



The Fringe

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

Summer 2021

Letter from the President

Hello everyone,

Hope you are enjoying the warmer weather which brings us beautiful flowers which include orchids. We have organized several trips for this year.

We have planned seven society trips so far this year - our first was in March when we went to Germantown Metro Parks checking for leaves of the putty root and other spring bloomers.



Photo by Jeanne Rhinehart

In early May, we went to Shawnee State Park for the Pink and Yellow Lady's Slippers and Showy Orchis.



Photo by Jeanne Rhinehart

Our next trip was to the Middletown area to Brian and Donna Wise's property where we were able to see *Liparis liliifolia* and other blooming plants on their wonderful property. Leaving the Wise's, we traveled to Cedar bog to see the Showy Lady's Slipper, *Cypripedium reginae*.

On June 19th we planned to travel again to Cedar Bog but were rained out. If you chose to go Grass Pinks, *Calopogon tuberosus*, and the Lesser Purple Fringed Orchid, *Platanthera psycodes* can be seen.



Photo by Jeanne Rhinehart



Photo by Jeanne Rhinehart

Several visited Leadingham Spangler Prairie as the Eastern Prairie Fringed Orchid, *Platanthera leucophaea*.

A guided hike through Cranberry Glades, West Virginia occurred Saturday, June 26th. Several orchids were seen including *Platanthera grandiflora* and *Platanthera orbiculata*.



Photo by Jeanne Rhinehart



Photo by Jeanne Rhinehart

July 24th found us in the Lake Hope area where saw the Purple Fringeless Orchid, *Platanthera peramoena*, the Green Adder's Mouth, *Malaxis unifolia*, and maybe a *Spiranthes*.

Look for emails on our upcoming trips. I hope to see everyone soon!
Sincerely,
Teresa Huesman

Field Trip to Hueston Woods State Park Saturday, September 18

Hueston Woods State Park has several locations where, in late summer, we can find three orchids: *Spiranthes ovalis*, the Oval Ladies' Tresses, *Spiranthes magnicamporum*, Great Plains Ladies' Tresses, and *Corallorhiza odontorhiza*, Autumn Coral Root. The Great Plains Ladies' Tresses is the highlight - it is large, showy for a *Spiranthes* and highly fragrant.

Date: Saturday, September 18, 2021

Time: 10 a.m. EDT

Location: meet at the Hueston Woods Lodge & Conference Center, 5201 Lodge Road, College Corner, OH 45003.

We'll gather in the parking lot and drive to two locations in the park from there.

Terrain: Everything is either roadside, a short walk in the woods or a walk along a service road. The service road is deeply rutted in places but walkable.

Even though our activities are outside, we will adhere to social distancing and the health guidelines that are in place at the time.

This hike is guided and an RSVP is very helpful so we know when everyone who wants to hike has shown up. You can RSVP to Teresa at huesmantj@aol.com or to Jan at jyates4110@gmail.com

Annual Members Meeting and Zoom Presentation from Michael A. Homoya Thursday, September 23, at 7 pm EDT

There will be a short business meeting followed by the presentation "Orchids of the Midwest".

Orchids occur on all continents save for Antarctica, and the orchid family is considered by many to have the greatest number of species of all plant families in the world. To the surprise of many there are over 50 naturally occurring species in the Midwest. This presentation will look at a selection of them and discuss their floral characteristics as well as range, habitat, and blooming seasons.

Michael Homoya served as Botanist/Plant Ecologist for the Indiana Department of Natural Resources, Division of Nature Preserves for 37 years before retiring in 2019. He has written over 75 scientific papers, popular articles, and books about Indiana's natural features, including *Orchids of Indiana*, *Wildflowers and Ferns of Indiana Forests: A Field Guide*, *Wake Up, Woods*, and *Wildflowers of the Midwest* (in press, with co-author

Scott Namestnik). Homoya is a Fellow and former president of the Indiana Academy of Science as well as board member and immediate past president of the Indiana Native Plant Society. He is currently an adjunct faculty member in biology at Indiana University-Purdue University Indianapolis and Marian University. In 2019, Indiana Governor Eric Holcomb awarded him the Sagamore of the Wabash for his contributions to preserve Indiana's natural heritage. Other honors include the Indiana Academy of Science Distinguished Scholar Award, the Distinguished Career Public Service Award from Conservation Law Center, and the Barbara J. Restle Lifetime Conservation Award from Sycamore Land Trust.

