



THE NATIVE ORCHID CONFERENCE JOURNAL



VOLUME 20.1
Special Photo Contest Edition



The Native Orchid Conference, Inc.

P. O. Box 2047 Boone, NC 28607-2047

Websites

www.nativeorchidconference.org
www.facebook.com/groups
www.facebook.com/page

Officers

President: Robert Sprague
bobsatcyndal@aol.com

Vice-President: Rick Burian
bur.rick@att.net

Secretary: Janice Yates
jyates4110@gmail.com

Treasurer: Richard Barmore
rebster61@yahoo.com

Board Members at Large

Cathy Bloome /catbloome@sbcglobal.net
David McAdoo /ncorchid@yahoo.com
Judy McCrary /jmccray2190@gmail.com
Mark Rose /rmarkrose_2000@yahoo.com
Ben Rostron, Ph.D. /ben.rostron@ualberta.ca
Dave Taft /orchiddave99@gmail.com

Case Grant Committee Chair

Doug Martin, Ph.D. /dofrma44@gmail.com

Publicity Chair

Linnea Hanson /linneachanson@gmail.com

IT/Communication Chair

Kyle Langford /klangfor@verizon.net

Webmaster

Amy Levengood /all70@dejazzd.com

Technical Advisor

Paul Catling, Ph.D. /brenda.kostiuk@gmail.com

Editor

Chelsea Kieffer /chelseakieffer@gmail.com

THE NATIVE ORCHID CONFERENCE JOURNAL

VOLUME 20, ISSUE 1 : TABLE OF CONTENTS

| | |
|-------------|--|
| FRONT COVER | <i>Platanthera blephariglottis</i> Photo: Steve Baker |
| 3-5 | Share the Joy By Robert Sprague |
| 6-9 | Photo Contest Winners |
| 10- 21 | Entries of Note |
| 22-25 | All Photo Contest Entries |
| BACK COVER | <i>Platanthera ciliaris</i> Photo: Peter Grube |

SHARE THE JOY

If you've heard that phrase before it's because you've been paying attention. Our photo "contest" morphed into an exercise less centered on competition and more focused on sharing the joyous orchid encounters which we've all experienced. When Dave Taylor first proposed the project our thoughts immediately turned to "judges," 1st, 2nd, and 3rd, winners, losers and also-rans. Well, there were no also-rans.

Awesome, incredible, sensational, unreal ... how many ways can you say "Wow!" We received more than 100 entries featuring 21 genera and 60 taxa which represent approximately 40% of North America's terrestrial orchids. Each one has a story to tell; how could we possibly judge them?

I'm reminded of the 1960's Stephen Sondheim musical "A Funny Thing Happened on the Way to the Forum" ... not because of its plot but simply because of the title. You see, a funny thing happened on the way to NOC judging. Our judges quickly realized they were not judges but rather, they were reviewers. Reasonably capable native orchid photographers in their own right, the reviewers found themselves contemplating the entries based on their own experience with the subject, not so much on pixels and other photographic technicalities. How rare is the subject, how difficult is it to photograph, how novel is the composition, and how unique is the perspective? Those are questions that were asked often and they were often answered from a subjective, personal, and emotional point of view.

As promised, three spectacular images were selected from the adult category (there were no youth submissions); those contributors are awarded 2023 NOC memberships. You will see their work, accompanied by comments from photographers and reviewers in this edition of the Journal. It was also decided that we must tell the stories associated with many of the other photos. You will find a number of those in this Journal and others will, over time, be published in subsequent issues.

We start with two images that frame the entire photography project. They "bookend" all that is the North American orchid flora and, in a way, delineate what the Native Orchid Conference is all about. Janet Jacoby, submitted *Pseudorchis albida* and Mark Larocque, offered *Platanthera tipuloides*. How is that noteworthy? *Pseudorchis albida* makes its North American appearance (as subspecies *straminea*) in the easternmost point on the continent... Newfoundland. *Platanthera tipuloides* makes its only North American appearance on the continent's westernmost point... the far reaches of the western Aleutian Islands. Two orchids, photographed 4,000 miles apart, remind us of the extraordinary range of all the orchids that are the focus of the NOC.

