On The Fringe

NATIVE PLANT SOCIETY OF NORTHEASTERN OHIO

Founding Chaper of
THE OHIO NATIVE PLANT SOCIETY

Thomas A. Sampliner
Local President and Editor
2651 Kerwick Road
University Heights, OH 44118
(216) 371-4454

Volume 16 **3rd Quarter - 1998** Number 3

On The Fringe
Quarterly News Letter of
THE NATIVE PLANT SOCIETY OF NORTHEASTERN OHIO
2651 Kerwick Road
University Heights, OH 44118

Thomas Sampliner
2651 Kerwick Road
University Heights, OH 44118

FIRST CLASS

USA 32

- DATED MATERIAL
- DO NOT DELAY
- RETURN ADDRESS CORRECTION REQUESTED

On The Fringe
Quarterly Newsletter of
Native Plant Society of Northeastern Ohio

3rd Quarter 1998

IN THIS ISSUE

1998 PROGRAM SCHEDULE Page 2
Dr. George J. Wilder

JACK PINE FORESTS Page 5
Tom Sampliner

KELLEYS ISLAND: ANYWHERE NEAR GILLIGAN'S? Page 8
Tom Sampliner

A PRAIRIE FOR YOUR HOME COMPANION Page 12
Tom Sampliner

* * * * *

1998 PROGRAM SCHEDULE
by Dr. George J. Wilder

It is advised that all participants bring a brown-bag lunch on all field trips and to all workshops. All please call the trip leader to let him or her know that you will be coming. This is very important in

case of any last minute changes which participants may need to know about. The phone number for the trip leader is listed for each event. Please feel free to invite guests.

SATURDAY, **SEPTEMBER 5**, SELECTED LYCOPODS OF CUYAHOGA COUNTY - 9:00 AM TO ABOUT 2:00 PM – **Dr. George Wilder**, Professor of Biology at Cleveland State University (CSU) and Vice President and Program Chairman of the Society, will lead this trip. Participants will initially meet at the botany laboratory of CSU (Room 226 Science Building) for a brief review of lycopod morphology and reproduction and of herbarium specimen of lycopods. Then we will travel to various localities to observe and key out the following species: *Lydopodium dendroideum*, *Lycopodium digitatum*, *Lycopodium lucidulum*, *Lycopodium obscurum* and *Lydopodium tristachyum*.

SATURDAY, **SEPTEMBER 26,** FALL MUSHROOM WALK AT NORTH CHAGRIN RESERVATION – 9:00 AM TO ABOUT 12:00 NOON. **Tom Sampliner**, President of the Society, will lead this trip. We hope to see species typical of a beech-maple forest. Of course, success will depend upon the proper weather prior to this trip. Excessively dry weather immediately prior to the trip may force cancellation. Be certain to call in

advance for this trip. Tom's number is (216) 371-4454 to ensure that it has not been cancelled.

SUNDAY, **NOVEMBER 1**, LAST FLING FIELD TRIP – 9:00 AM TO ABOUT 1:00 PM – **Dr. George Wilder**, Professor of Biology at Cleveland State University and Vice President and Program Chairman, will lead this trip. Most likely, we will examine plants of vacant, disturbed lands within Cleveland and/or suburbs nearby. Prominent, among species observed will be members of the families Chenopodiaceae (Goosefoot family), Gramineae (Grass family), and Compositae (Sunflower family). Telephone George Wilder at work (216) 687-2395 or at home (216) 932-3351 if you wish to attend.

SATURDAY, **NOVEMBER 7**, ANNUAL MEETING AND BANQUET – 5:30 PM TO ABOUT 9:00 PM – **Dr. Herbert Wagner**, Professor of Botany at the University of Michigan, Ann Arbor will be our guest speaker. Dr. Wagner is an internationally renouned authority on pteriodophyes, especially of ferns. He and his students have substantially refined our knowledge of taxonomy,cytology, life histories and putative evolutionary trends of these organisms. His talk is entitled "Unusual Wildflowers of Ohio." Look for more details in the next issue of "On The Fringe."