Shawnee State Forest Field Trip - Jan Yates

In early May, there is no easier, more productive orchid trek than to drive to Adams County. So, on Saturday, May 8th, after a wet spell, NOPES members and guests gathered at various locations in Shawnee State Park to look for spring bloomers: Showy Orchid (*Galearis spectabilis*), Pink Lady's Slipper (*Cypripedium acaule*) and the Large Yellow Lady's Slipper (*Cypripedium parviflorum* var. *pubescens*).

The Pink Lady's Slippers grow in two locations within the state park which, although not that far apart geographically, seem to persuade it to grow slightly differently. Our first stop was a hillside next to a forest road intersection, with heavier tree cover than the other location: the lady's slippers there are scattered randomly among the trees, in singles and pairs and the blooms facing every direction. Although the Pink Lady's Slippers' blooming can be erratic from year to year, this was a good year and to our eyes, the leaves were uniformly robust and larger than we have seen in recent years.



By the roadside, a solitary patch of the Large Yellow Lady's Slipper was having a good year. Usually there are two plants mature enough to bloom; they were performing on schedule, but the exciting news was we counted numerous seedlings that might be a year or so from blooming.



The second location is a steep hillside at a multi-road intersection with morning sun and less foliage cover and the Pink Lady's Slippers are more numerous, many forming clumps, with numerous near blooming-size seedlings. The stems were shorter than normal on many of the plants, but the leaves were robust; we're hoping it bodes well for next years' population.

Before the hike date, by word of mouth, we heard "the white lady's slipper is back." After a year's absence, it was. And in the rotted stump next to the plant were its offspring.



Finding Showy Orchid is, for me, a yearly gamble. It's one of my favorites but it's so small, it can be easily overlooked on a trail and its white lip is easily spotted by spring rains. (I have numerous pictures of near-mushy *Galearis* from prior years which I keep, proving that I can find it and that I was a few days late.)

This year, we hit the jackpot on the trail by the Nature Center. Despite recent rains, the flowers were pristine, and they were everywhere: at the trail intersections, by signposts identifying nearby trees, on both sides of the trail in places, next to *Goodyera* leaves – everyone was spotting them. *Galearis spectabilis* can have up to 15 flowers but here, the typical amount was 3-4, on slightly shorter than normal stems but still gorgeous with the white lip and the pink or purple sepals forming a hood over the column, and the white spur.

Some years, the spring blooming orchids have a similar timetable at Shawnee State Park and the nearby Wilderness Trail which had been a planned second stop. This year, it was not to be - the orchids at Wilderness Trail, and the Wild Columbine, *Aquilegia canadensis*, were a full week ahead of Shawnee so it's a note filed away for the future.



NATIVE ORCHIDS ON YOUR PROPERTY? – Ann Tsui

When Brian Wise retired to his family farm, he noticed a strange-looking flower. So, he showed a friend who identified it as a rare native orchid and offered to search Brian's land for other rare plants. Since then, several native orchids and many other rare plant surprises have been found on his unique acreage.

NOPEs participants had the privilege of touring this area, guided by Brian and Donna on May 29, 2021. The relatively abundant Large Twayblade (*Liparis liliifolia*) was difficult to spot and marvelous to photograph from different angles. Ragged fringed orchid leaves (*Plantaris lacera*) are tiny in May, and we wondered how Brian spotted them among the tall



Timid sedge (*Carex timida*)

grasses. He explained that 2 years ago it flowered and by watching the spot regularly, was delighted to find the leaves this year.



Large Twayblade (*Liparis liliifolia*) Photo by Alan Wolfson

The property's topography causes a unique drainage pattern that favors not just orchids but other rare native plants and even an extremely rare caterpillar. We all carefully stepped around the timid sedge (*Carex timida*) in bloom and found in just 4 Ohio counties, growing in the center of the path!



Green Dragon bloom

Photo by AlanWolfson

Also viewed were leaves of the endangered zigzag or short stemmed iris (*Iris brevicaulis*), a green dragon (*Arisaema dracontium*) in bloom, and we ogled the 5-foot-long Carrion plant (*Smilax lasioneura*), growing straight up supporting vegetation.



Carrion plant (*Smilax lasioneura*) by Barbara Grooman



Red shouldered hawk

Photo by Alan Wolfson

The depth of knowledge among the 24 hikers was incredible. This led to discussions about the identification of the native red mulberry (present) compared to the invasive white mulberry (not present), observations of geological causes of soil pH favoring certain plants, moth identification, maple mites making the maple leaf react by producing soft spikey projections, and accurate plant and bird identifications. A red-shouldered hawk even posed for us.