We're delighted that so many people participated in this endeavor; we invite you to turn the pages and feel their excitement. It's the same excitement we all experience upon finding a native orchid... whether it's in Dutch Harbor, Alaska, the limestone barrens of western Newfoundland or somewhere in between. Our thanks go out to all the participants for Sharing the Joy. And we extend special thanks to Janet and Mark for highlighting our geographic boundaries with their great photos.

Newfoundland Orchid (*Pseudorchis albida*)



If you haven't discovered Newfoundland yet, you probably would like it. We have completely fallen in love with the people, the scenery, the icebergs, the puffins, and the ORCHIDS. Timing is the secret. Mid-June through July is the best time to see many orchids. There are forests, bogs, fens, and limestone barrens all across the province.

This rare orchid, *Pseudorchis albida*, was a lucky find on July 8 in the limestone barrens of Western Newfoundland. It stands 15-40 cm tall and has a strong vanilla fragrance. An excellent field guide is *Orchids on the Rock*, by Andrus and Maria Voitk. Readily available in Newfoundland, it lists 46 native orchids.

Janet Jacoby
Wilmington, DE

Bering Bog Orchid (*Platanthera tipuloides* var. *behringiana*)



Platanthera tipuloides is known in North America from only the outer Aleutian Islands of Adak, Attu, and more recently, Unalaska (Dutch Harbor) where plants were discovered by local botanist Suzi Golodoff. Carlyle Luer photographed it on the island of Attu in the 1970's. The species is characterized by having a yellowish cast to the flowers, a long curved spur, and a basal rosette of leaves. It blooms from mid-July to early August and is found in wet, sub-alpine meadows, often with *Platanthera convallariifolia*, *Platanthera sacatta*, and *Platanthera chorisiana* nearby. On Unalaska, the plants are known from only three locations with a total population under 100 plants. The island is quite large and mostly inaccessible by car or foot. It is likely that other populations exist on the island. In July 2019, Stefan Ambs and I visited the Dutch Harbor sites following a report from Ben Rostron and Duane Erdmann who had visited in 2018. The Unalaska populations are the only ones easily accessible by plane. There is no air service to Attu or Adak nor are their overnight accommodations there. We spent several days on the island and Suzi showed us many other orchid sites. We were lucky to get this photo of some of the first flowers to open.

Mark Larocque
Gilford, NH

AND THE JUDGES CHOICES ARE...

Among the many fine photo contest entries received were a few that caused the judges (i.e. reviewers) to do a double-take. They are unusual, evocative or otherwise so extraordinary that they deserve our special thanks and they were selected as the recipients of a free one-year NOC membership. We hope you enjoy the work of Steve Baker, Peter Grube, and Bill Kress. These three photos, as well as “Other Entries of Note”, are accompanied by brief comments from the reviewers.

Clustered Lady's-slipper, (*Cypripedium fasciculatum*)



A native to California, *Cypripedium fasciculatum*, also called the Clustered Lady's-slipper, is a small terrestrial orchid endemic to western North America. It has a California Rare Plant Rank of 4.2, meaning limited distribution and fairly threatened. The low-growing plants with tiny flowers are not so obvious in a dark understory, which is fortunate for their protection. It is easy to walk right by these if you're unfamiliar with their broad, very green, opposing leaves.

The flowers are small and drooping, as illustrated in Figure 1. At first glance, it's not very photogenic, having purple-green petals and sepals, and a greenish lip streaked with purple.

My wife and I are familiar with its locations in the nearby Tahoe National Forest, on dry mountainous slopes in a shaded coniferous forest. We regularly hike the area and have photographed these many times throughout their lifecycle. The next figures show the progression from the first emergence to seed pods:

Figure 2. First emergence, late April.

Figure 3. Two weeks later a bud has formed.

Figure 4. Another two weeks, flowers are forming.

Figure 5. Flowers in full bloom, end of May.

Figure 6. Seed pod formed mid-July.

The dates are approximate and elevation and weather dependent.

Most of our observations have been at elevations between 2,500 and 3,000 feet, and the growth progression changes with elevation. This is convenient for sequence photography because this elevation difference is equivalent to a one to two week growth.

Photographing the *C. fasciculatum*

Many people use a smartphone to capture the beauty of wildflowers. Because the sensor is very small, the depth of field can be very large, causing distracting background detail, and there's not much ability to control camera functions.

