



The Fringe

Newsletter of the Native Orchid Preservation and Education Society
nativeorchidpreservationeducationsociety.com

October

Letter from the President

Hello everyone,

I just finished re-reading our last The Fringe newsletter. I hope everyone is taking the time to read it, there's a lot of great information there.

A group of 6 headed to Cranberry Bog last month with our protective suits, gloves and tape to keep our gloves in place. Unfortunately, some of us still ended up with the dreaded poison sumac rash. After discussing how we still ended up with a rash, we decide that it wasn't the suits fault, but human error.

Our first mistake was not having scissors to cut the tape that was around our gloves. Two of us ended up with a rash on our forearms. We also ended up with some secondary contact and we think that was from people sitting on the seats of the boat with their suits on and then those of us who took our suits off got it on our clothes. It's hard to comprehend how oily the sap is and how easy it spreads.

Our planned work day with ONAPA on the bog, October 31, was cancelled because of a 100% chance of rain. Plans are to reschedule the next week.

We had a productive meeting last month and have field trips planned to places that we haven't visited and also trips to revisit some places that we were last year. This will allow new members or members who were not able to go to see the orchids that are blooming in those areas. The truth is it's hard to resist going every year!

When the schedule is finalized it will be put on our calendar.

Enjoy the upcoming Holliday's!

Sincerely,
Teresa Huesman

It's time to renew your membership for the new year!
Membership forms for the Native Orchid Preservation and Education Society are available at nativeorchidpreservationeducationsociety.com

Planned Hikes and Work Days

Nothing is scheduled except work on Cranberry Bog for the rest of the year. Tentative trips for next year are listed in the minutes of our last meeting. They are found at the end of this newsletter.

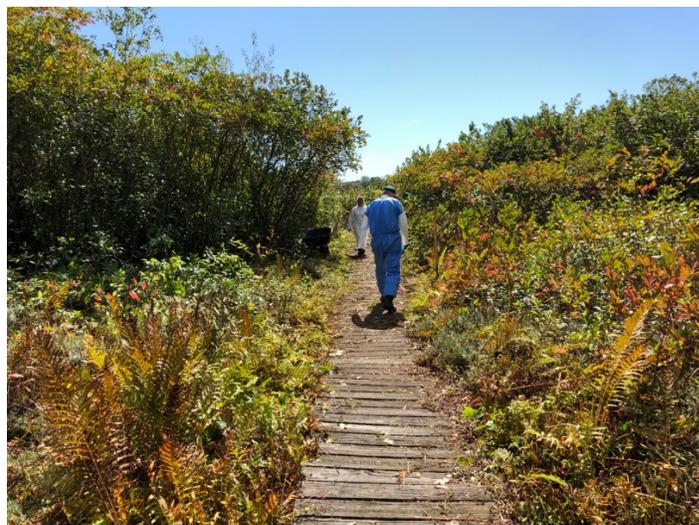
Keep in mind, that as the orchid season winds down, several *Spiranthes* species will be in bloom throughout October.

We will be doing preview hikes to see what is available throughout the year. If you would like to be put on an email list to be notified, please let Teresa know.

Cranberry Bog September 25, 2019

Seven members of the Native Orchid Preservation and Education Society (NOPES) joined with 6 Ohio Natural Areas & Preserves Association (ONAPA) members and assistants and 4 Ohio Division of Natural Areas and Preserves (ODNAP) members for a successful day at Cranberry Bog! The goal for the day was to clear an area along the boardwalk of woodies, in particular poison sumac. In addition to cutting the invasive plants, trained members treated the cut stems with herbicide. The cut plants were hauled to the edge of the bog. The first group to the bog cut the overhanging plants along the board walk so we could more safely work in the region. This opened areas of the boardwalk that hadn't been seen in recent years. It was also noted that portions of the original boardwalk had disappeared. We were instructed to work in groups that included people to cut stems, treat stems and haul the brush so that no cut stems were missed. The weather cooperated beautifully, although the protective suits provided personal saunas for each of us! We were pleased to see *Sarracenia purpurea* and *Pogonia ophioglossoides* plants and seed pods but disappointed to not see sundews and cotton grass.

The following pictures are from our work with the first being before and after pictures. And don't miss our ultimate goal!











What it once was!!!