* * * * *

JACK PINE FORESTS
by Tom Sampliner

Jack pines (*Pinus banksiana* Lamb.) are the most northern of all pines. They range across the northern tier of North America, being mostly in Canada west of the Great Lakes and then sporadically through to northern New England on the east.

They occur on rolling to flat sand plains at elevations ranging from 1100 to 1700 feet with occasional exception up to 2800 feet at the most southern penetrations.

The critical climate requires mild to cool summers, very cold winters with moderate to heavy snowfall. They occur in pure stands as well as associations with black spruce (*Picea mariana)*, paper birch (*Betula papyrifera)* and quaking aspen (*Populus tremuloides)*.

This species is a pioneer upon burned and/or exhausted sandy sites. It is closely related to and can hybridize with lodgepole pine. Typical of pioneer species, it is short lived.

Seed production begins from 5 to 20 years of age reaching it's maximum from 40 to50 years of age. Many of the cones remain closed persisting on the tree. Opening requires dry weather, 80 degree minimum temperature and/or fire.

White-tail deer browse on saplings while snowshoe hare and particularly porcupine will also go for the bark. Seeds are preferred by red squirrel, chipunks and whitefooted mice. Bird seedeaters include: goldfinch, bronzed grackle and robins. On this tour we will also learn of the fascinating relationship with the Kirtland Warbler.

A very good description is set forth by George A. Petrides in the Peterson Field Guide called, "TREES & SHRUBS". A paraphrase would be, a shrubby small to medium sized northern tree with short 2 needled clusters. This needle trait is diagnostic for this species of pine in our area being ¾ to 1 5/8" and no more than 1/16" across. Equally unique are the cones that curve or bulge to one side.

These remarks are a synthesis of species information in Grolier's "FIELD GUIDE TO NORTH AMERICAN TREES" by Thomas S. Elias, revised edition 1989, a must have for tree lovers.

Armed with a species description and some climatic remarks, it is interesting to review some tree species relationships and of the dynamics of succession. This section is paraphrased from a marvelous work called, "LEGACY, THE NATURAL HISTORY OF ONTARIO" edited by John B. Theberge, 1989.

The section on southern boreal forest observes that birch and aspen populate the open sunny areas as the pioneers. From an understory of herbs and

shrubs arise the next wave of trees. This includes balsam fir (*Abies balsamea)*and white spruce (*Picea glauca)* rather than the hardwood deciduous of farther south. The pioneers only dominate for a short span. The named conifers can start nicely in the shade. Their growing boughs cut off light penetration to the forest floor which combine with their rot resistance due to tannin and the leaching of rainwater through their needles gives rise to an acidic, harsh environment that is nutrient poor and sparsely vegetated. -

White spruce produces prodigious seed quantities beginning at about age 60. The firs, by contrast, began by age 20, producing larger seeds in lesser quantities. However, by age 60-70 they have run their life cycle and yield to the spruce. Fire becomes and integral part of this or any other forest system. Whether started by lightning or human activity, it recycles nutrients back into the purged system. The species associations following fire vary considerably depending upon such variables as: dryness, age, seed sources, and whether the fire was only in the crowns or was also traveling at ground level. We will observe, learn about and investigate the pioneer species that is breeding ground home to the Kirtland Warbler, the Jack Pine.

* * * * *

KELLEY'S ISLAND; ANYWHERE NEAR GILLIGANS?

by Tom Sampliner

On a picture perfect 70's day, Saturday, June 18th, I had opportunity to take part in a botanical exploration of a recently acquired property for the Cleveland Museum of Natural History. Our reaching the island was the most typical one; being via the ferry boat from Marblehead. The short trip across Sandusky Bay gives one time to take in the many aquatic endeavors taking place in this playland. With some of the cowboy type jet skiers, an aquatic cop or two would be a welcome addition.

The tract is west of the glacial grooves. These are one of the state holdings upon this limestone pebble in the lake. The parcel is well wooded and was to disclose a surprisingly rich diversity of plant life.

One caution as you motor, walk or otherwise transport around the island. Golf carts and bicycles are everywhere and with each group operating to their own version of rhythm and traffic procedures. Be on the lookout for the unexpected. By the way, it seems to be unwritten custom that while riding a golf cart you must have your beverage of choice in hand and highly visible.