I prefer to use a mirrorless camera, which has many settings, is challenging to set up, and good results are sometimes not so spontaneous. I like it that way – my wife, Dorothe, does an excellent job capturing the moment and the ambience with her smartphone.

Many of my flower photos are contextual – the flower in its environment. Some are more formal



Figure 1. The U.S. penny is 19 mm in diameter

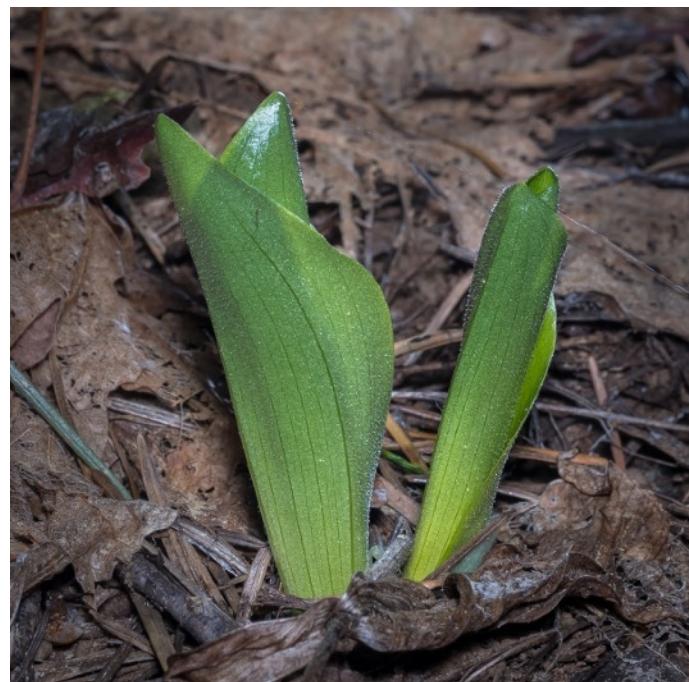


Figure 2. Just emerged, this *C. Fasciculatum* is about five centimeters tall.

flower portraits. The following outlines the procedures for the latter.

Because the *C. fasciculatum* is very small, there are two options to achieve enough depth of field to nicely capture the entire flower.

One is to use a small aperture, for example, f/22, but a disadvantage is lens diffraction, which is caused by the divergence of light when passing through the small opening. This results in a lack of sharpness and while using a strong sharpening filter post-process can recover some sharpness, the image can look artificial. Other small aperture disadvantages include a more defined background and the need for either electronic flash or long exposure time.

The other option is to use a large aperture, for example, f/2.8 or f/4. Lens diffraction is negligible and sharpness is very good, but the depth of field is much smaller.

To achieve a greater depth of field with macro photography, I use focus bracketing. The concept is simple. A series of images is captured at different focus settings, from near to far. This is an internal function with some modern cameras. The amount of focus change with each exposure can be set, and the number of images captured can be set to accommodate the depth of the flower. Figure 4 shows the result when 40 images were made with focus increments of about 1 mm.

The lens was f/4, and the bracketing started on the closest flower part, the dorsal sepal.

Then, using a computer, the stack of images was blended to form one very sharp image with the desired depth of field. This way, the entire flower can be very sharp, and the background very blurry – a nice effect.

Because of the low-growing nature of *C. fasciculatum* and its drooping flowers, the most common camera position was on the ground, sometimes using a small twig to angle the lens upward. This was done for Figure 4.



Figure 3. A bud has formed



Figure 4. Two weeks later two clusters of flowers are forming.

I found that a bracket of 35 to 50 photos is sufficient, and use a macro telephoto lens, electronic shutter, manual mode, cable shutter release, and with lens and in-body image stabilization turned off.

Articulated viewfinders are great and become more necessary the older one gets. Before such a useful feature, the bugs-eye-view required one to be flat on the ground, chin in the dirt...

Silver reflectors can provide soft light, particularly with these ‘hidden’ flowers. I also carry a small LED flashlight to provide side lighting if needed.

Focus bracketing can be difficult on windy days. During the few seconds required to capture the image sequence, both the plant and camera must remain still – hand-holding the camera is a shaky option and the results are usually not so good.