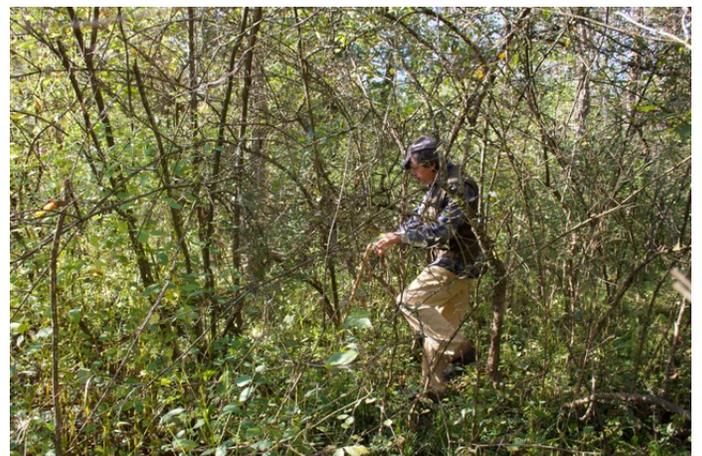
October 5 Betsch Fen Field Trip

Dave Minney former manager of Betsch Fen led Angela Carter, Janet James, Jan Yates, Ann and Dan Tsui, Greg Blum, Tim McNiven, Ken Mettler, Jeanne and Barry Rhinehart to the remote fen near Chillicothe, Ohio in Pickaway County. Betsch Fen is owned by the Ohio Branch of the Nature Conservancy.

We had to transverse a rugged terrain of pasture, fences, brush, woodlands and Blackwater Creek with no noticeable trail to reach the fen and its boot-sucking muck. It was worth all the effort to reach the fen as we



were rewarded with gorgeous wildflowers. The weather was perfect with low temperatures making the hike bearable. Also, no mosquitoes!



Betsch Fen is a prairie fen. It is a protected remnant of Pickaway Plains. Historically in the 1600s and 1700s Pickaway Plains was a prairie inhabited by the Shawnee Indians. They had three villages in the region Cornstalk Town, Grenadier Squaw Village and Kispoko Town. The name Pickaway comes from the variation of the name of the sept of Shawnee that settled the region – Piqua, Pickaweeke, Pedkawee. The Pickaway Plains encompasses several miles south of Circleville, Ohio. The geology of the region is sand and gravel deposits from the Wisconsin glacier. The water supplying the fen come from artesian springs running through the glacial deposits of sand, gravel and limestone bedrock. The Blackwater Creek snakes throughout the area.



When we finally got through the brush to reach the fen, the woody plants mostly disappeared, and the view opened to the sedges and wildflowers of the fen itself. We were surprised to see that the soil of the fen was still so wet and soggy as the surrounding region was quite dry.

Walking through the fen the we saw the Lesser Fringed Gentian, *Gentianopsis procera*, had not quite opened as it was still early morning. Continuing through the fem we chanced upon more of the fall wildflowers of the fen.

Parnassia glauca, grass of parnassus
fairly certain those are.



