



The Fringe

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

Winter 2022



Platanthera ciliaris
Hazel Dell Meadow

Letter from the President

Hello everyone,

Here we are closing out another year. A year with COVID still heavy on our minds, but definitely a better year than last year.

I don't know about you, but I'm looking forward to 2022. We have a schedule in place for our next orchid season, with some close trips and some that are further away. Hopefully getting this schedule out early will help everyone with planning.

We are working on planning some service days so we can give back and help with fulfilling the preservation part of our mission statement. We will send emails out when we have service days set up.

I look forward to seeing everyone in 2022.

Teresa

Hike Schedule

Jan Yates

NOPEs is scheduling seven guided hikes for 2022 with an additional date to be added as a 'give back to nature' day supplemented by emails to members as native orchids bloom at sites we visited in the last two years. These emails will identify what orchid is in bloom and where, and how to find it so members can hike on their own schedule.

First, the guided hikes schedule. The dates are based on prior years' bloomings for peak condition. (Now we'll cross our fingers that the orchids 'read the book.' Details will be added as each date approaches.

Sunday, May 15 Ash Cave Fire Tower and Clear Creek Metro Park,
Hocking Hill
Highlights: *Cypripedium acaule*, including alba forms, *Cypripedium parviflorum* var. *pubescens*

Sunday, May 22 Fort Hill and Pike State Forest
Highlights: Alba *Aplectrum hyemale* putty root and *Spiranthes lucida*



Arethusa bulbosa
Waterloo, MI

Monday, May 30 Waterloo, MI
Highlights: *Arethusa bulbosa*, *Cypripedium acaule*

Sunday, June 12 Mohican State Park, Brown's Lake Bog, and Lawrence Woods
Highlights: *Platanthera orbiculata*, *Rose Pogonia*, *Platanthera flava*, carnivorous plants



Rose Pogonia
Brown's Lake Bog



Platanthera orbiculata
Mohican State Park

Saturday, June 25 Oak Openings near Toledo, a joint hike with the Cincinnati Wildflower Preservation Society

Saturday, July 16 May Prairie, TN
Highlights: wonderful range of prairie plants



Spiranthes cernua
Hazel Dell Meadow

Sunday, October 2 Hazel Dell Meadow, Somerset, KY, a joint hike with the Cincinnati Wildflower Society
Highlights: *Spiranthes cernua*, soapwort gentians

In addition, we are planning a date to join volunteers from ONAPA (Ohio Natural Areas & Preserves Association) to clear invasive woodies at a nearby orchid habitat. Last year, that area was Medway Prairie, home of the Eastern Prairie Fringed Orchid. It's a 'roll up your sleeves and work up a sweat' day but the payoff is usually enhanced blooming for the next few years. No poison sumac expected.



Platanthera nivea
May Prairie

As the Pink Ladies' Slippers, Showy Orchis and such bloom in Adams County and other places we visited last year or the year before, we'll notify members by email so they can visit or revisit on their own time. We're striving to give members various ways, allowing for work, schedules, Covid complications and other life events, to see as many orchids as possible, Plus I have a lens cap to look for in Shawnee State Park; maybe this year it will surface when the Pink Ladies' Slippers bloom again.

Jan Yates



Drosera rotundifolia or round-leaved sundew.
Brown's Lake Bog

Field Trips for Native Orchids

Angela Carter (reprint from last year)

Finding terrestrial native orchids can occasionally be serendipity but scheduled field trips, networking and research are likely to yield more joyous moments to view their diversity and beauty. If you end up like so many of us orchidophiles, your friends will be amused, your vehicle will log hundreds of miles, and many sites may become annual pilgrimages to revisit and monitor populations along with basking in their splendor.

Keep in mind that orchids are Mother Nature's creatures and subject to weather and soil conditions (+/- 7 days of projected date), have boom and bust years, and may go dormant for up to 20 years. Some orchids, such as three birds, tend to bloom across states on the same date based on weather conditions; but many orchids will range 2-4 weeks depending on what state and/or site that you are targeting. If found in OH, dates ranges are below. A few orchids in nearby states have been included as well.

