NATIVE PLANT SOCIETY OF NORTHEASTERN OHIO
FOUNDING CHAPTER OF
THE OHIO NATIVE PLANT SOCIETY
9500 Sperry Road Mentor, Ohio 44060
(216) 338-6622

# *ON THE FRINGE*

VOLUME 2 JULY 1984 NO. 4

AUGUST PROGRAMS AND EVENTS:

11th (Saturday) - 9:30 a.m. - Windsor, Ontario, Canada
Paul D. Pratt, Chaief Naturalist, at "The Ojibway Prairie Complex". This is a 400 acre Provincial Nature Preserve in the heart of Windsor next to a race track. You won't believe your eyes! This is a Tall Grass Prairie filled with uncommon and rare plants including 48 species of grasses, 73 composite species, and 48 rose species. Just across the river from Detroit. It is a 3 hour drive. Plan to stay overnight and explore other natural areas in eastern Michigan and Pt. Pelee.

EDITOR'S NOTE: There are no programs or events in July because the majority of our members felt it was the busiest month.

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## PRESIDENT'S COLUMN

The June 16th bog trip to western Pennsylvania was quite a success. The group saw four species of orchids in bloom plus the very rare White Fringed Orchid in bud, as well as many other rare and endangered plants. We will do this again next year.

I am very pleased to be able to tell you that the Dawes Arboretum in Newark is going to sponsor The Ohio Native Plant Society - Chapter 2 this fall. They are very enthusiastic about the idea and will give it their full support. This will include the Columbus area in total. In addition, the president of the Toledo Herb Society has offered to undertake the development of a chapter through the Toledo Parks and hopes to have that going this fall. By late summer I hope to have good news about the Dayton Chapter as we have a strong advocate there.

**Enclosed are Constitutional Amendments voted on by your Executive Board at their May meeting. Please fill out your ballot and return as soon as possible. **

The project at University Circle ravine is going well. We have weeded and planted several times. However, we NEED volunteer workers. JOHN MICHALKO, 442-4526, is there several days a week and would be happy to have anyone come down for a few hours. It's fun and a beautiful place to be, so please help out.

We are underwriting Tom Yates participation in the Rare and Endangered Plants Exchange from Brooklyn College, New York. The cost will be minimal and we hope he gets several of the extremely rare plants that are being exchanged nationwide.

PLEASE TAKE NOTE OF THE NEW HEADING ON OUR NEWSLETTER. Our Charter for both the Ohio Native Plant Society and the Native Plant Society of Northeastern Ohio are expected any day from the Secretary of State. When that arrives we will be an independent, viable organization. We will then be officially known as Chapter * #1, NPSNEO of THE OHIO NATIVE PLANT SOCIETY. For the present we will remain under the sponsorship of The Holden Arboretum, as long as they will have us.

I will be appointing a nominating committee in August, as per the Constitutional Amendment. This is a very difficult committee to serve on but its job can be made easier if you members will let us know if you WANT to serve as an officer, member of the Board, or committee chairman.

We also need suggestions for speakers and field trips from any of you who have good ideas.

We are in contact with State Representatives concerning proposing the TRILLIUM GRANDIFLORUM as the State Wildflower. More on that later.

MARK YOUR CALENDAR NOW for the November 30th dinner and Annual Meeting at the Natural History Museum. I spent an afternoon with our speaker, Frederick W. Case, and found him to be an utterly delightful and fascinating person. I hope you will be as thrilled as I was when I met him. He is doing us a GREAT favor in coming from Saginaw , Michigan to be our speaker - So, LET'S ALL TURN OUT.

We're off to the upper reaches of Canada hunting orchids and such. If the bogs don't get us the cedar swamps will! Maybe even a polar bear. Tell you all about it in the next newsletter.

HAVE A FUN AND ADVENTURESOME SUMMER. Ann Malquist.

# LET'S LOOK AT THE GRASSES

by PERRY PESKIN

Looking at grasses for most people means standing on a high hill overlooking a field of wheat and admiring the view as the wind makes waves and ripples in the golden sea of grass. To come down to earth and actually examine the flowers and fruits of this family of plants is supposed to be forbiddingly difficult, presumably the province of specialists, such as the experts working for the Department of Agriculture. Even the popular plant guides warn the reader away from grasses. Like sedges, umbels, crucifers and aquatics, details on this family (they say) can be found only in "the techical manuals." One gets a mental picture of heavy, dusty volumes resting on a high shelf in some agricultural-school library.