The group of photos can be assembled into a single composite image with Helicon Focus, Zerene Stacker, Adobe Photoshop, or other similar software applications.

Bill Kress
Lincoln, CA

It's unlikely that any native orchid fan would list this species among their “Top 10” favorites. A very restricted range, cryptic coloration and an unusually “sloppy” posture render it hard to find and even harder to photograph. Bill Kress may have just changed all that. What a spectacular photo ... sharp, well lit and perfectly framed, Bill's image belies the fact that one must have their face in the dirt to see such detail. It surely belongs in our top three.

Bill's attention to detail yielded a beautiful photo. He carefully laid out how someone might approach this subject with special consideration given to stacking and depth of field.



Figure 5. A small cluster of flowers focus bracketed: camera on the ground, aperture f/4, 1/60 second exposure, and the resulting 40 images combined using Helicon Focus. The resulting image is super-sharp for the entire depth of the flower, which was about 50mm.



Figure 6. One seed pod has formed in mid-July. The many pods we observed had straightened up and stretched above the leaves, enhancing the dispersal of seeds.

White-fringed Orchid (*Platanthera blephariglottis*)



I've never met a bog I didn't like but my favorite surrounds a wilderness lake only 15 miles from my home. Access involves 5 miles of a narrow dirt road, 1 mile of deeply rutted two-track, 100 yards of dragging a canoe or kayak through boot sucking muck, and a paddle across the lake. I try to launch a good half hour before sunrise and then let the magic happen. The "Quick, three beers" call of the Olive-sided Flycatcher, wails and yodels of Loons, Trumpeter Swans honking, and the cackling of Sandhill Cranes add to the dawn ambiance. Beavers tail slapping in the mist, otters snorting, and deer barking express their displeasure with our presence. It's sensory overload of the best kind.

Steve Baker

Indian River, MI

When this image was first viewed there were audible gasps... it's absolutely stunning. At once a beautiful landscape, an extraordinary sunrise and a triumph of nature, this unexpected and most unusual orchid photo was a contender from the outset.

Not only does being in the midst of such a lovely setting bring joy to the photographer, but anyone looking at this photo can easily have a similar feeling. The colors are subtle but clear; the fog, the sky and the rising sun add spectacular depth to the photo. The man in the photo is taking a moment to be at one with the beautiful surroundings and he's letting the magic happen. We can imagine being there as well.

*I like images that make me stop, think and look more closely. Initially it might be a color pop, dramatic lighting or a striking composition that draws me in. Most importantly, it's an emotional reaction that hits hardest. This is something difficult to elicit with any photography and no different with the botanical niche. It's also the reason why I feel this image of *Platanthera blephariglottis* stands out. I'm not sure if the "man in the bog" is elated after years of exploring and finally reaching this spot, or taking an introspective moment with a special place he's visited many times. Either way, I'd bet many of us can relate.*

Yellow-fringed Orchid (*Platanthera ciliaris*)



The site for this station of *Platanthera ciliaris* is well known among orchid enthusiasts throughout the Midwest. It lies just inside the Illinois state line across from northwestern Indiana's vast 8000 acre TNC Kankakee Sands Preserve. The preserve takes its name from its sandy soils which support globally significant oak barrens, prairies, and sedge meadows. It also contains some of the best examples of black oak barrens in the Midwest. Unspoiled sand dunes and swales stretch as far as the eye can see.

One can expect to find hundreds of blooming *P. Ciliaris* during the last weeks of August growing between dune and swale areas of this vast prairie remnant which in total (including Illinois) comprises more than 20,000 acres.

Peter Grube
Valparaiso, IN

No need to go to Illinois to see blooming P. ciliaris... Peter has brought them to us. Gazing at this spectacular image you can feel the breeze wafting in from Lake Michigan and hear the resident red-headed woodpeckers calling in the distance. If ever a photo could transport one through space and time, it's Peter's remarkable image of one-hundred "neon" Platantheras.

This awesome photo of Platanthera ciliaris stands out. Whether it was from a meter or a mile, it's easy to see why these plants catch eyes.

ENTRIES OF NOTE

Several other images caught the attention of one or more judges so we asked the photographers to provide additional information about their photos. We received some very interesting and enthusiastic thoughts, comments, impressions, and context. Some of that information is shared here... we will continue to recognize other photos of note in future editions of the Journal.

