-see, you won't be sorry.

* * * * *

GRASS BAY, MICHIGAN
A Nature Conservancy Property
By Tom Sampliner

Directly east across the northern top of Michigan's Lower Peninsula from Wilderness State Park, is Grass Bay. The area is just south of Cheyboygan along the Lake Huron coastal road.

In comparison with the most common plants of Wilderness, Grass Bay offers a nice contrast, in particular, the soil is more acidic. Conifers dominate the forest. Therefore, it should be no surprise that here you'll find both Yellow Ladyslipper Orchids, (*Cypripedium calceolus*, var. *pubescens* and *parviflorum*). Also plentiful is the acid loving Pink Ladyslipper Orchid; (*Cypripedium acaule*).

There certainly is considerable overlap with the plants in Wilderness. In particular, (*Trientalis borealis*), (*Clintonia borealis*), (*Actaea rubra*), (*Cornus canadensis*). (*Polygala paucifolia*) are found in both locations.

Grass Bay presents several different habitats and micro-climates. The terrain drastically slopes downward from the road towards the Lake Huron shore. The woods are quite wet cut by many streams. Beside the dominance of conifers, in these wet woods the conifers and Red Maples are perforated by quite a few Birch Bark or White Birch; (*Betula papyrifolia*).

In the shrub zone in openings near the beach, there is Trailing Arbutus; (*Epigaea repens*). All the openings with the conifers needle floor covering have Gaywings; (*Polygala paucifolia*) and Dwarf Lake Iris; (*Iris lacustre*). Also, occasionally poking through the needle litter are Twin flowers; (*Linnea borealis*) and the Saprophytic One Flowered Cancer Root; (*Orobanche uniflora*). In the open areas in the

litter and around shrubs and also in the woods, you can find early Coralroot Orchids; (*corallhoriza trifida*), Canada Violets; (*Viola canadensis*), Grass of Parmassus; (*Parnassia glauca*), both Baneberries and all the other northern species also mentioned for Wilderness State Park.

It's not a large property, but one loaded with the plants described in this article, certainly well worth a visit.

* * * * *

Response to "Trillium"

By Tom Sampliner

By now each member in our northeast chapter should have received the initial issue of "Trillium", the new journal of the "Ohio Native Plant Society".

It is now critical that you members provide your reactions to the board so that appropriate financial and practical procedural responses be put into play.

For example, if our local mailing list now drops below 200, we would no longer qualify for bulk mail privileges. Complimentary copies to educational and recreational institutions as well as to prospective members is one way to make up any deficit. However, we must also consider financial obligations to both the state and local organizations.

Another issue is whether "Trillium" fills some, all or none of the needs of our local chapter thereby requiring a local journal of some format. What I have done for your benefit heretofore is to preserve all possible options. I

accomplished that by cutting "On The Fringe" to a quarterly publication and going to a duplication rather than printed format. I hope you concur the quality did not suffer. I am prepared and willing to continue with "On The Fringe". If the membership and finances allow.

As for whether there is still a place for a local publication, we still need to announce a local doings and provide a forum to tie the chapter together. It need not necessarily be in the current format though.

To help your board make the best decision, we need and would value your responses. I also concede we may need more of a track record on "Trillium". Conceivably, they could fold up in a year or go on to become a smashing success. This dilemma may force us to continue keeping all options open for some time yet.

Well, I guess dealing with problems like this is why we get the big bucks (\$0).

* * * * *

OHIO'S RARE PLANTS

A Native Plant Society Project

By Drew Rolik

Readers of the Native Plant Society's Journal can help add to our knowledge of Ohio's flora. Within Ohio, there are a number of species listed as endangered or threatened which were once more frequent in the state; several are featured in this article. To assess whether these plants are actually declining in abundance or have merely been overlooked, more data is needed. Here is where readers of the Journal can help: by keeping a look out for these plants when out in the fields.

Because of their rarity, collecting of these plants should not be attempted. Instead, sightings of these plants can be sent to the Journal's editor, and the information will then be forwarded to museum botanists for follow-up. A future issue of the Journal will list any new records of these plants contributed by its readers.