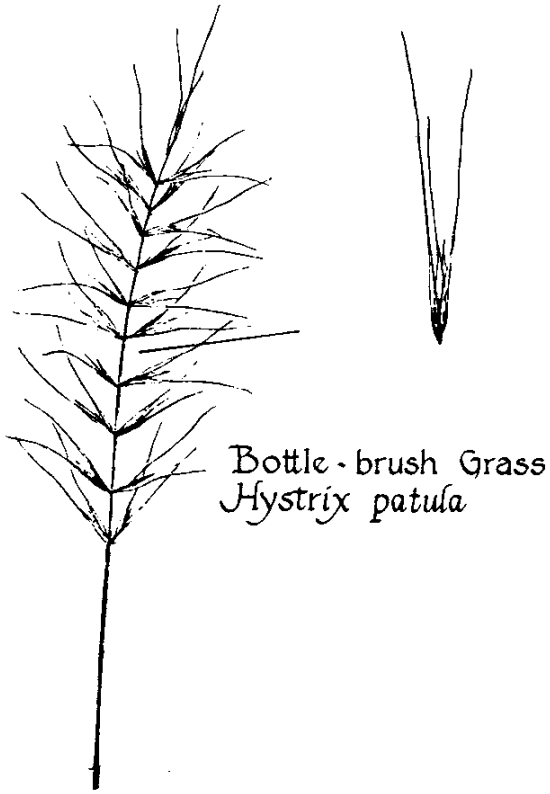
The reason for ostracizing this large and important family is simple. Grass flowers are small and imperfect, lacking colorful petals and sepals to attract pollinating insects. Being mostly wind pollinated, grasses produce large numbers of minute stamens and pistils, arranged in an almost infinite variety of complex heads, spikes, racemes, and panicles (called inflorescences), colored green or brown for the most part, and apparently designed to frustrate the best intentions of amateur naturalists in classifying them. In the popular view there are too many kinds of grasses and they all look superficially alike. Yet even a sober-sided botanist like Lucy Braun was moved to uncharacteristic admiration: "....The grasses and sedges .. should not be neglected by the layman," she once wrote, "for among these plants are some of the most graceful and beautiful forms of inflorescence."

Once we drop our prejudices against minute and colorless flowers, we will find that grasses, besides literally furnishing our daily bread, really serve as an unobtrusive background to many of our life's activities. At home the ground covers we carefully cultivate and many of the weeds we roundly curse are grasses. (In fact, the American obsession with grassy lawns has been the subject of serious study among social historians). Green-carpeted suburbs, public squares, athletic stadiums and industrial parks, not to mention cemeteries, testify to our need for a living background restful to the eye.

Grasses help fill in bare spots where more colorful flowering plants could not survive; they cover sterile tracts of soil disturbed by man's activities: roadsides, railroad tracks, dumps, vacant lots, and construction sites. Wherever nature limits trees, grasses simply take over: in Arctic tundra, wetlands, prairies,

deserts, sand dunes and mountains above timberline. One of the two flowering plants found in Antarctica is a grass.

One of the advantages of studying grasses is that they are as readily available as the nearest vacant lot. In fact, in disturbed areas one finds a greater number of species than in a natural habitat because of many of the foreign grasses (mostly agricultural escapees) prefer a dry, sandy or rocky environment. It is closest to the ancestral habitat, the treeless plains of Eurasia or the savannas and semideserts of the Mediterranean. These Eurasian grasses are often joined by immigrants from our own Western plains and deserts.