- late April to early May
 - o *C. wisteriana*
- mid-May
 - o *C. acaule*
 - o *C. parviflorum*
 - o *C. candidum*
 - o *C. pubescens* var. *makasin*
 - o *G. spectabilis*
 - o *C. viride*
- mid-May to late May
 - o *N. cordata*
 - o *S. lucida*
 - o *C. x andrewsii*
- late June to July
 - o *P. peramoena*
 - o *P. leucophaea*
 - o *P. clavellata*
 - o *M. unifolia*
 - o *H. spicata*
 - o *P. grandiflora*
- mid to late July
 - o *G. pubescens*
 - o *G. repens*
 - o *P. nivea*
- late July to early August
 - o *T. trianthophoros*
 - o *T. discolor*

- o *C. kentuckiense*
- o *I. verticillata*
- o *A. hyemale*
- o *C. trifida*
- late May to early June
 - o *C. reginae*
 - o *C. bifaria*
 - o *A. bulbosa*
 - o *C. bulbosa*
 - o *L. liliifolia*
 - o *L. loeselii*
 - o *P. psychodes*
- mid-June
 - o *C. tuberosa*
 - o *P. orbiculata*
 - o *P. flava* var. *herbiola*
 - o *P. ophioglossoides*
- o *P. blephariglottis*
- early to mid-August
 - o *P. ciliaris*
 - o *P. integrilabia*
 - o *S. lacera* var. *gracilis*
 - o *S. vernalis*
 - o *S. tuberosa*
 - o *P. cristata*
 - o *S. romanzoffiana*
- mid-August to September
 - o *C. maculata*
- late August to mid-September
 - o *C. odontorhiza*
 - o *S. ovalis* var. *erostellata*
- September
 - o *S. arcisepala*
 - o *S. ochroleuca*
 - o *S. magnicamporum*
 - o *S. incurva*
 - o *S. cernua*

Orchids in February in Ohio

Jeanne Rhinehart

As soon as the ice and snow leave the ground and you can go hiking, start watching for native orchids around you. Green leaves stand out amongst the leaf litter under trees. Watch for three kinds of orchid leaves found in Ohio at this time of year. If you see them, make note of where they are so you can come back later in the year when the orchids are in bloom. Two of these species of orchids, *Aplectrum hyemale* and *Tipularia discolor*, are sometimes called “naked ladies” as they bloom after their leaves disappear. The third orchid, *Goodyera pubescens*, is visible year-round.

Aplectrum hyemale, known as Puttyroot or Adam-and-Eve Orchid, seen at right, is noticeably unique from other plants seen at this time. Each plant has a single leaf with distinctive ribbing. Plants are found in wooded regions and flood plains. Their leaves are visible in the fall through late winter when they disappear.



The flower spike appears in mid to late May around here, as seen below.



Tipularia discolor or the Crane-fly Orchid is the second orchid around Ohio whose leaves disappear before the bloom spike appears. Most leaves are green on top, but they can be found in a dark form, but consistently the underside of the leaf is purple as seen below. This distinguishes the *Tipularia* from the other green leaves found at this time of year. The bloom (at right) appears in late July to early August.



Goodyera pubescens leaves are visible year-round with flowers appearing in mid to late July.



All three orchid species can be found throughout Ohio including the Germantown Metro Parks and Wahkeena State Nature Preserve. *Tipularia* is found at the Cincinnati Nature Center.

New *Spiranthes* Species – *Spiranthes sheviakii*

Jeanne Rhinehart

A new *Spiranthes* species has been identified in New York and named *Spiranthes sheviakii* by SUNY Cortland botanist, Michael Hough and botanist and Cornell instructor Matthew Young. It is the newest member of the *Spiranthes cernua* complex, discovered near Syracuse, New York and named for Charles Sheviak who had written about a similar plant found in 1982. Genetic testing shows this is a new species. Its range borders Lake Ontario, Lake Michigan and Lake Erie in Ohio, New York, Pennsylvania, and Ontario, continuing southward in Ohio, Indiana, and Illinois. It grows in woodlands, barrens and fields having acidic and relatively dry conditions, sometimes found with *Spiranthes ochroleuca*. Flowers bloom from mid-September to late October.