Large twayblade (*Liparis liliifolia*)

Photo by Alan Wolfson

In summary, this unique area merits the study and care it has received. We had a most enjoyable visit and are extremely grateful to our hosts for inviting us.



***Aplectrum* Count Study – Jan Yates**

For several years, we've been monitoring a population of Putty Roots, *Aplectrum hyemale*, in Winton Woods to see if the death of the ash trees around it helped or hurt the plants numbers. For the first time, in late March, we did a systematic leaf count and located 21 different plant clusters with a combined 121 leaves. That's the highest numbers of leaves we've seen to date.



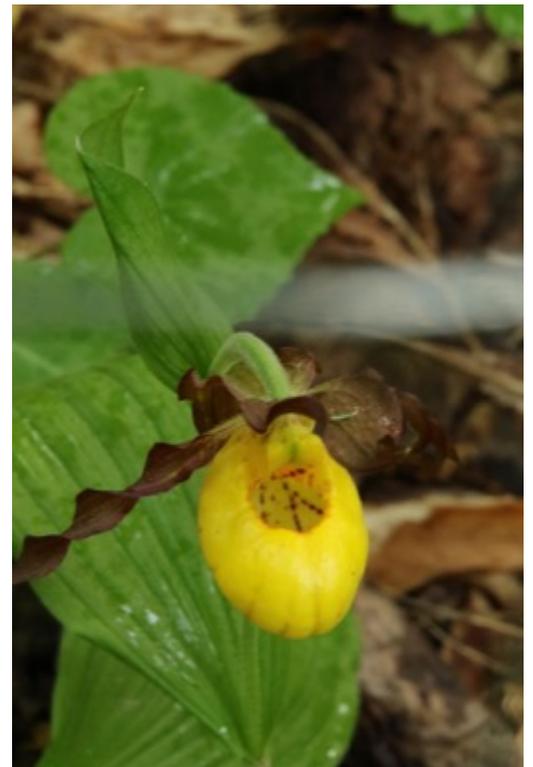
Two months later, we went back during flowering to see how the numbers of leaves translated into flowering spikes. And it didn't. The six or so largest leaf clusters, by count, had nary a flower; actually, combined they had one, the top of which a deer (most likely) had eaten. On a more promising note, most of the smaller clusters which produce flowers year after year still did. Uneaten, in fact, and on a partially sunny afternoon; they looked good.

We'll check again to see how many produce seed pods later in the summer.



Reestablishment of *Cypripedium parviflorum* var. *pubescens* at Mercer – Jeanne Rhinehart

The nine plants we planted last year all came up and one bloomed! We will continue to track their progress. The following photos show the other non-blooming plants. It was too early to look for the *Platanthera ciliaris*.





Heritage Garden Bog Update

Thursday, June 17, 2021, Ken Mettler, Jeanne and Barry Rhinehart met with Guy Denny to observe the bog garden and decide on a plan to restore it.

The bog still has some live sphagnum moss, several Grass Pinks, *Calopogon tuberosus*, and two Rose Pogonia, *Pogonia ophioglossoides*, one pitcher plant, *Sarracenia purpurea*, and many cranberry plants.

Observed problems to be addressed: 1) The level of plants has grown above the raised edges of the bog with the cranberry plants hanging over the edges of the bog. This has a potential of syphoning water out of the bog. 2) The medium in the bog is too high. 3) Rushes, non-sphagnum mosses, and other non-bog plants need to be removed. 4) The pH of the bog water was measured to near a pH of 7 and should be lowered for optimum conditions. 5) The proportion of desirable plants (Grass Pinks, Rose Pogonia, *Sarracenia purpurea*, and cranberry plants) needs to be changed to form a more attractive and healthy bog garden. The present bog is mostly cranberry plants.



With tours of the Heritage Garden resuming this summer the main work on the bog garden will move to fall except for some weeding out of the rushes and other undesirable plants. Ken Mettler is planning to come soon to do this. Ken and helpers will check on the water level in the bog until fall.

Treks By Our Members

Quest for Western Prairie Fringed Orchids - Angela Carter

Sometimes personal schedules and nature's timing are not in sync. Knowing that *Platanthera leucophaea* blooms at the end of June, I had heard that *Platanthera praeclara* blooms a bit earlier and could be mid-May to end of May. The only week that I was able spend in Missouri was June 12 through June 19, 2021. Planning a 9-hour drive, without certainty of finding a blooming plant, meant that I wanted to stay longer than a weekend to look for other rare plants and explore the area; at this time, I had the option of working remotely.