Bottle-brush Grass
*Hystrix patula*

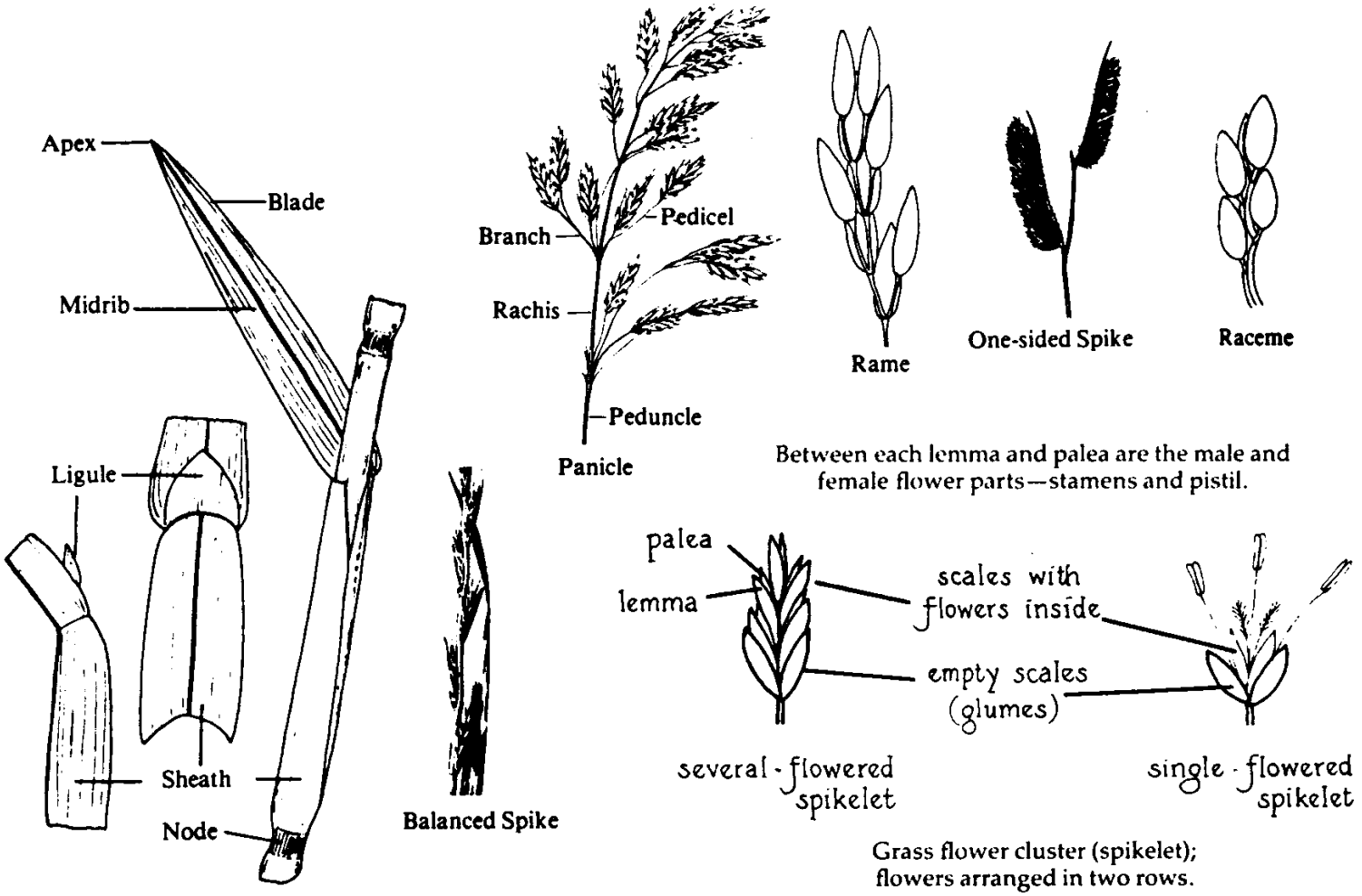
To learn the names of the grasses, two methods are feasible. The first, called the "leaf method" is to leaf through a book of grasses until you find a picture of the unknown plant. In some cases you will find the correct genus and sometimes the species without even having to read the description. A good book for this purpose is E. Lucy Braun's THE MONOCOTYLEDONEAE (Ohio State University Press, 1967) or the paperback HOW TO KNOW THE GRASSES by Richard W.Pohl (Dubuque, Iowa, William C. Brown, 1954), part of the H. E. Jacques Pictured-key Nature Series. The first covers only Ohio; the second, the whole country.