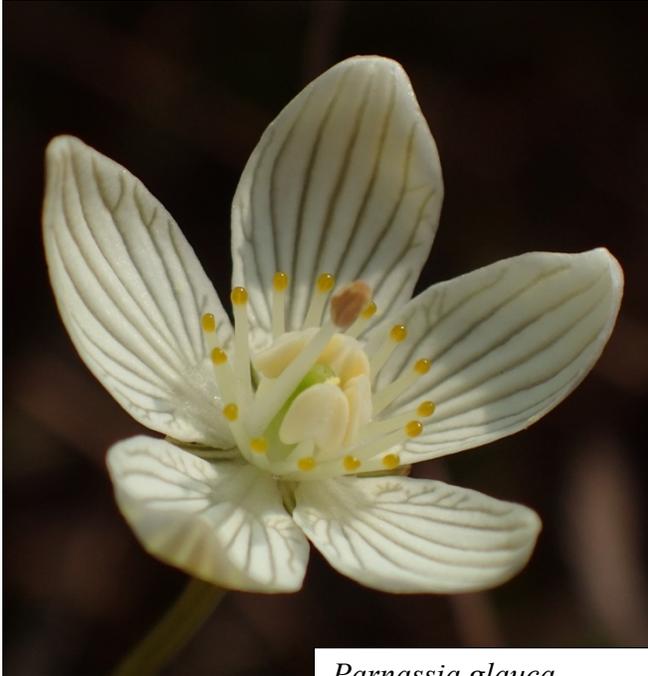
Sanguisorba canadensis,
Canada burnet



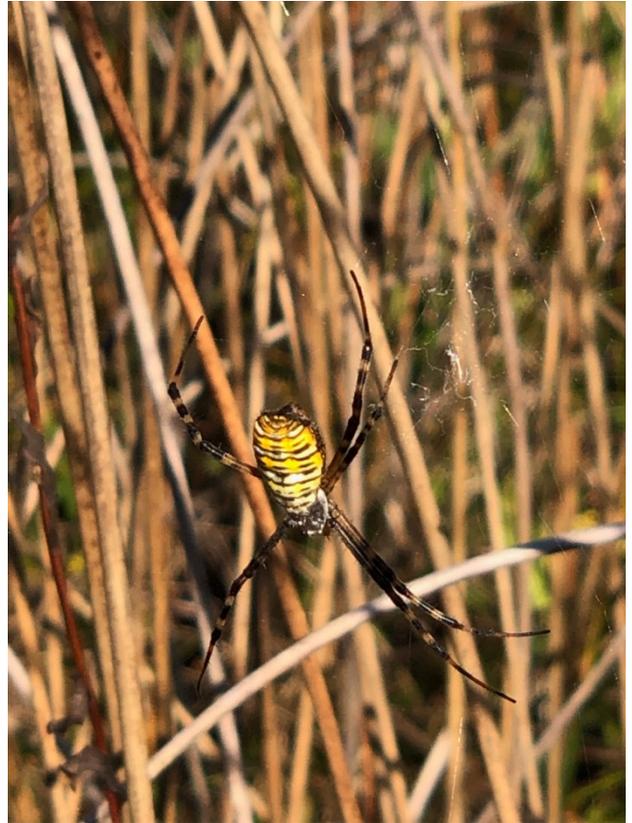
Symphyotrichum novae-
angliae, New England aster



Oligoneuron ohioense,
Ohio goldenrod



Parnassia glauca,
Grass of Parnassus



And even saw some wildlife! *Argiope aurantia*, the Golden Garden Spider

Finally, the gentians opened fully!



And near the center of the fen the sedges cleared some



and we finally saw the orchids!



Spiranthes cernua, the Nodding Ladies' Tresses was starting to fade but we even saw some cleistogamous forms.

Then since we were with Angela, we had to see what else was in the “nearby” areas. On to Scioto Brush Creek where it was too dry for many things in bloom – *Botrychium dissectum*, cutleaf grapefern, bracket fungi, beech drops and a lone cardinal flower.



And then on to Shawnee State forest to see *Spiranthes ochroleuca* , the Yellow Ladies' Tresses



And the cleistogamous form of *Spiranthes magnicamporum*, the Great Plains Ladies' Tresses



And seed pods on *Platanthera clavellata*, the Little Club Spur Bog Orchid and *Cypripedium acaule*, the Pink Lady's Slipper.



And then on to Lynx Prairie, as it was so close! There *Spiranthes magnicamporum*, the Great Plains Ladies' Tresses put on quite a show.



A successful day!

Orchid of the Month – October

-Jeanne Rhinehart

Spiranthes magnicamporum - the Great Plains Ladies' Tresses

Spiranthes magnicamporum, the Great Plains Ladies' Tresses was the first *Spiranthes* species to be identified as a new species and not a variety of *Spiranthes cernua*. It was described as a species in 1973 by Charles Sheviak. Other species later identified as distinct species from others in the *Spiranthes cernua* complex are *Spiranthes odorata* - the Costal Fragrant Ladies' Tresses, and *Spiranthes ochroleuca* - the Yellow Ladies Tresses. Recently *Spiranthes cernua* and been further divided with *Spiranthes incurva* and *Spiranthes arcisepala* being identified as their own species.