Since orchids and all wildflowers are subject to weather and soil conditions, I planned on stopping at a prairie in IL where Mead's milkweed had been blooming last year; I met with friends but unfortunately, only 3 vegetative plants were found and foreshadowed the lack of success of my trip.



Expecting to be too late for *Calapogon okahomensis*, I still selected a few prairies that had them listed as well as Mead's milkweed and *Platanthera praeclara*. The first prairie, known for *Platanthera praeclara*, let me know that I was too early for them; but that was okay since there were hundreds of bunchflowers starting to bloom. The only orchid found on this trip was *Platanthera lacera*. If you plan to visit MO, expect to encounter numerous ticks in the tallgrass prairies! Storm was covered in ticks as we left the second prairie without seeing orchids and I removed 4 dozen before entering the CR-V as well as after her bath.

All of nature interests me from insects, birds, fungi, geology to wildflowers; I found the glades and prairie plants delightful. Meeting new plants and looking up their identification was a treat. Visiting at least 1-2 sites each day gave me a good idea of where I want to return on my next visit at least a week later than this year's trip. If Mother Nature decides to shift blooming times again, there will always be another trip and more "new" plants to discover. I recently heard that an orchid location with consistent blooming times in OH was not blooming on "time" after I saw buds; remember that the same plant may not bloom each year and keep looking in the area for others to display their blooms.



Echinaceae pallida



Astragalus crassicarpus



Amorpha canescens



Verbena stricta



Melanthium virginicum



Nemastylis geminiflora



Dalea purpurea



Delphinium carolinianum

New York State Orchid Field Trip – Jeanne Rhinehart

For our anniversary, Barry and I visited preserves near Rochester, New York with Angela Carter, Leesa Scudder and Jan Yates (along with Lucy and Storm) and Beth and Doug Martin. We planned this trip for last year and then COVID happened.

We joined a Zurich Bog naturalist hike around the preserve with Paul J. Brach. Zurich Bog, a National Natural Landmark, is a 490-acre sphagnum bog which is part of the Bergen Swamp Preservation Society. It is a wetland area between large drumlins. The hike includes various regions – the boardwalk over the bog, woodlands over the drumlins, muddy swamp wetlands and a floating moor.



The walk started through moist woodlands where we saw *Cypripedium acaule* in a wide range of colors (see Orchid of the Month below)



The trip was planned with this site as our main destination. Here we would see the Southern Twayblade, *Neottia bifolia* previously *Listera australis*. The term “Southern” is a misnomer as this tiny gem is found from Quebec to Florida but is endangered or threatened over much of its range.



After traversing the drumlins, we entered a swampy area with a large number *Cypripedium parviflorum* var. *pubescens*. Until later in this trip this was the largest group of *Cypripedium parviflorum* var. *pubescens* we had seen since the Bruce peninsula.



We ended the trip observing the floating moor. This area had no visible growing sphagnum.

The next day we traveled to Chaumont Barrens Preserve. We were told *Cypripedium arietinum* was in bloom here. Although we only found one plant, its bloom was just starting to open. Chaumont Barrens is one of a loop of alvars from New York across lower Ontario to Michigan and a fine example of an alvar grassland. Alvars occur in northern Europe and around the Great Lakes. There only 43 square miles of alvars in Great Lakes region.

These conditions with a thin layer of soil over limestone are home to some rare wildflowers like Prairie Smoke another attraction on the trip. Prairie Smoke, *Geum triflorum*, forms these wispy seed heads after fertilization



Leaving the Prairie Smoke, we traveled to an area with the largest amounts of yellow Lady's-slippers we have seen since the Bruce. Apparently, the trail led to wet pockets where some of the more moisture loving plants are found allowing these orchids to flourish. We probably saw fifty or more clumps like these!

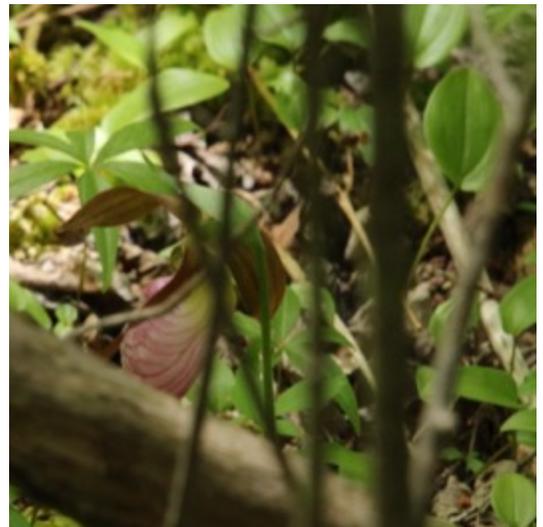


Finally, the other rare alvar plant we wanted to see was found but it was only just opening – the Ram’s Head Orchid, *Cypripedium arietinum*.