I remember how easy it was to name a peculiar bushy-headed grass which I first found in North Chagrin. Without much leafing, I found it in Lucy Braun's book, which I had borrowed from the library. (Probably every library in Ohio has a copy.) There, big as life, on page 96 was a picture of Hystrix patula, the bottle-brush grass. (Luckily there was only one species for this particular genus.) Anyway, I was hooked. Soon, I began looking at weedy gardens, vacant lots, and cracked sidewalks and came up with foxtail grass, orchard grass, velvet grass, timothy and wild rye. Grasses were easy! What's more, they could be gathered quickly and brought home intact in a plastic bag

without much fuss. Occasionally people would look at me suspiciously as I wandered around vacant lots, eyes glued to the ground, but they probably thought I was looking for a lost wallet or a contact lens.

The second method for identifying grasses is the scientifically correct method of learning the twelve tribes of the grass family (as found in Ohio) and their distinguishing characteristics. This requires learning something about anatomical structure and the special terminology that goes with it. For the record, the twelve tribes are commonly called bamboos, fescues, cereals (wheat, rye and barley), oats, bent grass, cord grass, canary grass, rice, wild rice, panic grass, beard grass and corn. These account for 74 genera and about 300 species in the state, native and introduced. Their differences have to be determined by studying minute structures of the flowers under a ten-power magnifying glass.

The following diagram is of a typical grass flower (from the fescues, which are the most unspecialized of the tribes). This information was gained from the introduction to Pohl's book, referred to above.



The fruit of grasses, called the grain, usually very minute and ignored by the textbooks, develops inside each floret, which consists of two bracts ( the lemma and palea) wrapped around the stamens and the pistils ( the male and female reproductive parts). All the florets plus the two bottom bracts (called the glumes) compose one spikelet. The sum of all the spikelets on a flowering stem (or culm) makes up the inflorescence. Sometimes there are hundreds of spikelets on one inflorescence. In wheat, the glumes, lemmas, and paleas are called chaff and have to be separated from the grain. In corn, they are called husks.

In some of the more specialized tribes the glumes are large envelopes covering the florets, as in oats, or they are reduced to tiny vestiges, as in rice. In still others, the spikelets contain only one fertile floret and the rest are empty or staminate. In the last two tribes the florets (either fertile or sterile, or male and female) take on a different appearance and sometimes assume a different location on the plant. Again, corn, which is the least typical grass, is a good example with the male tassels on top and the female ears along the side of the stem.

No matter which way you learn the grasses, you will find that knowing 10 or 20 major types will add greatly to your knowledge and appreciation of the green world around you.

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There are a wide variety of grasses growing in the Cleveland region, some of which are handsome enough to be transplanted into a garden or gathered as a supplement to dried-flower arrangements.

Starting at the Lake Erie shore, one can find the tall, stately switch grass (Panicum virgatum), with big panicles of dark purple spikelets, and the beach grass (Ammophila breviligulata) with stiff, yell-brown spikes. Both of these grow in sand dunes and are seldom found far from the water's edge.

In disturbed areas throughout the city, one can find grasses that prefer to grow in rocky, gritty soil. Many of these are aliens from Europe of the Western states. One of the

most beautiful is purple love grass (Eragrostis spectabilis) with an inflorescence consisting of bright, red-purple spikelets, shining with a metallic gleam in the sun. Unfortunately its color fades somewhat when the plant is gathered and brought inside the house. Another plant frequently found around industrial areas and heavily salted roadways is squirreltail barley (Hordeum jubatum), a short relative of the familiar cereal. A large stand of this plant presents a solid, shimmering mass of golden awns. (I have seen a variety of this plant in the Arctic with pinkish awns.) It may make a good rock garden plant.

The tall prairie grasses native to the counties west of Cleveland require plenty of space for their cultivation. Indian grass is a favorite (Sorghastrum Nutans) with graceful panicles of a beautiful golden-brown when ripe. It is often associated with big bluestem (Andropogon gerardi), which has bluish-green stems often tinted with a purple or pinkish cast. A shorter relative of big bluestem, broomsedge (A. virginicus) grows in weedy fields and along railroad tracks. Its stems and leaves turn dark red in the fall.

