



The Fringe

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

August

Letter from the President

Hello everyone,

What a wonderful summer. The weather may not have been perfect, but the orchids were! I saw six orchids for the first time this summer. Just thinking about it brings a smile to my face.

We have two new members Brian and Donna Wise who have a wonderful piece of property in Middletown that has seven orchid species and like to share their good fortune with others.

As I look ahead as we finish out this year, there's a couple of things going on. The first thing is Cranberry Bog. We will be doing some much needed clearing of poison sumac and other invasives with ONAPA on September 25. NOPES did purchase protective suits in three sizes. M, L and XL. The suits were worn when we visited the bog in June. We were all rash free! The other thing that we will be doing this fall is a business meeting. Jan Yates has volunteered to host the meeting. She is centrally located for most of us. So be looking for an email concerning both of our upcoming events.

Sincerely,

Teresa Huesman

July 21st Field Trip to Lake Hope State Park and Ken Mettler's home

-Jan Yates

Since I have been hiking more this summer, the cargo area in my Tahoe has a permanent collection of hiking sticks, bug spray, sunscreen and a pair of knee-high rubber boots for the mucky areas that orchids like *Platanthera peramoena* like. (For those of us who went to Annapolis last year, *Platanthera peramoena* is forever linked to 'boot-sucking mud.)

Fast forward to July 21st and a Cincinnati Wildflower Society-led hike at Lake Hope State Park in the Hocking Hills area. Along the highway near the park entrance, down side roads and along a creek, nearly every splash of purple was *Platanthera peramoena* and the hot, dry weather meant the boots stayed in the car.



Platanthera peramoena



Platanthera peramoena



Goodyera pubescens

As a group, we created our own trail through the high grass to see the *Platantheras* closest to the park entrance then we split into smaller groups and just explored, walking further and further along the highway, away from our cars, stopping to take pictures. And avoiding traffic while we did it – it was a busy road.



Angela Carter photographing *Platanthera peramoena*

Before we left, we walked to the edge of the lake to see the native water lily, *Nymphaea odorata*, which blooms in June and July and watched the dragonfly activity.



Lake Hope with water lily, *Nymphaea odorata*

After that, my hiking buddies Teresa Huesman and Ann Tsui played hooky from the second stop on the formal hike – Ken Mettler had driven to the hike from his home in the Hocking Hills and invited us to see the orchids in bloom on his property, *Tipularia discolor* and *Goodyera pubescens*, but especially one that I had seen only in pictures, *Malaxis unifolia*. It was a short jaunt to his house,

including a stop to see more *Platantheras* along the road. Ken has marked many of his orchid patches with flags so he can monitor the population ebb and flow. So, it was with the *Malaxis*, which was dense enough in places, I had to watch where I stepped. And its pictures on web sites didn't prepare me for how small the individual flowers are. Still, a charming little guy and a great day hiking. Still working on good pix of *Goodyera* flowers, small white flowers are such a challenge.



Malaxis unifolia at Ken Mettler's

July 23rd Hike to Lynx Prairie and Shawnee State Forest -Teresa Huesman

Once again, the weather decided to give us a cooler day. We met Richard McCarthy in the parking lot of Lynx prairie. On our guided hike we saw lots of *Hexalectris spicata*, Crested Coralroot orchid, and *Tipularia discolor*, Cranefly orchid. After our hike, we decided to go to Shawnee State Park where we saw *Platanthera clavellata*, Club-Spur orchid, and *Platanthera ciliaris*, Yellow Fringed orchid. Four orchids in one day!