We ended the day crossing the exposed rock of the alvar.

Beaver Lake Nature Preserve was next and a hard act to follow from what had just seen. Following the board walk in the overgrown bog we finally found a couple of *Cypripedium acaule*.



Chimney Bluffs State Park was next on our list. We were not expecting to see orchids but the rocks forming the Chimney Bluffs along Lake Ontario. This gave us a chance to take Lucy for a hike. Most preserves do not allow dogs. These bluffs are formed from eroded drumlins.

On the way home we found a pair of ospreys.



Our trip ended with sunset over Lake Ontario at Sodus Point.



Orchid of the Month – *Cypripedium acaule* Aiton, Hort Kew

Walking through an early spring forest and finding *Cypripedium acaule* in bloom is an exciting find. It is one of our largest orchids and the earliest to see after *Corallorhiza wisteriana*. Finding *Cypripedium acaule* in bloom gets the new year's orchid hunt off to a great start. It was the first native orchid I saw in the wild in Waterloo Preserve in Michigan.

Acaule differs from other *Cypripedium*s in North America in that the aperture to the pouch and the stigma instead of being round, the entrance in the pouch is a longitudinal slit in the front of the pouch large enough for a large bee to enter. *Cypripedium japonicum* has a similar opening but is found in China, Japan and Korea.

Cypripedium humile is a synonym. Earliest description was by Leonard Plukenet in 1700 in *Mantissa* as *Helleborine Calceolus dicta*. The present name, *Cypripedium acaule*, was given by William Aiton in 1789 for a plant blooming at Kew. *Acaule* means stemless in Latin, *a* means without and *caulis* means stem. *Cypripedium acaule* has a large number of common names - Pink Moccasin-flower, Pink Lady's-slipper, Stemless Lady's-slipper, Two-leaved Lady's-slipper, Dwarf Umbil, Noah's Ark, Valerian, Whippoor-will-shoe, Squirrel-shoes, Purple-slipper, Rose-vein Moccasin, Hare's Lip, Brown Lady's-slipper, Old Goose, Camel's-foot. "Stemless lady's slipper" refers to the flowering stalk and basal leaves which attach directly to the underground rhizome.



Cypripedium acaule in Shawnee State Forest

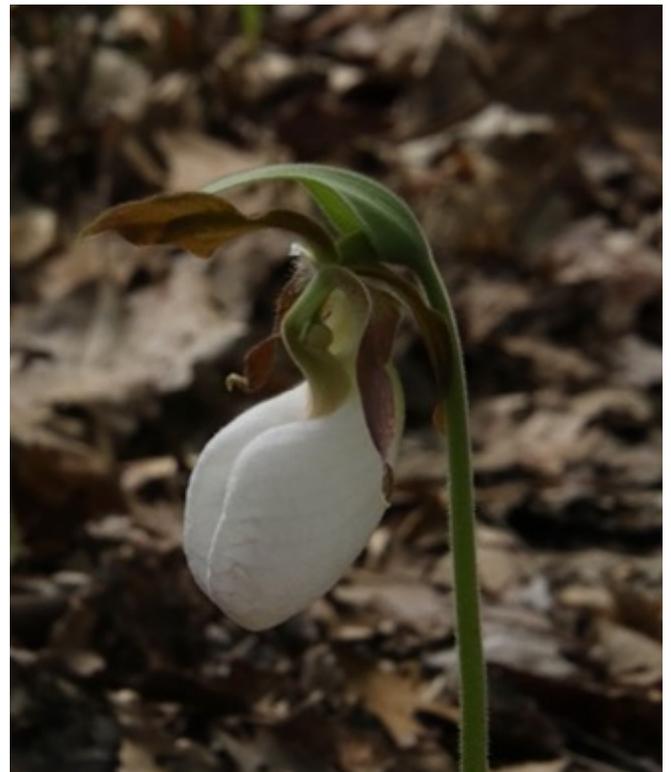


Plant size varies greatly depending on environment. Plant mostly short-pubescent throughout, 25-35 cm tall. Leaves basal, normally 2 (in some sterile plants), elliptic, ribbed, 15-18 cm long x 8-10 cm wide. Roots fibrous. Inflorescence consisting of a single flower, subtended by a green, lanceolate, foliaceous bract, 3-4 cm long x 1-1.2 cm wide. Flowering stem a scape. Lip 4-6 cm long x 3-4 cm wide, pink, obovoid, with a longitudinal cleft in front. Petals ovate-lanceolate, purplish, slightly twisted, 4 cm long x 1 cm wide. Dorsal sepal lanceolate to elliptic-lanceolate, purplish, 3-4 cm long x 1.2-1.5 cm wide. Lateral sepals united behind the lip, ovate-lanceolate, purplish, 3.5-4 cm long x 1.6-1.8 cm wide. Staminode ovate, purplish.¹