Downy Rattlesnake Plantain (*Goodyera pubescens*)

This photo was taken with a COOLPIX P80 camera. Leaving the NOC Delaware conference on August 2, 2011, I was visiting all the westward sites on my way home. In Pennsylvania, on the north side of the forest road, there were orange *Platanthera ciliaris* shining in the sun. On the south side, there was a marker pointing to *Goodyera pubescens*. I was beginning to think I had missed the marker when suddenly, there it was. It must have seemed odd to any passing cars, but the directions were perfect. I turned and headed into the woods. Less than 30 feet in was the group of *Goodyeras*, I sat down taking several shots; the light breeze made it hard to focus. Then an unknown pollinator flew in and worked up the flower. It wasn't until I got the photos into my computer that I saw I had gotten the perfect shot. Serendipity!

Anne Kotowski
Villa Park, IL

"Serendipity" ...perhaps. But Anne's terrific shot conveys patience and determination. Oft hidden in shadows, this diminutive plant is notoriously hard to photograph. Anne not only captured a happy pollinator, but the detail in her photo leaves no question about the plant's species epithet...*pubescens*.

I just love photos of orchids with pollinators! This is such a great, sharp, macro shot of this species.



Ghost Orchid (*Dendrophylax lindenii*)



I have been chasing native orchids for a long time and my “holy grail” was the Ghost Orchid (*Dendrophylax lindenii*) in flower. I was able to see plants while participating in the late winter surveys of the Fakahatchee Strand Preserve State Park in south Florida. At that time of year the plants were not in flower, since it is a leafless orchid, they were just a bunch of roots on the sides of trees. I decided that I had to go back in season and was lucky enough to find a perfect bloom during that visit. If you want to see this flower without wading in water up to your waist, go to Audubon’s Corkscrew Swamp Sanctuary near Naples Florida. Along the boardwalk they have a spotting scope set up pointing to a magnificent plant that can have up to 13 blooms.

Dave McAdoo
Kemmersville, NC

Good job capturing the details in the whites (i.e. not burning them out) and using the correct f-stop to blur the background thereby making the flower stand out.

We’re glad David persisted long enough to capture this fine portrait of the “Ghost Orchid.” Excellent detail, dramatic lighting and a slight glimpse of healthy roots bring this photo to life.

We can’t help but think about Susan Orlean, John Laroche, Mike Owen and the on-going battle for the survival of this species. Perhaps we should consider a symposium in Florida.

Crested Coralroot (*Bletia spicata*)



This image is from a trip to Adams County in Ohio's southernmost tier of counties. The year was 2012. These orchids are forest orchids seen during summertime here in the northernmost extent of the species' range. The forest was in a floodplain. An interesting anecdote; the day was in the high nineties, perhaps even 100 degrees, with humidity near full saturation. In fact, as we finished our hike and photography session, the rains began. It was a downpour with a violent electrical component. I had been carrying my oversized, stuffed backpack and tripod in the heat and humidity. I was so exhausted one of my companions drove my car halfway home, a five plus hour drive. The orchid I depict in my image was one of the more vibrantly colored specimens. They did range from paler colors to this beautiful example.

Tom Sampliner
University Heights, OH

Too bad Tom had to enlist the services of an alternate driver, but we're glad he persisted. Thanks for submitting this spectacular image of a spectacular species. The detail is exceptional and the lighting is perfect.

The intense saturation in this shot does, indeed, capture the vibrancy of the flower. The tight cropping allows the viewer to focus on the flower and not get caught-up in the tangle of the background.

Eastern Prairie Fringed Orchid (*Platanthera leucophaea*)



The image of *Platanthera leucophaea* was taken on July 6, 2022. I had directions to check the roadside ditches but was unable to locate any plants. Fortunately, I looked up and saw a colony of a half dozen plants standing tall amongst the un-mowed grasses in a moist prairie about 30 yards from the ditch. The early morning setting provided little if any wind and the natural lighting was neither too bright nor too dark.

I used a Nikon Z6 mirrorless camera with a 105mm lens set at F16 aperture, 1/125 second shutter speed in RAW format. It was just one of those days when everything came together.