Spiranthes sheviakii Photo by Michael Hough with permission

References:

http://www.thismia.com/S/Spiranthes_sheviakii.html

https://www2.cortland.edu/news/detail.dot?id=42ff4dd7-9329-41c8-b065-7dd9e0ae2f90&fbclid=IwAR3InvScDsF4uIPR4RP0wG6a-4bcfbXqQUB2EJdEKT55MPMFdpFGzaY_4TQ

[7dd9e0ae2f90&fbclid=IwAR3InvScDsF4uIPR4RP0wG6a-4bcfbXqQUB2EJdEKT55MPMFdpFGzaY_4TQ](https://www2.cortland.edu/news/detail.dot?id=42ff4dd7-9329-41c8-b065-7dd9e0ae2f90&fbclid=IwAR3InvScDsF4uIPR4RP0wG6a-4bcfbXqQUB2EJdEKT55MPMFdpFGzaY_4TQ)

***Bletia spicata* formerly *Hexalectris spicata* - The Crested Coral Root**

Jan Yates

When I wasn't paying attention, someone (actually two someones) renamed one of my favorite native orchids. The Crested Coral Root, or *Hexalectris spicata*, was moved to *Bletia* last August and renamed *Bletia spicata*, by botanists/researchers Mark Case and Victoria Sosa, writing in an online publication *Phytotaxa*. The name change

is trickling through the usual sources we use for native orchid identification such as GoOrchids so, for a while, you can still find it under its former name.

Old name or new, the plant is visually striking - a leafless spike of yellow/orange flowers strongly veined deep purple or brown. The vividly striped keels on the lip are the source of its common name. Last July, I arrived Lynx Prairie at dusk, and the setting sun behind the sepals and petals was breathtaking.

In some locales, the flowers open fully. At Lynx Prairie, the flowers are a little shy, often only partially opening when they bloom the last week of July through the first few days of August. The Crested Coral Root has no leaves, no chlorophyll and its existence depends on mycorrhizal fungi colonizing its roots for nutrition. Very little is known about its pollinator(s); the best guess is a bumble bee. Lynx Prairie is a typical habitat, dry soil in a forest over sandstone or limestone, on the edge of prairie.

Ohio, Indiana, and Illinois are the northernmost part of its range which extends through the southern states and west to Arizona and New Mexico. So, it is geographically widespread but, throughout this range, it is frequently rare or endangered. In Ohio, it is considered 'Potentially Threatened' and found in only three counties, Lynx Prairie being one of them.

Its beauty is fleeting. The flower spike or inflorescence seems to be easily bruised or susceptible to rotting from high summer temperatures and the entire spike topples. Four years ago, you could find large clumps



Clump of Crested Coral Root, circa 2017

along Cline Road, possibly due to a wet summer. Since then, those large clumps have disappeared, and blooming has been sporadic. When I saw a clump of six plants last year, and a few more solitary plants, I returned a week later with friends, one of whom had never seen the plant. In only a week, the clump of six was past prime but we found additional flowering plants nearby, newly opened. Because of the fleeting and sporadic nature of blooming, finding the Crested Coral Root is a hunt rather than a hike, but always worth it.

Hueston Woods and Brian and Donna Wise Field Trip

Jan Yates

Spiranthes magnicamporum grows in many places in southwestern Ohio and northern Kentucky. For some locales, like Hueston Woods State Park, *Spiranthes magnicamporum* is the front runner for fall blooming; the same species in Adams County can be almost a month behind. So it was, on Saturday, September 18th, NOPES members and guests walked numerous service roads looking for the Great Plains Ladies' Tresses.



Spiranthes magnicamporum, Great Plains Ladies' Tresses with pollinator, photo by Heidi Fassler

Spiranthes ovalis, the Lesser Ladies' Tresses, by this time of year, is dwindling, running out the flowering season. It lacks the 'wow' factor of *magnicamporum* by being smaller, and the variety in Ohio and the rest of the Midwest, *var.*



Autumn Coral Root, *Corallorhiza odontorhiza*, a recent discovery on the Wise property. Photo by Jan Yates

erostellata generally doesn't open fully. It is a challenge to find the flowers in the surrounding vegetation.