forma *albiflorum* and normal coloration. Photos by Angela Carter

Albino forms are found in the northeastern part of its range and are known as forma *albiflorum*. There is also a white color form with dark petals. An unrecognized forma biflorum name has been used for plants having two flowers per inflorescence. Flowers sometimes can be found having two pouches. One is pictured on page 116 of *Wild Orchids Across North America*.



Cypripedium acaule is found over a large range of eastern North America. It can be found in a wide range of climates and habitats – forests of oak and pine, bogs, and pine barrens many times near conifers. The one requirement is for its roots to be in acidic soil. It is found from near sea level to an elevation of nearly 2000 meters.

Flowering season is April in the South, July in the North.



Cypripedium acaule uses deception to attract pollinators – its bright color and attractive scent. Bees in the *Bombus* genus are the main pollinators.

Pollination occurs when insect enters the slit in pouch and cannot exit because the slit has infolded margins forcing the pollinator out through the lip. When exiting through the lip, any pollen on the insect will be deposited on the stigma and then picking up pollen from one of the anthers.

Few seed pods are found among large colonies of plants. Cause may be from lack of pollinators or too long a time between pollination and fertilization. Frost cuts down most scapes but does not affect the leaves. Frost free years find many plants with pods.

For seedling development, *Cypripedium acaule* depends on a mycorrhizal association. It interacts with a fungus in the soil from the *Rhizoctonia* genus. The germinating orchid seed connects with the specific fungal partner allowing the fungal filaments to substitute for the root system of the seedling providing carbohydrates. If this relationship does not develop, the seedling dies. Successful seedlings continue as a protocorm nourished by the fungus for a time (sometimes several years) before green leaves form allowing for photosynthesis to take over.

Rhizomes contain glycosides and other compounds acting as a sedative like opiates without the side effects. It has been used by Cherokees for centuries. Overdoses can cause hallucinations.

Plants have glandular hairs on the leaves and stems. Contact with these may cause a rash like poison ivy.

Every writer emphasizes that *Cypripedium acaule* is extremely difficult to grow. Plants dug up in the wild usually die immediately or after the second year never producing seed. Their roots spread out over a wide area in the wild and do not survive being broken when being transplanted. Collecting seed from wild plants is another problem. The seeds need a specific fungus to germinate and if successful germination is achieved, it takes years for the plant to reach blooming size. So, leave the plants where they are successfully growing in their natural habitat!

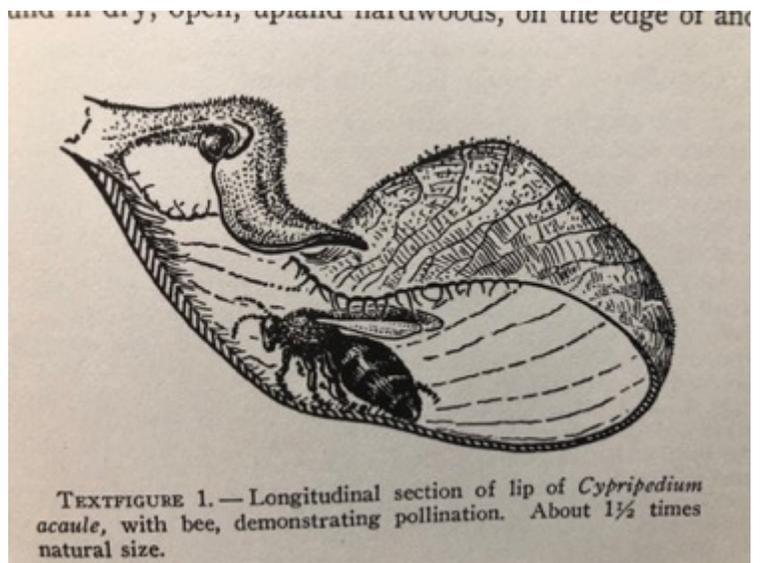
There are reputable orchid vendors selling plants, and all warn of the difficulty growing *acaule* in cultivation. You want to purchase from a reputable vendor. Cheap plants are probably wild collected and probably will be lucky to live two years. *Cypripedium acaule* requires specific cultural conditions – strongly acidic and nutrient poor. Fertilizers can kill plants. The pH needs to be below 5 thus they must be watered with acidic rainwater with a pH less than 5. They require humidity.