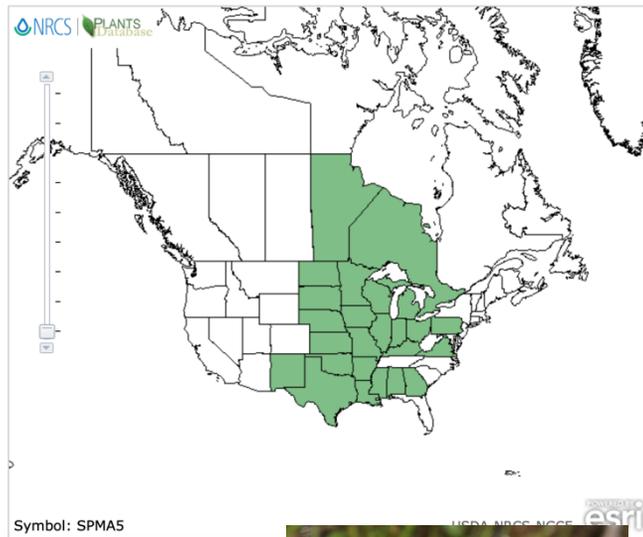
The *Spiranthes cernua* complex group are commonly referred to as the Nodding Ladies' Tresses. *Cernua* means "nodding" as the base of the flowers arches downward which makes them appear to be nodding. The complex is also commonly referred to as the Autumn Ladies' Tresses referencing their fall blooming time. *Spiranthes magnicamporum* grows in drier regions than *Spiranthes cernua* often growing nearby.



		
<i>Spiranthes cernua</i>	<i>Spiranthes ochroleuca</i>	<i>Spiranthes odorata</i>
		
<i>Spiranthes magnicamporum</i>	<i>Spiranthes incurva</i>	<i>Spiranthes arcisepala</i>

The name *magnicamporum* comes from the Latin “magnus” and “campus” with the meanings large or great field or plain thus the Great Plains of the United States giving the name Great Plains Ladies’ Tresses.

While common in the Great Plains regions, *magnicamporum* also occurs in the Appalachian Mountains and in Ohio, West Virginia, Virginia, North Carolina, Michigan, Wisconsin, Indiana, Texas, and Tennessee also appearing in Ontario, and as far west as Colorado, Utah and New and recently in New York. It is found in wet, meadows, moist to dryer prairie and conditions in calcareous soils but also fens and even dune soils preferring the drier but tolerating moist conditions.



Spiranthes
Kentucky,
Georgia,
Alabama,
Canada
Mexico
calcareous
grassland
around
conditions



While common in many parts of America it can be threatened by of soil in its growing region, by species growth and by general The last can be controlled by burns of habitats.



North
compacting
invasive
succession.
periodic

“Plant glabrous except for capitate hairs on the upper stem and inflorescence, 25-35 cm tall. Roots several, very thick, fleshy. Leaves linear-lanceolate to oblanceolate, 10-15 cm long x 8-12 mm wide, characteristically absent at anthesis. Inflorescence a tight spike of 20-40 flowers, each subtended by a lanceolate bract 7-10 mm long x 2-3 mm wide. Spike multi-ranked, with phyllotaxy 1/3 or 1/4. Lip 8-10 mm long x 3-5 mm wide, white with a dull yellowish center, oblong-ovate, with a wavy margin distally, and 2 relatively small basal tubercles. Petals white linear-lanceolate, 8-10 mm long x 1-2 mm wide. Sepals white, lanceolate to linear-lanceolate, 8-10 mm long x 1-3 mm wide. Petals and dorsal sepal convergent. Lateral sepals widely spreading, incurved apically and commonly arching above the flower.”

Besides differing habitat of open prairies and higher pH than *Spiranthes cernua*, another of *Spiranthes magnicamporum* distinctive characteristics is its pleasant fragrance, in some cases noticeable from a distance. The fragrance is described to be coumarin. This is the fragrant substance produced from tonka bean tree seeds. Another distinctive characteristic is its lack of leaves while in bloom. Seeds of *Spiranthes magnicamporum* seeds differ from *Spiranthes cernua* in that *Spiranthes mangincamporum* seeds are short and broad in comparison to the longer and narrower seeds of *Spiranthes cernua*. Also, *Spiranthes magnicamporum* seeds are nonembryonic while *Spiranthes cernus*’ are poly embryonic. *Spiranthes magnicamporum* is also the latest *Spiranthes* to bloom. Blooming times vary by region starting around August until frost.

It is pollinated by bumblebees, such as *Bombus fervidus*

and *Bombus nevadensis*



but can also self-pollinate (cleistogamous).