As we reached the property, we could see roadside the fernlike leaves of the limestone loving herb robert (*Geranium robertianum*) with some specimens still contributing their two tones of tiny pink

flowers to the visual palette. Also present, were the now attractive stage of ramps (*Allium tricoccum*) in most prime bloom condition. Not quite as prime was the gravel growing nodding onion (*Allium cernuum*). Taller than any of these species was an unusually frequent showing of trumpet creeper vine (*Campsis radicans*) with some having their long orange tubular flowers open for business. Most were perhaps a foot off the ground and merely displaying their pinnate oval to lance shaped compound leaflets. For those with blooms, it was like neon lights to the butterflies. The island was loaded with these dancing bands of color.

Speaking of butterflies, the uncommon for our area giant swallowtail is in good supply due to several of it's favorite food sources: namely Prickly ash (*Xanthooxylum americanum*) as well as fragrant sumac (*Rhus aromatica*). The former can be described as being a shrub with four regular flower parts having compound entire leaflets numbering 5 to 11 and prickly stems. The very small greenish flowers appear in axillary clusters before the leaves are fully developed. Rocky woods and thickets are home to this member of the rue family. The sumac, a member of the cashew family, has leaflets in threes with blunt coarse toothed margins, giving a resemblance to the itch causing poison ivy – with which we were to become all too familiar as the day progressed. This sumac has yellow flowers in short dense spikes appearing in spring as the leaves unfold. Rocky woods is the expected habi-

tat.

The roadsides allow sun to liberally arc along the edges. No doubt this is what brings to bloom tall (waist or slightly higher) blue flowering spires of bellflower (*Campanula americana*). Light blue five part flowers in the leafy spike sit in axils of lance shaped toothed leaves. Moist thickets are the expected habitat for this member of the bluebell family. Even taller was a figwort. The species called, either Carpenter's Square or Maryland figwort (*Scrophularia marilandica*) was adjacent to the most handsome group of bellworts. These irregular flowers, two-lipped and tubular grow in loose clusters. Green or brown flowers have an erect, 2 lobed upper lip while the middle lobe of the lower lip is bent downward toward the bottom of the ovary. The undeveloped stamen is flush with the inner surface of the upper lip; if purple or brown it is this species but if green it is another lance-shaped figwort (*Scrophularia lanceolata*). The leaves of the latter are also coarser.

The thick interior was rough going. Roses were everywhere. As previously mentioned, we become overly well aquainted with poison ivy (*Toxicodendron radicans*) which manifest in both tree vining and robust ground cover forms. As if this were not enough, that we were being pricked or having to watch footing and handholds, the thick shrub story kept you tripping, falling almost comically dancing through the woods. Some of the

species present were rough-leaved dogwood (*Cornus drummondii*), round-leaved dogwood (*Cornus rugosa*), and red ash (*Fraxinus pennsylvanica*). Of these the rough-leaved is worthy of comment since it is not prevelant in our immediate area. The species is 10 feet tall with gray mature branches often reddish the first year. Pith would be typically brown, rarely white. Leaves are opposite broadly ovate coming to long acuminate tip and 4-5 pair of lateral veins. The upper leaf surface feels like it needs a good shave, a condition called scabrous. White flowers are in a flat-tip cyme changing to white fruits on a red pedicel. It is more common in western Ohio.

Hippity hop creatures of the toad and frog menagerie just escaped your feet. At this ground level, sharp eyes spotted two members of the Orchidiceae: specifically in the genus *Liparis* for twayblades. The in fruit lookalikes: Lilly-leafed twayblades and Loesel's or fen orchid; respectively (*Liparis lilifolia*) and (*Liparis loeselii*). Frankly, our group could not agree on which of the seen specimens were which at this confusing stage.

It was dark inside the dense thicket of this preserve. Every so oftern you could come upon what appeared to be a miniature juniper tree perhaps one foot to 18" tall, as if some fantastic woodland creature had planted an arboretum. At this young stage they had a power to attract attention.

Several of the group were captivated by the rich display of *Carex, Scirpus* and other sedge and bulrush species. These ranged from common to rare.