References:

1 *Orchids of Indiana*, Michael A. Homoya, Indiana Academy of Science, 1993, pp.93-96

The Native Orchids of the United States and Canada excluding Florida, Carlyle A. Luer, The New York Botanical Garden, 1975, pp. 40-41.

Native Orchids of North America North of Mexico, Donovan Stewart Correll, Stanford University Press, 1978, pp. 20-24.



Drawing comes from *Native Orchids of North America North of Mexico* by Donovan Stewart

Orchids of the Western Great Lakes Region, Frederic, w. Case, Jr., Cranbrook Institute of Science, 1987, pp. 71-73.

The Genus Cypripedium, Phillip Cribb, Timber Press, 1997, pp. 232-255.

Wild Orchids Across North America, Philip E. Keenan, Timber Press, 1998, pp. 113-117.

Flora of North America http://www.efloras.org/florataxon.aspx?flora_id=1&taxon_id=242101544.

The moccasin flower, *Cypripedium acaule*, Botany Boy, http://www.efloras.org/florataxon.aspx?flora_id=1&taxon_id=242101544

Conservation Corner

One of our purposes involves educating people about native orchids. As they do not grow in a vacuum, we want to recognize that orchid habitats are endangered worldwide. Many groups and people are involved in preserving natural areas and the plants, animals and microorganisms found there. This section will highlight the groups that work in these areas and/or information about the interrelationships occurring in nature. Many of the groups have ways you can help in this process through memberships, donations and/or volunteering.

In this issue we are going to highlight three groups we work with and have mentioned in many of our articles.

Appalachia Ohio Alliance (AOA)

appalachiaohioalliance.org

Their mission is “dedicated to the conservation and stewardship of our land and water as sustainable natural resources that are an asset and a legacy for our community.” Their preserves are found in eastern Ohio around the Hocking Hills region and cover around 10,000 acres. They offer walks to observe the natural areas and opportunities to help remove invasive plants. In July they offered Float Big Darby Creek and Prairie and Butterfly Walk at AOA Demonstration Site.

Some of the areas under their protection include the following areas. Bartley Preserve is found in Circleville and honors Floyd Bartley a local farmer and naturalist. Bison Hollow is an older growth wooded area near Ash Cave State Park. Cackley Swamp is near the Cooper Hollow Wildlife Area in Jackson County. Cassin Property is found along the Scioto River Flyway Corridor. Kleinmaier Preserve is a permit only site. Sickles Preserve is in Athens County and includes a trail from Zaleski to New Marshfield. Trimble Township Community Forest is 1205 acres located between the Trimble Wildlife Area and



Planting *Cypripedium parviflorum* var. *pubescens* on AOA property

Wayne National Forest. They are doing restoration along Big Darby Creek.

We have been reestablishing orchids at sites on their properties.

Ohio Natural Areas and Preserves Association (ONAPA)

onapa.org

The Ohio Natural Areas and Preserves Association was formed in 2012 to help the Ohio Division of Natural Areas and Preserves (DNAP) when their funding and staffing was severely reduced. ONAPA has organized a group of volunteers to monitor preserves, help with habitat management and educational activities on the preserves. ONAPA has activities for volunteers in natural areas all over the state, working with other partners in addition to DNAP. In July, they did Invasive Species Control at Jackson Bog State Nature Preserve, Woody Invasives Removal at Clifton George State Nature Preserve, and Denny's Tallgrass Prairie Tour. Information about their activities are on their site. Their Annual Meeting took place Saturday, August 21st at The West Woods Nature Center in the Geauga County Park District. NOPES has been working with ONAPA at Cranberry Bog to improve the bog meadows for orchids and other rare plants.



Clearing Medway Prairie for *Platanthera leucophaea*

Division of Natural Areas and Preserves (DNAP)

naturepreserves.ohiodnr.gov

The Division of Natural Areas and Preserves is a division of the Ohio Department of Natural Resources, ohiodnr.gov, and is responsible for the state nature preserves, natural areas and scenic rivers of Ohio. They also keep and monitor a botanical inventory. They administer the Natural Areas Act, Endangered Plant Law, Cave Protection Act and Ohio Scenic Rivers Act. They present an Ohio Botanical Symposium every two years.

Check out all that the above websites offer for you to explore Ohio's natural heritage.