Indian Grass
Sorghastrum nutans

Certain Ohio grasses are well adapted to a woodland garden. The bottlebrush grass referred to above grows in small, isolated clumps in fairly dense shade. Wet woodlands would be suitable for the wild-rye species known as Elymus villosus with fuzzy, nodding spikes. (Its tall relative E. canadensis can be found among the sand dunes of Lake Erie.) Another grass fond of wet woodlands that most likely will introduce itself into a woodland garden is the close relative of rice called white grass or Virginia outgrass. Like domestic rice, it is semiaquatic and probably grows beside every woodland stream or wet spot in Northern Ohio. The yellow-green color of its leaves is distinctive, as well as their saw-toothed edges. One should not walk barelegged through clumps of white grass (Leersia virginica).

Among the grasses of meadows and wetlands, reed canary grass (Phalaris arundinacea) sometimes has red-purple panicles instead

of the usual green. However, it has the reputation of crowding out the other plants in its habitat. Another grass which grows in dense stands along mud flats, Walter's barnyard grass (Echinochloa walteri) is a fairly recent immigrant to the Lake Erie estuaries. Its large, long-awned, wine-red panicles set it off as one of the most striking members of the grass family in Ohio.

Whether one tries to cultivate native grasses or simply encounters them in their own habitat, a knowledge of this important family of plants adds immeasurably to the enjoyment of the natural world.

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PLACE TO GO by Ann Malmquist

One of the jewels in Ohio's botanical crown that will soon be shining most brightly is the Adams County Shawnee Forest area. Located along the Ohio River, it is an easy four-hour drive. Plan at least two days there. It is located at the Intersection of State Routes 52 and 125. Drive north into the park and explore the rolling forested hills and open meadows. Along one of the Park roads is found the YELLOW FRINGED ORCHID (Platanthera Ciliaris). The meadows abound with more kinds of butterfilies than I have ever seen before. NO nets, please.

Twenty-one miles west of the Shawnee is a little town called Lynx. Behind one cemetery off County Road #T154 and T151 is the Lucy Braun Preserve, a full fledged XERIC PRAIRIE. The last week of July and into August it will be ablaze with color. Purple cone-flower, grey-headed coneflower, rattle-snake master, green milkweed, the rare and endangered blue-hearts, several kinds of sunflower, huge dock, flowering spurge and rose gentian will all be blooming.

All of the prairie grasses will be in full flower. If you've never seen the tall and graceful prairie grass species waving in the wind, then you have missed a magnificent sight.

There is a problem, however. The heat and humidity will be intense. You probably will not escape ticks and chiggers. Flowers of sulphur are an excellent preventative against chiggers. The suffering is worth the effort because this is a truly unique area, both botanically and geologically. Fossil hunting is superb along the banks of Ohio Brush Creek.

Just a few minutes from the Lynx is Buzzard's Roost Rock and The Wilderness. Here can be found the rare Hexalectris Orchid, a difficult specimen to find, but one of exquisite beauty.

PLACE TO GO - Continued

Adams Lake State Nature Preserve is located just above West Union. They will have a guided tour on Saturday, July 28th.

Go north on Rte. 41 to Peebles and County Road T129 to find the Edwin H. Day Memorial Preserve, owned by the Ohio Historical Society. Here can be found Clematis Viorna, one of my favorites and the endangered Sullivantia Sullivantii. The Cranefly Orchid also grows here and at Buzzard's Roost Rock.

Coming home, stop at Smith Cemetery and Bigelow Cemetery State Nature Preserves. Located near Plain City off Rte. 161, these are examples of a mesic prairie, originally a great swamp. Here blooms the rare and lovely Royal Catchfly. One can stand in one cemetery and imagine what it must have been like when the first settlers arrived with the prairie grasses and the blazing flowers growing higher than a man's head.

These places are well worth your time and investigation. You will come away with memories that will brighten the long winter months ahead.

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NEW MEMBERS

Robert McCance, Jr.
Dolores T. Lad
The New York Botanical Garden
Erna Kordesch

RENEWALS

Thomas J. Denbow
J. Arthur Herrick

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A sincere THANK YOU to Elizabeth S. Martin, Honorary member of The Native Plant Society for her generous crontribution.