Woodlands and wood edges are home to four plants of uncertain status. Rock Elm, (*Ulmus thomasii*), can be found in both floodplain and upland woods. Small Purple Fringed Orchid, (*Platanthera psycodes*), is typical of wet, semi-shade locations. Nodding Pogonia, (*Triphora trianthophora*), is found in rich woods, while the sub-shrub Pipsissewa, (*Chimaphila umbellata*), inhabits dry woods.

In wetlands, look for Spatulate-leaved Sundew, (*Drosera intermedia*), and Marsh Cinquefoil, (*Potentilla palustris*). Wet fields might contain Yellow-eyed Grass, (*Xyris*), and recently burned, cleared or sterile locales would be the home of Fireweed, (*Epilobium angustifolium*), and the shrubby Sweetfern, (*Comptonia peregrina*).

The first species considered here is Pipsissewa, (*Chimaphila umbellata*). Dry, especially pine or hemlock, woods are its home. Though once found scattered throughout eastern counties. Flowering in July and August, this 6-10" plant has a similar relative, Spotted Wintergreen, (*Chimaphila maculata*). The two are easily separated: (*umbellata*) has entirely green leaves while those of (*maculata*) are striped with white.

Another woodland species is Nodding Pogonia (or Three-birds Orchid), (*Triphora trianthophora*); it's however, prefers rich, especially beech-maple, woods. Because this habitat is so widespread in Ohio, Nodding Pogonia has been recorded from nearly 30 counties, though in recent years there have been only seven reports.

Allison Cusick (in McNance, 1984) has aptly described the plants as "seldom seen and little understood. . . graceful and diminutive in bloom, but almost impossible to locate at any other time of the year." Diminutive it is, reaching a height of only 3"-8".

Nodding Pogonia spends most of its life underground living as a saprophyte. It does not appear above ground every year, "usually developing only at remote periods," according to Fernald. The plants appear out of the humus sometime in July, each stem producing (usually) three flowers. Each colony of plants bloom within a three-day period in late July or August. The individual flowers wilt as soon as fertilized. Thus a flower may last only an hour or so, up to a maximum of one day! Soon nothing remains but a dried stalk, which also has a brief life. Thus finding this orchid in bloom means being at the right place at exactly the right time!

The Rock Elm, (*Ulmus thomasii*), is found in floodplain or upland woodlands or wooded swamps. While it has been collected in the past in several northern and western counties, there are only recent records of this species, from Huron and Pickaway counties.

Though fruits (ripe in early May) are needed for positive identification, this tree, 60 to 80 feet in height at maturity, can tentatively be identified with some certainty. Typical (*U. tomasii*) is the only elm with leaves smooth above and hairy beneath, with hairy twigs, and with corky wings on at least some of the branches. Some forms of the American Elm are similar but lack the corky wings. Additionally, some cultivated elms are similar, but they would be unlikely to be found far from plantings.

The Small Purple Fringed Orchid, (*Platanthera* (*Habenaria*) *psycodes*), has been collected at one time or another over a large portion of the state and was especially frequent in the northeastern part. Since 1960 it has been collected only in six counties, which is about 30% of its former range. The typical habitat for the Small Purple Fringed Orchid is damp thickets, low woods, and moist ditches. This strongly fragrant orchid is 12-30" tall. Blooming June to August, it is quite distinctive; no other orchid has a 3-6" spike of fringed-lipped, deep rose-purple to pink-lilac flowers except the even-rarer Large Purple Fringed Orchid, (*Platanthera* (*H. Fimbriata*) *grandiflora*). The latter may be recognized most dependably by the roundish opening to the spur rather than the dumbbell shape of the former. Sighting of the Large Purple would be an even indeed!

Anyone familiar with the Cinquefoil, (*Potentilla palustris*). This species is unique in the genus in Ohio for having purple instead of the usual yellow or white flowers. This relatively showy 6-24" plant--with flowers 1" across--blooms June to August and inhabits wet meadows, swamps, and the margins of streams. Though most frequent in northeastern Ohio, it has been collected down into the central part of the state and from as far west as the Toledo area. Recently it has been found in only five northeastern counties plus Lucas County.