Al Menk
Charlotte, MI

*This statuesque portrait of a very rare orchid is a testament to Al's patience and good timing. Rarely does one get every flower on a *Platanthera* inflorescence open and in perfect condition at the same time. Dramatic lighting and exquisite detail make this beauty look even larger than life. Nicely done.*

A very sharp photo ... beautifully subtle with just enough light to reveal the detail in the shadows.

Small Whorled Pogonia (*Isotria medeoloides*)



On April 22nd, I was asked to give my input on some proposed new conservation ranks for five of Vermont's more uncommon orchid species: *Cypripedium arietinum*, *Neottia cordata*, *Spiranthes romanzoffiana*, *Dactylorhiza viridis*, and *Platanthera hookeri*. Most, if not all of these species are in a state of decline throughout their New England distributions. To help inform my opinion, I decided to take a quick look at available iNaturalist data concerning the species in question and other rare or uncommon taxa. Just before concluding my brief investigation, I noticed a single observation of *Isotria medeoloides*—a species I and others have fruitlessly sought in Vermont—at the bottom of the page. Taken aback by this discovery, I assumed that the record was most likely the result of confusion, perhaps with the vegetatively similar *Medeola virginiana*, which is a common woodland herb that occurs throughout the Northeast. Upon seeing the photo, my preconceptions were promptly dispelled. Despite there being no flowers, the succulent, waxy green to bluish-green stem and more expanded leaves, not to mention its single elliptical fruit, left no doubt as to the identity of the plant.

Tom Doubleday, an avid birder, had rediscovered an orchid thought extirpated in Vermont for 102 years. I told Aaron Marcus (an assistant botanist at the Vermont Fish and Wildlife Department) that afternoon, and we were both ecstatic about the find. The subsequent weeks were characterized by getting acquainted with Tom, visiting the site, and planning a survey for when the orchids would be in flower. Tom, Aaron, Bob Popp (the state botanist) and I returned to the site on May 25th, where we found a total of nine plants, some bearing one or two small green flowers. In places, the ferns and clubmoss formed a small canopy over the ground, obscuring the orchids and other, smaller herbs. In light of this, our search was performed with great caution for fear of stepping on or knocking over any unseen orchids. There was, unfortunately, some evidence of slug herbivory at the site. While most affected plants had received only minimal damage, two had broken stems and were unable to flower. Despite this, there's little reason to think that slugs pose a significant threat to this population in the long term.

The media buzz generated by the discovery far exceeded anything that any of us anticipated, and following the press release on June 8th, we were inundated with calls and emails concerning interviews and photo usage. How quickly and widely the news spread is still a great surprise to me. Now more than ever, rediscoveries such as this serve as a reminder that the natural world still harbors secrets, and that sometimes, nothing more than some luck and a keen pair of eyes are needed to find them.

John Gange
Shelburne, VT

Sometimes the forest holds a little more magic when you realize what might still be out there... There's no wonder why this photo was written and talked about by botanists, conservationists, and news outlets across the globe last year. Revealing a plant that hadn't been seen in Vermont for 120 years, it spotlights the importance of land protection and gives hope for the future. If plants were people, this one sure looks happy to be found.

This is such an exciting story and illustrates how citizen science can help in the discovery and protection of plants. Way to go John for your expertise, and such a beautiful photo of the species. —I love how it looks like one of the flowers is hugging the other.

Veltman's Twayblade (*Neottia ×veltmanni*)



I went in search of *Neottia auriculata* in a most suitable habitat, i.e. the banks of the Ste-Anne River in Mont Albert, Quebec, Canada. I found instead, (well camouflaged in the riparian vegetation) five flowering plants of *Neottia* which presented characteristics intermediate to *N. convallarioides* and *N. auriculata*. This rare natural hybrid, known as *Neottia ×veltmanni*, was discovered in 1962 by H.S. Veltmann and F.W. Case. It has the distinction of being the only known hybrid in the genus *Neottia* and its distribution is limited to Michigan, Wisconsin, New Hampshire, New Brunswick, Newfoundland, Ontario and Quebec.