References

<https://plants.usda.gov/core/profile?symbol=SPMA5>

<https://www.inaturalist.org/taxa/52774-Bombus-fervidus>

<https://www.inaturalist.org/taxa/341001-Bombus-nevadensis>

Orchids of the Western Great Lakes Region, Frederick W. Case, Jr.
Edwards Brothers, Inc., 1987, pp. 177-180.

Native Orchids of the Southern Appalachian Mountains, Stanley L.
Bentley, University of North Carolina Press, 2000, pp198, 206-209.

Orchids of Indiana, Michael A. Homoya, Indiana Academy of Science,
1993, pp 207-210.





Native Orchid Protection and Education Society (NOPES)

Membership Meeting Minutes of October 13, 2019

Attendees: Teresa Huesman, Jeanne Rhinehart, Angela Carter, Jan Yates, Ann Tsui, Barry Rhinehart, Ken Mettler, Michelle Little, Flower White, Connie Peebles.

President Teresa Huesman started the Membership Meeting of NOPES at about 3:30 pm on Sunday October 13, 2019 at the home of Jan Yates, 4110 Rose Hill Ave,

Cincinnati Ohio. Discussion was as follows:

Fieldtrips for next year: Volunteers were assigned specific trips to research. Confirmed dates and destinations will appear on the NOPES calendar page. Recommendations were to visit Kitty Todd in mid-September, Lake Hope/Crane Hollow Preserve in late June, Cranberry Glades in late July, Shawnee in early May and the Wise property, where 7 native orchids have been identified, on the last Sunday in May.

Cranberry Bog: Seven NOPES members joined the **ONAPA Cranberry Bog work detail** on September 25. An area of poison sumac near the boardwalk was cleared and an herbicide applied to the cut stalks by ONAPA and ODNA members certified to handle this product.

Despite our use of gloves, Tyvek suits and chemical blocking agents like Ivy Block, several of our members did experience skin reactions. Examination of contamination sources will continue. For instance, scissors will be made available to cut the tape attaching gloves to the Tyvek sleeves. Perhaps applicators of the "bingo blotter" type would improve the isolation of the herbicide onto specific cut stalks as well as the speed of applications.

MAOC grant money has been used to purchase gloves, Tyvek suits and Ivy Block. In the future a request for propagation supplies may be an option.

The **next ONAPA/ODNR workday at Cranberry Bog is scheduled for October 31, 2019**. NOPES members are invited to participate.

Ken Mettler Studies: Ken reports 2 studies he is conducting on his property. He is observing the effects of carbohydrate fertilization on Autumn Corralroot and determining if there is a correlation between leaf color and inflorescence color in *Tipularia discolor*.

SERC (Smithsonian Environmental Research Center): Juliana's request is to be sent 6 plants in our region including their associated fungi. Perhaps *Aplectrum* is an option.

Putty Root Mapping NOPES Study Update: Since ash trees are disappearing, how are the *Aplectrum* affected? In a Cincinnati park, of the 116 *Aplectrum* (putty root) leaves counted and photographed by members of NOPES, 14 produced spikes and all of these did set seeds.

Zoo: We continue to encourage partnership with the Zoo and Botanical Garden. The outreach property in the Mason area's bog is under construction for bog restoration. They encourage volunteers.

Website: The NOPES website presently gets about 39 hits per month. A link to a donation page on the website would facilitate donations. The cost of the website was \$71 the first year, now will be \$121/year to continue at the present level.

501c3 status: 501c3 status would enable tax deductions for donations as well as money spent for the Society, and even make banking costs less. Work continues towards this goal.

AOS (American Orchid Society) membership: NOPES should join AOS at some point.

NOPES Newsletter: The Fringe will come out every 2 months. The December newsletter will feature a list of members' favorite orchid books. *Please email the name, author and a very brief description of your favorite orchid books to Jeanne.*

Money making items proposed:

- a. T-shirts; "NOPES" and/or "Support Cranberry Bog"
- b. Encourage related societies to join NOPES
- c. Jeanne is completing booklets on native orchids found in each of several nearby states. These can probably be sold for about \$10 each, for a small profit after printing costs.

Treasurer's Report: \$600 is in our bank account. The website will soon require \$121.

Membership: Membership Applications are available for 2020 memberships.

The NOPES meeting adjourned at 6:00 pm. The next meeting is TBA.

Respectfully submitted,

Ann Tsui