It will be interesting to return at different times during the growing season to follow the progression and see what each time slot holds. It will also be interesting to see how the Museum resolves creation of some kind of pathway amidst the bumper crop of poison ivy (*Toxicodendron radicans*).

* * * * *

A PRAIRIE FOR YOUR HOME COMPANION

by Tom Sampliner

On Sunday, July 26th, a very small group met at Smith Cemetery, which is slightly south and west of Plain City in the Darby Plains. We could not have expected nor ordered a more perfect day. Blue sky was punctuated by passing clouds ranging from wispy to billowing. Cooling breezes that we appreciated more as the day progressed pushed them along. Temperature was a pleasant upper 70's.

Ron Demmy, Preserve Manager for the O.D.N.R., was our leader. He was knowledgeable especially as to the historical perspective of each preserve and the Darby Plains and was a most gracious host. Earlier in the week I had learned from Ron by phone that this was the best bloom in

the eight years he has been manager.

The literature certainly lists how small these prairie remnants are; however, the visual impression of seeing these small tracts tightly fenced in from the surrounding croplands makes a striking sight. The cemetery preserves are higher than the surrounding terrain and seem so isolated against the flatlands that appear endless around them.

As you enter Smith, the grasses and forbs tower above your head. The narrow paths taking you in seem nothing more than animal created. Once inside, the feeling can seem almost claustrophobic. Around the perimeter, old, large-girthed bur oaks, (Quercus macrocarpa) stand sentinel duty. They predate the preserve and even statehood. This is known because a few years ago one came down in a storm enabling Ron to count in excess of 300 rings of age.

Of all the colors, certainly yellow is most prominent. Intriguing for the floral configuration, Gray-headed coneflower, (Ratibida pinnata) was everywhere. This composite gives you a swept back appearance as the yellow rays angle backward away from the disc. These were everywhere and in good supply. Prairie dock (Silphium terebinthinaceum) puts up a very tall, stout flowering stalk for those yellow flowers, but it is the very wide basal leaves that set off this composite.

The flowers are not small at about two inches wide, but in proportion to those thick stalks and super wide leaves they appear so. Whorled rosinweed,(Silphium trifoliatum) continues our yellow color scheme. The noticeable feature for this composite is the whorl of mostly three but occasionally four stem leaves on a stalk not as thick as the first named species

Ox-eye, (Heliopsis helianthoides) is a composite but not a true sunflower. In fact, it may be distinguished by the fertile ray flowers that have a small forked pistil at the base of each ray. It also helps to know that the coarse sharply toothed leaves including the uppermost are opposite. Some true sunflowers were also present; namely, pale-leaved wood sunflower, (Helianthus strumosus) and the Saw-toothed sunflower, (Helianthus grosseserratus).

Seemingly hidden away beneath these blooming heights were the tombstones of pioneers from the 1800's. Many headstones would qualify as works of art. This may also explain the occasional vandalism. We were informed there are still a few of the old master stone carvers around who can relate geological history and sources for the stones as well as fascinating anecdotes about the artwork and prose.

As we reflected upon this, mockingbirds swooping down from the bur oak limbs to snatch insects entertained us. Those white wing patches flashed frequently. Even an occasional kingbird got into the act, though most of our sightings were of them upon the utility wires. Kettles of vultures were frequent throughout the day; kind of made you check your pulse to assure you were OK. It was also good to glimpse indigo buntings adorning the wires as we whisked around.

It would not be too much longer before the stiff goldenrod (Solidago rigida) joined the show. Too bad we missed them for they have large heads for goldenrods. Now they merely stood erect, knee high, rough oval leaves on a downy stem with the unready flower cluster drooping.

Perhaps slightly taller, generally waist high, was another composite which changes our color scheme. Meet the unmistakable native called either bergamot or monarda, (Monarda fistulosa).puts forth individual large flower heads with pink tubular ray flowers surrounding an off-green disc. From each pink narrowed upper lip emerge the stamens and colored bracts underlie the receptacle. We have also changed families as these are mints. Often these showy flowers, now at peak, provided the perfect framing for an old headstone. Relatives could not have provided any better.