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We regret to tell you that DAVE McAdoo is leaving Ohio for North Carolina. We will miss you, Dave. Good Luck!

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FASCINATING FACETS OF NATURE

1) What first gives you a clue that the river you are crossing is VERY OLD?
2) OF WHAT SIGNIFICANCE IS CEDAR HILL TO WE WHO LIVE IN NORTH-EAST OHIO?

Answers on cover page.

PROPOSED CONSTITUTION CHANGE:

FROM: ARTICLE V: ELECTIONS

In September of each year, the President shall appoint from the voting membership outside the Board a nominating Committee of three (3) persons, who, at the October meeting shall announce the slate of officers (President, Vice-President, Secretary, Treasurer) and two (2) members-at-large, for election at the Annual Meeting in November. At the Annual Meeting, nominations may also be made from the floor.

TO:

Prior to September of each year, the President shall appoint from the voting membership outside the Board, a Nominating Committee of three (3) persons who, at the September meeting, shall announce the slate of officers (President, Vice-President, Secretary, Treasurer) and two (2) members-at-large, for election at the Annual Meeting in November. At the September meeting, nominations from the floor will also be taken.

Written notification of the voting date (Annual Meeting in November) and a ballot shall be issued at least, but not less than, 30 days prior to the Annual Meeting. Written ballots must be received by the voting date.

Election of officers and Board members shall be by majority vote of the total number of written ballots submitted by and on the voting date.

FROM: ARTICLE XIII: AMENDMENTS

The By-Laws of this Society may be amended at any regular meeting of the members or at any special meeting called by the President for this purpose. Written notice of such meetings is to be sent out at least ten (10) days in advance.

A vote of at least two-thirds (2/3) of those members present and voting shall be required in favor of the proposed change for its adoption.

TO:

The Constitution and By-Laws of this Society may be amended at any regular meeting of the members or at any special meet-

CONSTITUTION CHANGE (Continued)

ing called by the President for this purpose.

Written notice of the voting date and a ballot shall be issued at least, but not less than, 30 days prior to the specified meeting. Written ballots must be received by the voting date.

A vote of at least two-thirds (2/3) of those members voting by written ballot shall be required in favor of the proposed change for its adoption. Two-thirds (2/3) affirmative vote shall be determined by the total number of written ballots submitted by **and** on the voting date.

PROPOSED BY-LAW

I. A favorable majority of Board members polled, written or verbal, shall be required to approve any Society expenditure in the amount of fifty dollars ($50.00) or more.

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VOTING MEMBER BALLOT

PROPOSED CONSTITUTIONAL AMENDMENTS:

| | | |
|---|---|---|
| ARTICLE V -ELECTIONS | FOR_____ | AGAINST____ |
| ARTICLE XIII - AMENDMENTS | FOR_____ | AGAINST____ |
| PROPOSED BY-LAW: | FOR_____ | AGAINST____ |

Please mark and return your ballot as soon as possible to:
NATIVE PLANT SOCIETY OF NORTHEASTERN OHIO
6 Louise Drive
South Russell, Ohio 44022

Signature_____

NOTE: If more than one member of your family is a voting member, please submit a ballot in this same form signed by the voting member.

SPONSORED BY THE HOLDEN ARBORETUM






NATIVE PLANT SOCIETY OF NORTHEASTERN OHIO
FOUNDING CHAPTER OF
THE OHIO NATIVE PLANT SOCIETY
9500 Sperry Road Mentor, Ohio 44060




EDITOR'S BLOCK

In the last issue I told you I hoped to publich articles by several of our lady members. Sorry. It just didn't work out that way. Maybe next time.

My thanks and appreciation this month go to:

*Perry Peskin for his marvelous article on Grasses. It's true. Too many of us take them for granted.

*Ann Malmquist. As busy as she is, she still made time to write a PLACE TO GO article.

*Kathy Smith for typing and running off copies of the amendments to the Constitution and By-laws.

ANSWERS to FASCINATING FACETS OF NATURE:

1) Steep clopes or cliffs
2) Last (or first) foothill of the Appalachian Mountains.

* should read: NATIVE PLANT SOCIETY OF NORTHEAST OHIO, FOUNDING CHAPTER OF THE OHIO NATIVE PLANT SOCIETY.