Platanthera ciliaris,
Yellow fringed orchid



Hexalectris spicata,
Crested Coralroot orchid



Platanthera clavellata,
Club-spur orchid



Tipularia discolor,
Cranefly orchid

August 3rd Field Trip to Hazeldell Meadow Nature Preserve and Daniel Boone National Forest

-Jeanne Rhinehart

We had a rewarding day joining the Cincinnati Wildflower Society and Dan Boone to see hundreds of Yellow Fringed Orchids, *Platanthera ciliaris*, a rare and tiny sundew *Drosera brevifolia*, and a few Crane-fly Orchids, *Tipularia discolor* at Hazeldell Meadow. *Drosera brevifolia* is the smallest sundew species native to the United States. We then traveled to Daniel Boone National Forest to see the rare and federally threatened Monkey-faced Orchid, *Platanthera integrilabia* and the Slender Ladies' Tresses, *Spiranthes lacera*. Angela Carter, Ann Tsui, Jan Yates, Toni Doty, Barry Jones, Lois Shadix, Janet James, Jeanne and Barry Rhinehart were in attendance.



***Platanthera ciliaris* at Hazeldell Meadows**



Sundew, *Drosera brevifolia*



Monkey-faced Orchid, *Platanthera integrilabia*



Slender Ladies' Tresses, *Spiranthes lacera*



Crane-fly Orchids, *Tipularia discolor*

Planned Hikes and Work Days

If you wish to attend, let Teresa know - huesmantj@aol.com.

September 25: Work Day, Cranberry Bog

Business meeting date to be announced.

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

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.

Other Activities

We are continuing our study of *Aplectrum hyemale* or Putty Root at Winton Woods. Of the 14 plants that were in bloom, all produced seed pods. So, from 120+ plants visible in March, 14 produced blooms and all 14 produced seed pods.



March 23, 2019



May 27, 2019



August 4, 2019

Orchid of the Month – August

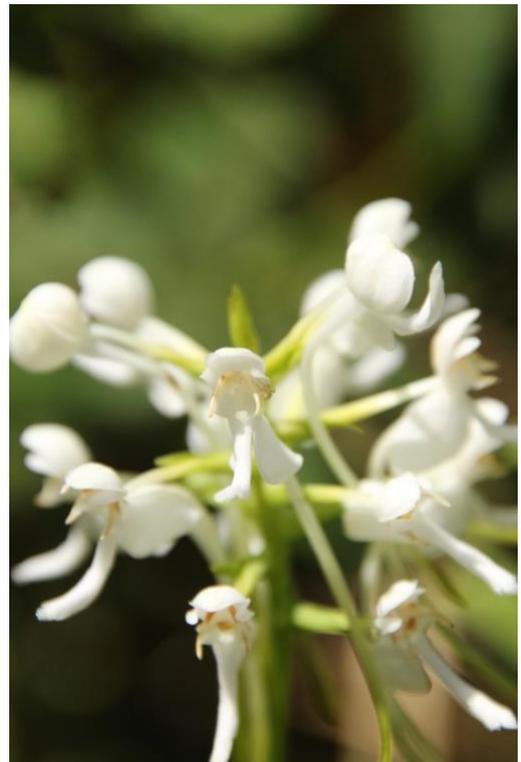
-Jeanne Rhinehart

Platanthera integrilabia Monkey-Face Orchid

Platanthera integrilabia was first identified in 1940 and thought to be a variety of *Habenaria blephariglottis*. It was discovered in Kentucky with hundreds of plants growing there. It was found to be very common on the Cumberland Plateau of Kentucky and Tennessee, in the Smokie Mountains of North Carolina, and on the Piedmont Plateau and Coastal Plain of Georgia, Alabama and Mississippi. "Like other species of *Habenaria* it is known locally as 'Monkey-face.'"¹

Since the 1700's it had been suggested to change the genus name of some of the *Habenarias*. The name change to *Platanthera* finally became accepted when Carlyle Luer delineated the differences in 1972. The difference being that *Platanthera* have "fleshy roots without tubers, undivided petals, a lip without three linear parts and a nectary opening free of stigmatic processes."²

Platanthera blephariglottis var. *integrilabia* was changed to its own species *Platanthera integrilabia* by Carlyle Luer in 1975.