The Veltman's Twayblade is characterized by a shortly clawed lip with broad apical lobes and slight basal auricles (see comparison with putative parents below). Less obvious in a photo, but useful in situ, is a comparison of the glandular pubescence of the flower pedicels as described by Catling (1976):

- *N. ×veltmanni*: generally shorter and more sparse than that of the main axis
- *N. auriculata*: glabrous
- *N. convallarioides*: as thick and long on the pedicels as on the main axis of the raceme



Next time you're in the presence of one of its putative parents, look around and you might just be lucky enough to find this gem!

Benoit Dorion
Laval, Quebec

Three flowers (each from a different angle) and a bud all in perfect focus...nice. Due to their small size, Neottias are hard to photograph. Those that are monochromatic present an even greater challenge. Benoit not only submitted a terrific image, but he also introduced a taxa that most of us didn't even know existed. His comments and additional photos are an unexpected plus... well done.

Benoit's fine photo and outstanding commentary are a great addition to the Journal.

Ash Meadows Ladies-tresses (*Spiranthes infernalis*)



Ash Meadows National Wildlife Refuge was baking in the scorching Nevada sun. Somewhere out there, a small, twisted orchid was waiting to be found and trying to find it felt like *Mission Impossible*. Despite the odds, and with the aid of a map, I finally did. It felt like hitting the jackpot. I bounced back to the car to tell my wife that I had actually spotted some plants, but in my excitement I forgot to mark the place. When we got back to the area, everything seemed pale yellow, but it was just dry grass providing perfect camouflage. Luckily, after what felt like an eternity, that twisted flower raceme pattern hit my eyes again, and there they were. And there were plenty of them growing along a mostly dry riverbed, so we had loads of motives for our little private photo competition, smart phone vs 'real' camera. The picture here is from my 'real' camera, taken with an 18-300 mm zoom lens. And this is probably when real photographers turn away and stop reading, but I got seriously tired of changing lenses. The actual focal length for the shot was 276 mm, which explains the nicely blurred background. The aperture was 13, with an exposure time of 1/1250 (it was really bright), and I usually leave the ISO at 800. I don't use a tripod as I am too impatient. I take as many shots as possible while working my way around the subject, always making sure not to disturb neighboring plants. I change the position, the light, the angle...every orchid species is different, and every plant is as well. The plant in the picture was one of the taller ones, showing a beautiful spiral arrangement of the flowers; not much that I could do wrong.

Ralph Graeser
Mittelbiberach, Germany

*Even those who are not enamored with *Spiranthes* will appreciate Ralph's unique photo. The orchid stands out from, but at the same time blends in with, the background for a very pleasing effect. Furthermore, it's an extremely rare species and Ralph and Chizuko sent their image all the way from Germany.*

Interesting monochromatic photo and equally interesting comment about comparing Ralph's SLR camera with Chizuko's cell phone. This may inspire a follow-up discussion and even a "How to" presentation.

Three Birds Orchid (*Triphora trianthophoros*)



My love of photography began when I was 12. My grandmother loved taking flower pictures with her Kodak brownie camera. My dad loved taking flower pictures with his Kodak 35 mm camera with a handheld light meter. Then I came along and took a ton of slides and prints; I got my first good digital camera in 2003. Soon after, I got into wild native orchids. Apparently it stuck because I have spent over 13 years photographing all orchids that are native to Michigan. The orchid pictured is the Three Birds Orchid (*Triphora trianthophoros*). I first saw this species in 2011 in Indiana. The colony was about 250 plants in a 30 foot area. Those plants were all open at the same time. It is one of the rarest orchids in Michigan. I searched for about 10 years and finally found it with the help of a friend in West Michigan. When we visited the spot, we found about 100 plants. I am not a botanist, neither do I know much about orchid genetics, but based on articles I had read, the plants looked like they would open the next morning. According to the articles, there are usually a few pink colored blooms that trigger the rest of the colony to bloom. The Three Birds Orchid will only bloom on sunny or bright overcast days. If it's a gloomy type of overcast, they will wait for the next group of

flowers on the stem to bloom. The blooms last only several hours. The plants will start blooming at the end of July when there has been 2-3 consecutive nights of a temperature drop. I knelt on the ground next to the pinkish bloom and watched the other plants within a 15 foot radius begin to open. This photo was taken with a Nikon D850 using a 105 VR macro, cable release, right angle viewfinder, and the Manfrotto Wilderness model tripod. The image was created through focus stacking. Focus stacking is done by taking pictures of the plant at many (possibly hundreds) of different focus points. You then "stack" them together in Adobe Photoshop to create the final image. The photo you see was created by stacking 140 images. Although I am not a botanist, I have a great love of nature and I try to convey that through my photos.