Unlike Marsh Cinquefoil, the Spatulate-leaved Sundew, (*Drosera intermedia*), it is found in bogs, wet sand, and marshes. This small plant is easy to overlook: it is usually around 6" tall in bloom and its leaves are about 3/4" long. Sundews are known even to those not especially interested in plants because of their insect "eating" ability. The distinctive leaves, with the gland-tipped red hairs, make the genus (and this species) unmistakable even out of flower.

There are two similar species in Ohio, the other being the more common Round-leaved Sundew, (*Drosera rotundifolia*). (*Rotundifolia*) has roundish leaves, wider than long, while (*intermedia*) has spatulate leaves, longer than wide. (*Drosera intermedia*), which is much less common, is now only known from Lucas and (possibly) Geauga counties. It should be search for across northern Ohio and has been recorded from four additional northeastern counties in the past.

Also inconspicuous are the Yellow-eyed Grass, (*Xyris*). These 6-24" plants, with grass-like leaves and small yellow flowers, are easily overlooked. The nomenclature of the two Ohio species is confusing: The first species, Twisted Yellow-eyed Grass, (*Xyris torta*), was once known as (*Xyris flexuosa*). Our second species, Carolina Yellow-eyed Grass (an in appropriate common name) was long considered (*Xyris carolinana*) (as indicated in Fernald, for example). Recently, however, these Ohio plants have been determined to be (*Xyris difformis*), not (*Xyris carolinana*).

These plants flower during July and August (*difformis* may linger into September) and inhabit sunny bogs, wet shores, and wet fields. (*Torta*) may occur in drier fields, while (*difformis*) may tolerate some shade. In terms of range, (*difformis*) has only been collected in northeastern Ohio and recently as 1980 was considered "presumed extirpated" in the state. Since then it has been found in Portage and Summit counties. (*Torta*), however, is more wide-ranging, having been collected from several northern and south-central counties in the past. There are recent records are from only three counties: Erie, Henry, and Lucas. There are, oddly enough, no records from Ohio's mid-section, where it also should be looked for.

Differences between the two species are relatively slight: (torta) has a bulbous base to the plant, sepals with a ciliate keel (ie, with a fringe of hairs on the central ridge), and leaves and stems often conspicuously twisted. (Difformis) has a soft base to the plant, sepals with an erose (gnawed look) keel, and leaves and stems usually not twisted.

Fireweed, (*Epilobium angustifolium*), is a conspicuous species of dry places. This 2-8" plant has large magenta-pink flowers borne from June to September and unmistakable; the only similar species is (*Epiilobium hirsutum*), which is hairy, not smooth. The best place to look for Fireweed is in man-made clearings, along roadsides, and as the name implies, in recently-burned areas in the northern half of the state. Once widely distributed, it has been collected recently in only four counties! But as it is an early succession species, it is not likely to be found in any one locale for any length of time.

Dry soil in sunny spots is the preferred home of Sweetfern, (*Comptonia peregrina*). Like Fireweed, it is an early succession species whose range will therefore vary over the years. Also like Fireweed, it is primarily known from northern Ohio. Recently it has been found in only four counties.

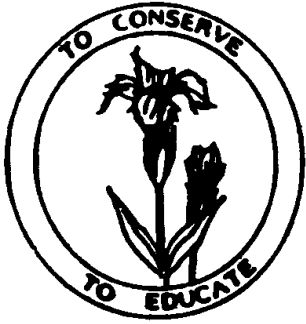
This shrub, up to 5' in height, blooms in April and May and fruits in June and July. Its unique leaves and form--"like a woody fern" (*Petrides*)--makes its identification an easy matter. This aromatic plant is found in sterile soil in pastures, woodland clearings, and recently disturbed soils.

All of these species can be looked for this July and August, and any new information would add to our knowledge of the state's flora and the preservation of our ecological heritage.

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