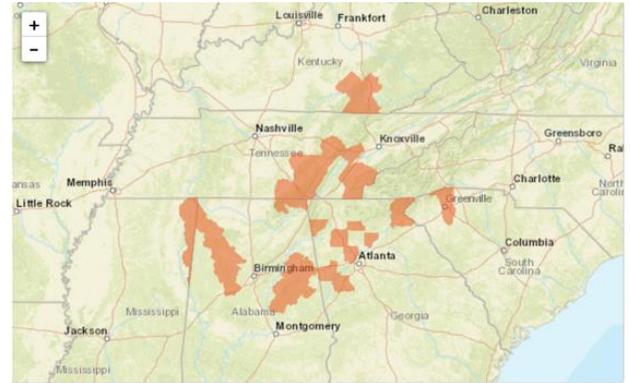


The plant height is 36 inches. "Leaves: Alternate 2-3 green, lanceolate, up to 8 in. long, sheathing the lower stem, reduced to bracts above. Flowers: luminescent white, fragrant, 2 narrow, lateral petals, curved upward; lip petal long, thin, finely serrated (not fringed); 3 sepals, 2 lateral sepals swept back to clasp the ovary, giving the flower a narrow frontward appearance, downward-curved spur, 1.6-2.0 in. long, more than 2x the length of

the flower, 6-15 flowers in a loose raceme.”³ the flower a narrow frontward appearance, downward-curved spur, 1.6-2.0 in. long, more than 2x the length of the flower, 6-15 flowers in a loose raceme.”³



Its habitat is sphagnum bogs, red maple – black gum swamps, damp stream margins and rocky thinly vegetated seepage slopes, primarily in mountains.



From a common genus in 1940 found in 6 southern states to finally being declared federally threatened in 2016 under the Endangered Species Act. In 1975 it was first identified as being in need of federal protection. It is only found in the locations seen at right.⁴ Habitat loss is from logging, wetland loss, woody species invasion off-road vehicles, feral hogs, pollution, and exotic pest plants such as kudzu. Droughts threaten the fungus on which the orchid depends. Much of the hardwood forests of the region have been converted to pine plantations creating a change in a habitat having many species to one with predominately one species. Habitat loss also threatens the orchid’s pollinators.

It is pollinated by eastern tiger swallowtails - *Papilio glaucus*,

spicebush swallowtails - *Papilio Troilus*,



and silver-spotted skippers - *Epargyreus clarus*.



References

1. *Native Orchids of North America*, Donovan Stewart Correll, Stanford University Press, 1978, p. 59.
2. *Orchids of Indiana*, Michael Al Homoya, Indiana Academy of Science, 1993, p. 143.
3. *Wildflowers of Tennessee the Ohio Valley and the Southern Appalachians*, Dennis Horn, Tavia Cathcart, Thomas Hemmerly, David Duhl, Lone Pine Publishing, p. 461.
4. Us Fish and Wildlife ECOS Environmental Conservation Online System.
<https://ecos.fws.gov/ecp0/profile/speciesProfile?slid=1889>.

Wildflowers and Plant Communities of the Southern Appalachian Mountains and Piedmont, Timothy P. Spira, The University of North Carolina Press, 2011, p. 425.

North Texas Master Naturalist Program: *Hexalectris* Orchids

- Jun Lao, with Charles Hess and Stephanie Varnum

In 2018, I drove up to the Cleveland area to attend the Mid-America Orchid Congress and stopped by one of the exhibitors who had prints of orchids he had painted. The gentleman's name was Charles Hess, and we struck up a conversation on native orchids, exchanged e-mails, and I later found out that he was in the North Texas Orchid Society, and led their Conservation Committee. That summer, I saw an article on seeing *Hexalectris* Coral Root orchids and thought that would be interesting to see as the flowers were quite beautiful.