Clearing invasives at Cranberry Bog

Native Orchid Preservation and Education Society

2021-2022 Membership Application

IN CONSIDERATION of being given the opportunity to participate in any NOPES activity, including scheduled, supervised club activities, and during my membership, I, for myself, my personal representatives, assigns, heirs, and next of kin:

1. Understand the nature of NOPES Activities, both in meetings and hiking based, and that I am in good health, and in proper physical condition to participate in such Activity.
2. Understand that:
 - A. some NOPES ACTIVITIES such as Orchid Hikes involve risks and the danger of serious bodily injury, including permanent disability, paralysis and death ("Risks") as a number of the activities of NOPES will be outdoors where there may or may not be trails, or sloping terrain that may have moderate effort required, or the possibility of insect or animal bites or inadvertent contact with poisonous plants.
 - B. these Risks and dangers may be caused by my own actions or inactions, the actions or inactions of others participating in the Activity, the condition in which the Activity takes place, or the negligence of the Releasees named below.
 - C. there may be other risks and social and economic losses unknown to me or not readily foreseeable at this time; and I assume all such risks and responsibility for losses, costs and damages I incur as a result of my participation in the Activity.
 - D. if I observe any condition which I consider to be unacceptably hazardous or dangerous, I will notify the proper authority in charge of the Activity and will refuse to take part in the Activity until the condition has been corrected to my satisfaction.
3. Understand that NOPES is a society dedicated to the appreciation of native orchids through education and preservation. Individuals found poaching orchids will have their membership immediately revoked and will be reported to local and state authorities.
4. Understand that a member may not act on behalf of nor invoke the name of NOPES without the express written permission of the board of NOPES. Members agree to hold harmless NOPES, the board, its officers and other members for any activities conducted by said member.
5. Release NOPES, its administrators, directors, agents, officers, volunteers, other participating organizers, any sponsors, advertisers, and if applicable, owners and lessors of premises on which the Activity takes place (the "Releasees"), from all liability, claims, losses or damages on my account caused or alleged to be caused in whole or in part by their negligence, including negligent rescue operations; and I further agree that if, despite this release and waiver of liability, assumption of risk, and indemnity agreement, I, or anyone on my behalf, makes a claim against any of them, I will indemnify, save and hold harmless the Releasees from any litigation expenses, attorney fees, loss, liability, damages, or costs which any may incur as a result of such claim, to the fullest extent permitted by law.

I have read this agreement, understand its terms, understand that I have given up substantial rights by signing it and have signed it without any inducement or assurance of any nature and intend it to be a complete and unconditional release of all liability to the greatest extent allowed by law and agree that if any portion of this agreement is held to be invalid, the balance, notwithstanding, shall continue in full force and effect.

Native Orchid Preservation and Education Society 2021 Membership Application

Printed Name of Participant: _____

Address: _____

CITY STATE ZIP: _____

Phone: _____ (Home ____ Cell ____)

Email: _____

Participant's Signature: _____ **Date:** _____

PARENTAL CONSENT (if participant is under the age of 18).

AND I, the minor's parent and/or legal guardian, understand the nature of NOPES 'activities and the minor's experience and capabilities and believe the minor to be qualified to participate in the activity. I hereby release, discharge, covenant not to sue, and AGREE TO INDEMNIFY AND SAVE AND HOLD HARMLESS each of the Releasees from all liability, claims, losses, or damages on the minor's account caused or alleged to be caused in whole or part by the negligence of the Releasees or otherwise, including negligent rescue operations, and further agree that if, despite this release, I, the minor, or anyone on the minor's behalf makes a claim against any of the above Releasee,

I WILL INDEMNIFY, SAVE, AND HOLD HARMLESS each of the Releasees from any litigation expenses, attorney fees, loss liability, damages, or costs any may incur as the result of any such claim, to the fullest extent permitted by law.

Printed Name of Parent/Guardian: _____

Address: _____

CITY STATE ZIP: _____

Phone: _____ (Home ____ Cell ____)

Email: _____

Parent/Guardian Signature (only if participant is under the age of 18):

Signature: _____ Date: _____

Membership dues are \$20.00 for an individual or \$30 for a family. Please make checks payable to NOPES and mail to Jan Yates, 4110 Rose Hill Avenue, Cincinnati, OH 45229. Or pay online via PayPal at <https://nativeorchidpreservationeducationsociety.com> and mail or email the membership form to Jan Yates.

The Native Orchid Preservation and Education Society is a 501(c)(3) organization and dues and donations are tax exempt for most people who itemize their deductions.