If permitted, let me briefly return to the

composite family for the well known purple coneflower, (Echinacea purpurea).It is easy to see why these have been domesticated. With flowerheads that go 2-4 inches wide showing off rays of a reddish purple and a central disc with upright yellow to orange-brown florets, even a single flowering stalk gets noticed. Humans aren't the only ones who notice either. Insects are well aware as everything from tiny solitary bees to gaudy large butterflies stop in for a visit.

It must be said that even an isolated preserve like these is not immune from alien invasion. All too prevalent was bouncing bet, (Saponaria officinalis) an alien that took up more than it's fair share of space in all three sites visited. Though past prime, their numbers made them noticeable.

All too quickly to adequately photograph and appreciate Smith, we had to head on over to Milford Center Railroad Prairie. It is a powerline right of way kept open a mere 65 feet wide and 1+ miles long. Being north of both Smith and Bigelow, it is in Union County.

While all three sites had the federally listed rare plant called royal catchfly, (Silene regia) this was by far the most extensive and impressive display. Along the path it was as if an elaborate

set of extremely bright display lights were set among the forbs glowing with red 5-petaled, inch wide flowers. They were at prime and stood from 2 to 4 feet high generally having at least a dozen of these impressive flowers per stalk. It is hard to believe these belong to the same pink family as does the unimpressive bouncing bet.

It was at this site that big bluestem put on it's best show, (Andropogon gerardii). That three-pronged set of panicles were here freshly opening and allowing us to see the earthtone palette of oranges, browns, yellows and greens. Neither little blue stem, (Schizachyrium scoparium) nor Indian grass (Sorghastrum nutans) were quite ready for company yet. With some imagination at any of the three sites, you could fantasize as to what it must have been like to have traveled this way back in the early 1800's. In the prairies, if you were walking, it must have felt quite claustrophobic.

Both the black and brown-eyed susans had a familiar ring for me as I have both (Rudbeckia hirta and triloba) in extensive patches in my back yard. Bright golden yellow ray flowers attract lots of insects. Leave the seed heads on all winter as I do and the birds and critters will thank you.

The open path gains you good opportunity to view the perhaps foot high nodding wild onion, (Allium cernuum). Drooping umbels of pink

florets top off the typical stout onion stalk.

This was the one site where the insects in the guise of mosquitoes make themselves known. Was that the click of a camera shutter I just heard or some one swatting one of the little pests?

Again, it was time to move on to our final stop of the scheduled tour, Bigelow Cemetery. This returns us to Madison County. A well-weathered wooden fence that surrounds the preserve comes almost out to the street. An old style wooden sign announces the preserve. Poking through the fence was a tightly packed display of the beautiful flowers we were becoming so well aquatinted with this day.

Each site had only a very few of the federally listed Prairie false indigo, (Baptisia lactea). We were far too late to see this in flower; so we had to be content with the large pods jiggling in the breeze.

Some of the most artistic headstones were at this site. It was here that the bergamot and purple coneflower seemed to save their best show for us. As if our hearts were not already won, the most adorable three baby kittens came out of nowhere seeking attention. One was gray, one calico, and one white and tan. No mother or owner was apparent. If logistics for the day had been different they would have gone home with me. They wandered with us on the narrow paths.

I was sad to leave them.

It was at this final site that a most unusual vision awaited us. It was here we were treated to color variation of the royal catchfly. One scape had all flowers upon it in a delicate pink color. Another had most flowers in a two-color scheme. The lower portions of each floret were a creamy white and the rest the standard red. If you listen closely you can hear the clicking away of all our cameras.

If I recall correctly, it was also here that some shingle oak (Quercus imbricaria) was inside the preserve. Ron told us these could cross with the bur oaks previously mentioned and create a hybrid.

This was the only stop where we saw wild petunia (Ruellia humilis) open. The light blue tubes have a certain resemblance to bluebells. Flowering spurge, (Euphorbia corollata) was open at all the sites, but compared to the larger, showier other plants, who noticed?

I am sure I speak for all in our small but mighty group in saying it was a great trip. Camaraderie was excellent, the guide congenial and knowledgeable. Too bad more of you folks don't take advantage of such opportunities.

* * * * *