Early this year, I got in touch with Charles, and just casually asked if he knew of locations in Texas where you could see native orchids, as I might be visiting my sister in the Houston area. He got me in touch with Stephanie Varnum, who headed the North Texas Master Naturalist *Hexalectris* Program in the Dallas area. Stephanie gave me a rough schedule of when the various species would be blooming, and soon, Charles and Stephanie invited me to join them in their surveys - every Tuesday and Thursday from May to end-July.

The location in the Dallas area where they do the surveys yearly is quite interesting. It is located in a suburb of the city of Dallas, and surrounded by homes, and just a bit to the east, by factories. It is an Audubon preserve, with trails, and which are heavily used by people hiking or running, or families with small kids. Most people follow the trail, as there are signs around to not go off-trail as there are rattlesnakes in the area (Texas has these signs in the parking lot of rest stops asking people to be careful approaching or opening garbage bins as there might be snakes in the shadow or inside, escaping the heat).

I was with Canadian naturalist and amazing botanical photographer John Lamey, three weeks back, when he brought me around to see the native orchids and rare plants of the Bruce Peninsula in Ontario. I mentioned to John then that I had arranged to join the North Texas Master Naturalists' *Hexalectris* Survey, which started in 2006. The date I was going was past for the Crested Coralroot (*Hexalectris spicata* - which we have in Adams County in Ohio), but was blooming season for four more *Hexalectris* species - *H. arizonica*, *H. grandiflora*, *H. nitida*, and *H. warnockii*. Imagine, this one nature preserve having five *Hexalectris* species! This was one amazing place.

I proposed a date of first week of July (week of July 4th), for a visit to my sister, and this was also the start of prime time for the *Hexalectris* blooms. Charles and Stephanie said that was a prime time to go and see their Texan orchids. John Lamey said he was on his way up to Manitoba, then to Alberta, and then on to the Olympic Peninsula for botanizing. He said that he could detour to Texas, as these *Hexalectris* orchids would be quite new for him, too.



Patch of Snowy Orchids in prime blooming condition. This was in a fen with clear flowing water, with lots of yellow pitcher plants.

On the morning of July 1, I drove a rental car from Houston to Big Thicket Nature Preserve, a large collection of areas north of Beaumont, Texas, to walk the trails of the Sundew Trail and the Watson Rare Native Plant Preserve, which, in a small area near a lake, embodied a lot of the rare plants scattered in the rest of Big Thicket.

According to their website, the Watson Rare Native Plant Preserve has many rare and endangered species of native plants, including seven species of orchids, four of the five types of carnivorous plants native to North America, and ten species of ferns. Through the help of Pauline Singleton, who is the main contact, and who gave me directions of where to find the Snowy Orchid (*Platanthera nivea* - which we don't have in Ohio), I was able to see and photograph the Snowy Orchid, which was a little past peak in the boggy area next to the lake, but in a separate spot on the boardwalk further down the trail, they were in prime blooming condition.

This was an amazing place, with lots of plants that were new to me. The wet area where the Snowy Orchids were, also had a crayfish visible in the clear water.

I was warned that the Grass Pink Orchids (*Calopogon tuberosus*) would be done blooming by then. However, a short walk around the fen revealed a vivid purple bloom unfurling - a Grass Pink Orchid that did not receive the



Grass Pink Orchid opening up.

memo (see above right).



Snowy Orchid with a green spider, waiting for an unwary pollinator to pass by.

From here, it was a 4-hour drive to the Dallas area, through tropical downpours that felt like buckets of water were being unleashed from the sky. Visibility was so low and the sky so dark, that you could only see the vehicle immediately ahead of you, and this went on for close to an hour of that drive.

The following morning, I met up with Stephanie, Charles, and the rest of the Texas Master Naturalists near the trailhead of Cedar Ridge Nature Preserve.

Also, there was John Lamey, who was telling the naturalists about his many botanizing trips and showing them pictures of flowers. John had arrived that Sunday, after driving through Colorado on his way south to Texas. He had already walked some of the trails that afternoon, but rested on Monday, when the preserve was closed.