Spiranthes magnicamporum, Great Plains Ladies' Tresses, photo by Flower White

By fall, some orchids which bloomed months ago have mature seed pods. *Liparis loeselii*, which grows along a nearby creek bank, distributed its seed into *magnicamporum* territory a while ago and those plants are now setting seed.

About 45 minutes away, less as the hawks and turkey vultures fly is the home of Brian and Donna Wise, NOPES members who are restoring the prairie behind their house, establishing new ponds for wildlife, and scouting their woods for orchids. Each year, Brian's discoveries grow – last year, he found healthy clumps of the Autumn Coral Root, *Corallorhiza odontorhiza*, (at left) after looking for several years. For the NOPES visit, he ran a sturdy rope

down the hillside and groomed a trail. We walked down the hillside in groups of three to minimize possible damage to ground where the plants are growing. Browsing deer pruned the patch a little the night before but most of the plants were unharmed.

The Autumn Coral Root is widely distributed across the eastern half of the United States and Canada, but it is devilishly hard to find in the woods. It does not photosynthesize but stays underground, dependent on fungi for nutrients, until fall when it produces this yellow, greenish, or purplish brown stem, with small reddish brown or greenish flowers. Nearly all the autumn coral root flowers you find will be closed and self-pollinating, sometimes showing only a trace of a white lip with purple spots.



Liparis loeselii, Loesel's Wide-Lipped Orchid, with seed pods, photo by Flower White



Spiranthes ovalis, Lesser Ladies' Tresses, photo by Alan Wolfson

Spiranthes lacera, the Slender Ladies' Tresses, was an easier find. These plants are growing in the yard around the house and Brian has been careful not to mow over them. They like disturbed areas and resources, so much so that GoOrchids actually includes lawns in its listing of probable habitats. Also widely distributed, in the eastern United States and Canada, it has up to 40 small white flowers arranged in a tight spiral – a distinctive green spot on the lip distinguishes it from all the other small white things that bloom in late summer and fall.

As a wrap-up, a few NOPES members walked with Brian through the woods where, last year, he found additional populations of *Liparis liliifolia*, Mauve Sleekwort, including some with alba (green) flowers, *Liparis loeselii*, Loesel's Wide-Lipped Orchid, and as a hint of spring a few months from now, emerging leaves of *Tipularia discolor*, the Crane Fly Orchid.

For additional photos see our website.

Cranberry Bog

Jan Yates

A brief update on Cranberry Bog: staff from the Ohio Department of Natural Resources rebuilt the two docks at the bog and, when these photos were taken on July 7th, were replacing the boardwalk. NOPES members Ann Tsui and Jan Yates were there to observe whether poison sumac and other woody invasives along the boardwalk



closest to the boat dock and in the East Meadow had regenerated. Both areas had been cut and treated with herbicide during the last two years. It was a mixed picture; the poison sumac growth has been slowed but not stopped. On the plus side, the native orchids, particularly the rose pogonias, were healthy.



Appalachia Ohio Alliance update

Jan Yates, Ken Mettler, Jeanne Rhinehart

Ten *Cypripedium parviflorum* v. *pubescens* seedlings, purchased by the Native Orchid Preservation and Education Society with a 2021 MAOC Conservation grant, now reside in Hintz Hollow, restored to a habitat where they once grew on a family farm. Hintz Hollow, in the Ohio Hocking Hills area, was formerly the Hintz family farm and is now a preserve of the Ohio Appalachia Alliance – it contains a forested box canyon, spectacular rock cliffs and one of the largest stands of Ohio’s threatened native *Rhododendron maximum* or Great Rhododendron.



Ken Mettler, with Sue Hintz Clay, on a hillside topped by stands of Ohio’s Great Rhododendron, a threatened native species.

Guided by Sue Hintz Clay who identified areas where she remembers the orchids growing when she was a child, NOPES members Ken Mettler and Jan Yates replanted three patches in mesic forest, dominated by oaks. One area was especially satisfying to restore because some of the *Cypripediums* which once grew there were poached years ago. The replanting process itself is simple, find an appropriate site where there is little competing vegetation, clear the leaf litter in layers (it will be replaced in reverse order), scrape the ground to loosen the soil and place the seedlings about 12 inches apart.



Planting the *cypripedium* seedlings; they were refrigerated until they could be planted. The bare ground has enough space for three seedlings.