Aaron Strouse
Clare, MI

This evocative photo is a real stunner. It has an ethereal quality with its ultra-sharp image of a perfectly posed flower and buds-in-waiting accompanied by the overall moodiness of a foggy morning. In the misty background we see the hint of another flower... or could it be a reflection from some unseen, ephemeral pool?

I can really appreciate this photo and the effort it took to find it, time their exact blooming, and get such a great closeup photo of their tiny flowers!

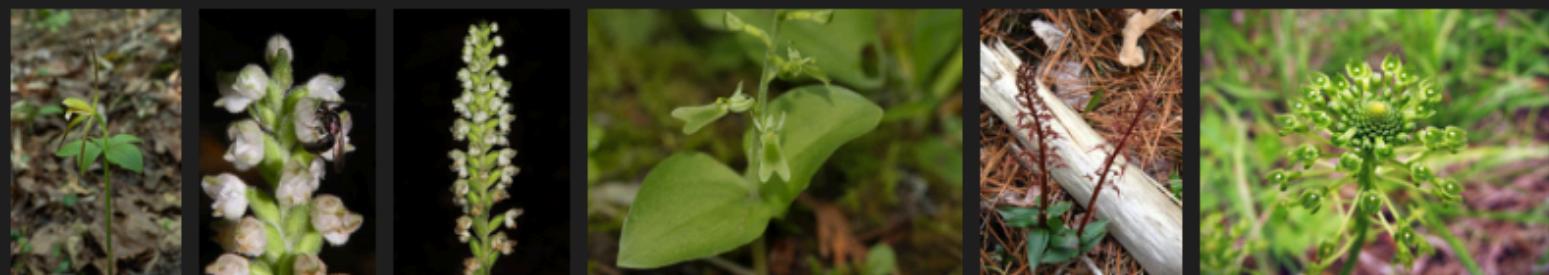
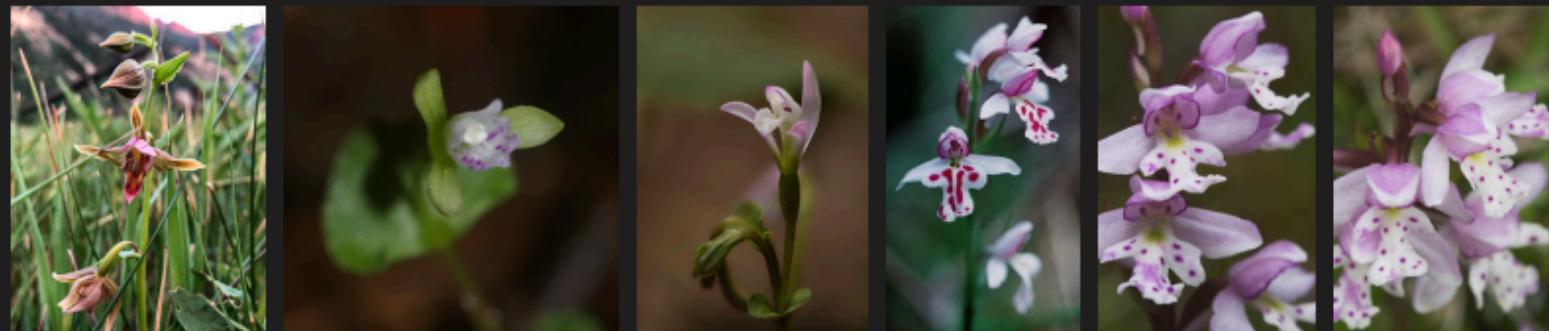
THANK YOU TO ALL OUR PARTICIPANTS!

(Additional photos will be featured in subsequent Journals)











nativeorchidconference.org

NOC Facebook Group: www.facebook.com/groups

NOC Facebook Page: <https://www.facebook.com/The-Native-Orchid-Conference-Inc>

ISSN 1554-1169