Stephanie distributed the workload and broke us into two teams, and we went off-trail along the slopes to spot, record, and tag the *Hexaletris* orchids. Here, they marked the orchids with a piece of branch and neon orange tape, with the date, the designation (species and number), and the height of the flower spike. Stephanie had the logbook where she noted down each find.

The front portion of the trails yielded a number of *H. nitida* and *H. warnockii* in various stages of bloom. What was exciting was that there was a patch of about 6 white *H. warnockii* - alba blooming spikes. Stephanie said that there was another patch somewhere else in the preserve.

After some time photographing plants in the area, Charles was asked to bring us to see the *H. arizonica*, so that



Arizona Crested Coral Root
(*Hexalectris arizonica*)



Glass Mountain Coral Root
(*Hexalectris nitida*)



Texas Purple Spike (*Hexalectris warnockii*)

The three species of *Hexalectris* orchids blooming in the Dallas area nature preserve.

we could see all three types of blooming *Hexalectris* orchids (Unfortunately, *H. grandiflora* had not bloomed for a few years in the Preserve, when they rerouted the trail to better protect the orchid, but in so doing, the habitat changed enough for the orchid to remain dormant).



Alba form of the Texas Purple Spike (*Hexalectris warnockii*).

The hardest to spot was the Glass Mountain Coral Root (*Hexalectris nitida*). The spike was often thin and short and was characterized by bends in the spike where the blooms were. It tended to be self-pollinating, so most of the blooms were closed. This is an orchid that can be found in Texas and Mexico and believed to already be extirpated in New Mexico.

Very abundant this year was the Texas Purple Spike (*Hexalectris warnockii*), a very beautiful orchid, if you can but see up, as the blooms tended to face down. Every so often, given the number of blooming plants, were a few that did not have “shy” flowers, with flowers better positioned for pictures (see above, right). The beauty of the flowers really comes into view when you see the contrast between the petals and sepals and the yellow stripes on the lip, which likely direct the pollinator further in. The Texas Purple Spike is considered an imperiled species, being found only in Texas and Arizona.



Texas Purple Spike, showing the contrasting colors and the vivid yellow “stripes” on the lip, which can go from three (left) to one (right).

While the two *Hexalectris* orchids tended to be short in stature, the same was not true for the Arizona Crested Coral Root (*Hexalectris arizonica*). The spikes were quite thick in diameter and very robust. Most of the spikes had flowers that were somewhat closed - they tended to be self-pollinating as well, but every now and then, there would be an open flower, and they resemble the Crested Coral Root (*Hexalectris spicata*).



In fact, they were considered a variety of the Crested Coral Root but differs in their blooming time (*H. spicata* blooms earlier in May in this area) and lacks a rostellum in the flower. The Arizona Crested Coral Root is considered quite rare, and usually found as scattered individuals, but in the preserve, you could see small colonies of them, even one that formed a fairy’s ring. It was quite gratifying to see their tall, sturdy spikes, and seeing them in small groups (below).

The *Hexalectris* orchids in this area in Dallas were doing very well and seemed to be having a banner year. The theory is that the area had a wet year last year, and the orchids tapped into fungi that tapped the roots of the trees, and thus they had enough nutrients to send up a lot of flowers.

By the end of July, Stephanie said it was a record year, with 1,032 *Hexalectris* orchids; *H. arizonica* - 33; *H. nitida* - 343; *H. spicata* - 43; *H. warnockii* - 613. The greatest numbers prior to this year were in 2018 with 640, and 2017 with 518. The data sheets were sent to Dr. Marcy Brown Marsden. It was indeed a great experience being part of the survey (and helping spot a number of untagged plants) on a great year for these orchids.

Membership forms for the Native Orchid Preservation and Education Society are available at nativeorchidpreservationeducationsociety.com