Once the seedlings are placed, they are marked with stakes and covered lightly with the loosened dirt, decaying leaf mold and then dry leaves in that order. The planting area is then securely caged to protect the orchids from deer predation and flagged. NOPES members will return to these sites next spring, to check on the seedlings, monitor the light level as the forest leafs out and remove any woody invasives.

NOPES, with permission from the Ohio Appalachia Alliance and funds from an earlier MAOC grant, has restored the Large Yellow Ladies' Slipper in one other preserve, Mercer Woods, where it historically grew. These patches are small, 3-4 plants apiece, but of the Mercer Woods orchids, nine seedlings were planted last year, all nine grew and one even flowered this year. NOPES is striving for a similar outcome for the Hintz Hollow Cypripediums.

Securing the cage with tent stakes; relatively effective deer-proofing.

Progress is continuing at Mercer Woods with our previously reintroduced populations of *Platanthera ciliaris* and *Cypripedium parviflorum* var. *pubescens*. For the three plants of *Platanthera ciliaris*, all produced bloom spikes and on two, the buds opened.



One of the *Cypripedium parviflorum* var. *pubescens* bloomed and produced a seed pod.



Seed Sowing Progress Report January 2022

Doug Martin

I can report continued progress in producing seedlings for the NOPES reintroduction projects.

This past fall, I again sowed samples of the seeds. They were sown using both symbiotic and asymbiotic methods. Based on the experience gained last year, I used different media and a new fungal stain. Both methods have given better results this year.

The developing seedlings of many species require cold treatment of two to three months. This is called vernalization and mimics the normal winter conditions they experience in the wild. Some other species require vernalization before the seeds will germinate. Consequentially, all the flasks have been placed in a refrigerator.



Figure 1



Figure 2

Liparis lillifolia:

As previously reported, seeds of the alba variety from Germantown Metro Park, collected with permission, and the normal variety from the Wise property were both sown symbiotically with a strain of fungus isolated from plants of this species. Both varieties have germinated and have continued to develop. Figure 1 shows seedlings of the alba variety which have been removed from their flask and planted in soil. They have been growing in dim light and cool to cold temperature and are now being vernalized in a refrigerator.

Platanthera blephariglottis and *P. ciliaris*:

As previously reported, I sowed seeds of both species symbiotically with two fungal strains. A good number of seeds from both species germinated and developed well before being placed in the refrigerator.

Seeds of both *Platanthera* species were again sown asymbiotically this year. However, different media were used which gave better results. Seeds of both species germinated and developed protocorms. Some of the *P. ciliaris* protocorms were large enough to be replated before being placed in the refrigerator.

Figure 2 shows some asymbiotic *Platanthera blephariglottis* protocorms from 2020 that were grown in dim light for a short period before being placed in the

refrigerator. As can be seen, they started to develop leaves and chlorophyll.

Conservation Corner

We want to remind readers of other groups who need our support with their activities. Support them by joining or donating to their efforts, by volunteering for their many projects, and by joining their hikes or participating in their educational efforts. Clicking on their website links shows what they have been doing and what they are offering.

Ohio Natural Areas and Preserves Association (ONAPA) <https://www.onapa.org>

Appalachia Ohio Alliance (AOA) <https://www.appalachiaohioalliance.org>

Division of Natural Areas and Preserves (DNAP) <https://ohiodnr.gov/discover-and-learn/safety-conservation/about-ODNR/nature-preserves>

The Nature Conservancy <https://www.nature.org/en-us/about-us/where-we-work/united-states/ohio/>

North American Orchid Conservation Center <https://northamericanorchidcenter.org>

Native Orchid Conference <https://www.nativeorchidconference.org>

Orchid of the Month *Platanthera peramoena* A. Gray - Purple Fringeless Orchid

Jeanne Rhinehart

Platanthera peramoena like many of its genus is dependent on moisture and is found in wet habitats. Its synonyms are *Blephariglottis peramoena*, *Habenaria peramoena*, and *Platanthera fissa*. Its common names are the Purple Fringeless Orchid and the Purple Fret-Lip orchid. The first name used for this orchid was *Peramoena* in 1769. Its first scientific name was *Habenaria fissa* given by Robert Brown. Fissus means cleft or fissured. Since this name was already used for *Platanthera psycodes*, A. Gray named it *Habenaria peramoena* in 1840. *Peramoena* means 'very loving' in Latin and refers to its beauty. Stanley Bentley writes "the flowers pollinia resemble big, dark, enchanting eyes. The lip is spread like outstretched arms beckoning above a wide, full skirt. All this is topped off by a delicate pink bonnet that never fails to remind me of a beautiful young debutante all decorated for her first cotillion."¹

Plant glabrous throughout, 45-55 cm tall. Roots fleshy and thickened. Leaves 3-4, lanceolate to elliptic, 9-12 cm wide.



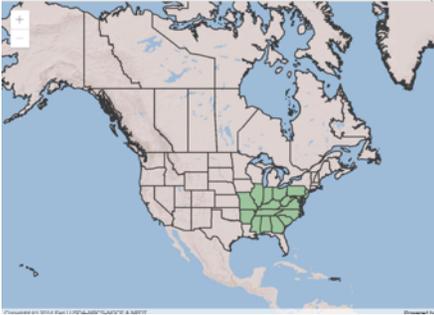
Inflorescence a loose raceme of 15-25 flowers, each subtended by a lanceolate bract 15-20 mm long x 3-4 mm wide. Lip 15-19 mm long x 18-20 mm wide, rose-purple, broadly ovate in general outline, three parted, each lobe wedge-shaped, shallowly toothed at the apex, with the middle lobe notched in the center. Spur from base of lip 20-25 mm long. Petals rose-purple, spatulate, 6-7 mm long x 2-4 mm wide. Lateral sepals rose-purple obliquely ovate to suborbicular, 7-8 mm long x 5-7 mm wide.²

It is sometimes confused with *Platanthera psycodes* but the lip fringe in *peramoena* is less than one third the length of the lobe and more jagged and *Platanthera psycodes*' lip is one third greater than the lobe. The pollinaria on the columns are spaced more widely in *Platanthera peramoena*.

A key to the *Platanthera* can be found at

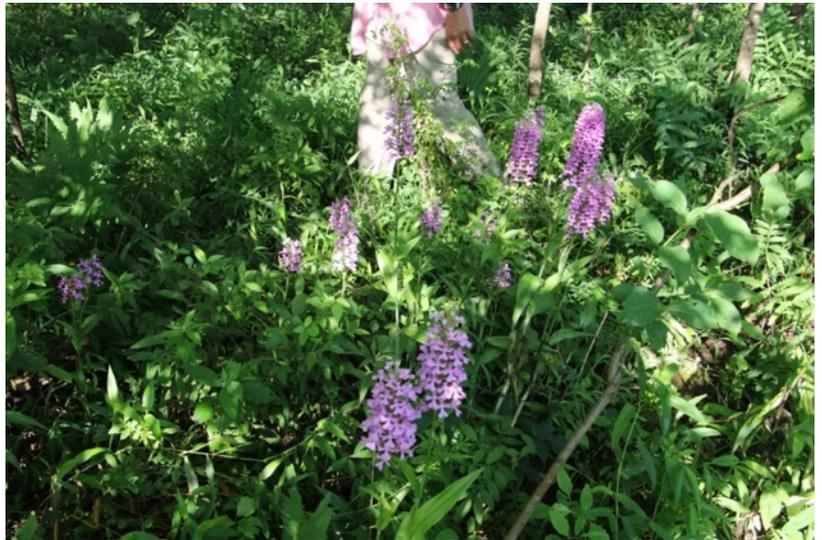
http://www.efloras.org/florataxon.aspx?flora_id=1&taxon_id=125746





Platanthera peramoena is found over a range of states in southeastern United States though rare over most and is endangered or threatened in Alabama, Arkansas, New Jersey, and Virginia. ³

Its habitat and growing conditions require sufficient moisture with acidic conditions, so it is found in wet soils of swamps, prairies, moist woods, and meadows, and along streams. It can withstand dry summer conditions, and grows up to 2,500 feet in elevation. While it can grow in shaded conditions, it grows more robustly where there is more sunlight. *Platanthera peramoena* will tolerate some disturbance that removes surrounding plants and often reappears in disturbed areas. Growth habits like many native orchids vary from year to year, some years refusing to bloom or remaining dormant.

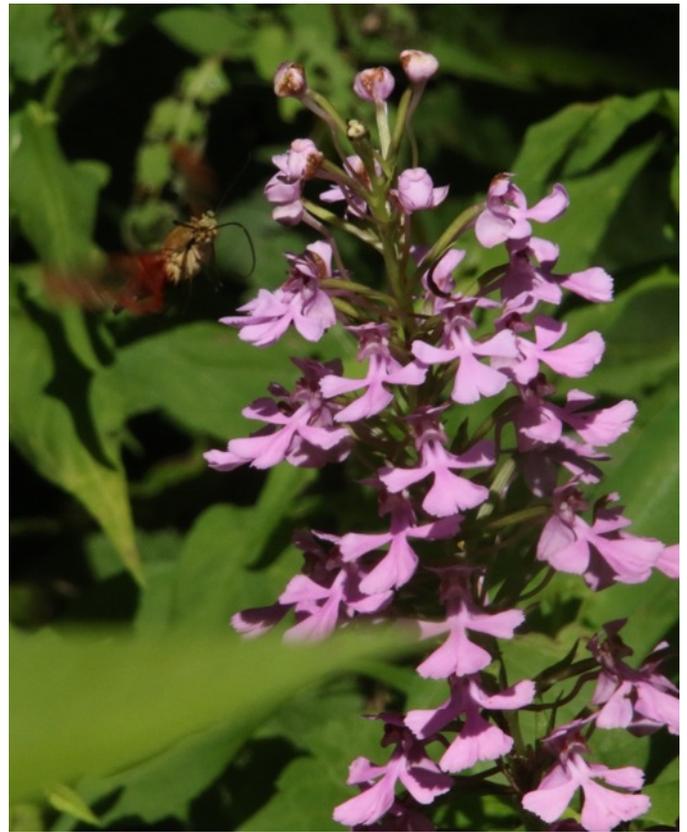


A location having *Platanthera peramoena* may not see it again for several years. “One should realize that wild orchid populations are not static, but rather are dynamic units, thriving briefly in a region of favored ecology (perhaps produced by a minor habitat disturbance). They often fade in a short time because of successional or other change. Although all our orchids are potentially long-lived perennials, few individuals in the wild persist long in the face of the rigors of competition. Rather existing populations produce the seeds which actively colonize new habitat as it develops, even as the old formerly vigorous stands decline.”⁴

While *Platanthera peramoena* likes disturbed conditions, it is difficult to transplant because of its need for the symbiotic fungi found in the soil and difficult to cultivate. It is also well liked by deer and rabbits.

Bloom time ranges from mid-July until late August. Flowers can vary in color from white to pale purple to deeper shades.

Pollinators are primarily large butterflies like the Monarch (*Danaus plexippus*), Tiger (*Papilio glaucus*) and Spicebush (*Papilio troilus*) Swallowtails and Sphinx moths with its main pollinator *Hemaris thysbe*, the Hummingbird Clearwing.



Footnotes:

1. *Native Orchids of the Southern Appalachian Mountains*, Stanley L. Bentley, The University of North Carolina Press, 2000, pp. 184-189.
2. *Orchids of Indiana*, Michael A. Homoya, Indiana Academy of Science, 1993, pp. 179 – 183.
3. United States Department of Natural Resources, <https://plants.sc.egov.usda.gov/home/plantProfile?symbol=PLPE>
4. *Orchids of the Western Great Lakes Region*, Frederick W. Case, Jr., Cranbrook Institute of Science Bulletin 48, 1987, pp.121-124.

Additional References:

Native Orchids of North America North of Mexico, Donovan Stewart Correll, Stanford University Press, 1978, pp. 95-97.

The Native Orchids of the United States and Canada excluding Florida, Carlyle A. Luer, New York Botanical Garden 1975, pp. 200 - 201.

GoOrchids, <http://goorchids.northamericanorchidcenter.org/species/platanthera/peramoena/>

Native Orchid Preservation and Education Society

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 2022 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. Email is jyates4110@gmail.com

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.