# Greater Akron Orchid Society

An Affiliate of the American Orchid Society & the Mid-American Orchid Congress

# August 2019

President

Jane Bush

Vice President

**Barb Ford** 

**Treasurer** 

Claudia Englert

Secretary

Lore Yu

Editor

Brandon Spannbauer

Trustee

**Dave Miller** 

## **Minutes of July 2019 Meeting**

Jane began the meeting by greeting new members and guests. We are in need of a representative for the Mid America Conference. The Mid America Congress includes fifty-one orchid societies from thirteen US states and Canada. It coordinates activities between different societies and holds two meetings a year, in Spring and Autumn.

As Donzell's is closing, our Orchid Society needed to find a new location for our annual show. The Show Location Search Committee has visited ten different places in the Akron area and is recommending Rohr's Nursery and Garden Center. <a href="http://rohrsnursery.com/">http://rohrsnursery.com/</a> Rohr's came to our attention as they host a bonsai show. They are very happy to work with us and will supply the tables. We only need to pay the cost to heat the greenhouse to keep the orchids happy.

Paul's orchids were offered for sale in hopes that they would find loving homes.

Dave Miller gave a great presentation on "How We Grow Our Orchids" which can be found on our website: <a href="https://thegaos.com/">https://thegaos.com/</a>

*Website:* www.thegaos.com

Facebook: <u>www.facebook.com/theGAOS</u>

### **Upcoming Business**

For the August meeting, here will be a pre-meeting potting session starting at 6:15 PM. Pots and media will be available for a suggested donation.

Anyone is invited to bring an orchid plant for which they have a question about its care and Edgar will be the "Answer Man" during the meeting to the questions. If the plant may have bugs, please put it in a **closed plastic bag** to prevent contamination of other plants.

Third, there will be about phalaenopsis plants for sale \$4 each or 3 for \$10. The plants have no ID tags but some have a note as to the color of the flower.

### **Next Meeting**

The next meeting of the GAOS will be Monday, Aug 12, 2019. Doors open 6:30 pm, Beginner's Corner 6:45 pm and meeting starts 7:15 pm. Portage Lakes Kiwanis Center, 725 Portage Lakes Dr., Akron, Ohio 44319.

Program: Game Night: "Orchid Jeopardy"

Speaker:

Game Night: Orchid Jeopardy. Come join us for a fun night of orchid games and trivia.

Each meeting will have a show table in which everyone is invited to bring in their blooming orchids to show off. This is a great way to see what other members are growing and how they do so.

New members and visitors are also invited to bring any plants they wish to show or have questions about.

### **President's Corner**

By Jane Bush



### Greetings!

Our hearty thanks to our Show Site Search Committee of Dave Miller and Barb Ford with assistance from Mary and Jim Bell. They put in many hours in over a month to find us a suitable place for our 2020 show. Their final recommendation was presented to the board which unanimously approved Rohr's Nursery and Garden Center as our new show site.

A second huge thank you goes to Edgar of Windswept In Time who graciously volunteered to repot, spray for insects, and then spray for fungus the approximately forty orchids that were left after the sale of Paul's orchids at the last meeting. Now that these orchids have had a good dose of TLC, many are starting to show new growth as they bask in the dappled shade in my yard. These will appear again in the member auction in September.

Having experienced the bewilderment of trying to repot and care for types of orchids that I had had no experience with made me realize that many of our newer members probably had the same feelings. To help all of you, we are adding some additional activities to our August meeting.

First, starting at 6:15 PM we are offering a repotting session. Pots and media will be available for a suggested donation.

Second, bring any plant for which you have a question about its care, and Edgar has volunteered to be the "Answer Man" to those questions. If you think that your plant may have bugs, **please put it in a closed plastic bag** to prevent contaminating other plants. This should be a very interesting part of our meeting!

## **Meeting Schedule**

GAOS meets the second Monday of each month (except December) Beginner's Corner starts at 6:45pm and the meeting at 7:15pm, at the Portage Lakes Kiwanis Center, 725 Portage Lakes Dr., Akron, Ohio 44319

Members are encouraged to bring orchids from their collection for exhibit. All are welcome; you do not have to be a member to attend.

Aug 12 Game Night: "Orchid Jeopardy"

Sept 9 2<sup>nd</sup> Member Plant Auction

"Orchid Diseases Part 1" Jane Bush

Oct 14 "Orchid Diseases Part 2" Jane Bush

Nov 11 Holiday Banquet / Elections



**Photo of the Month:** Laelia purpurata sanguinea. Orchids never flower in time for a meeting or a show, so I wanted to document them in case they don't survive long enough. This is a becoming a reliable summer bloomer for me with several blooming years in a row.

Photo: Brandon Spannbauer

### **President's Corner Continued**

By Jane Bush

Lastly, we will have a game of Orchid Jeopardy. Everyone will be split into competing groups. The group that racks up the most points will be the first group to choose a plant at our November meeting. The group with the second highest points will go second and so on. All information in the game comes from the January through June newsletters, Dave's information on "What's in a Name" and Dave's information on the 3 Orchid Alliances he has covered. All of this is on the GAOS website, thegaos.com

From the time doors open, there will be about 35 phalaenopsis plants for sale on a first come, first serve basis. These plants do not have ID tags but some have the color of the flowers noted. The plants are \$4 each or 3 for \$10. These plants are easy to grow and if you place them in a window area where they experience a temperature change, they will produce a beautiful spray of flowers in the early spring, just when you need something to brighten the house. The flowers usually last a long time and sometimes the plant will rebloom in the fall. The one no-no with phals is "do not let water sit in the crown of the plant" as that will cause rot that kills the plant.

TIDBIT: August is the time to start treating your plants that have enjoyed the summer outside for the move back inside.

# What kind of plant is this and where can I get one?



I found this meme which reminded me of my Bailey, sleeping here in a bag of peat moss -Brandon



# Discovery reveals secrets about how ghost orchids reproduce

By Douglas Main, Photos By: Carlton Ward Jr. & Mac Stone, abbrev.

National Geographic:

https://www.nationalgeographic.com/animals/2019/07/ghost-orchids-floridasurprising-pollinators-moths/



The first-ever photo showing a pawpaw sphinx moth (*Dolba hyloeus*) probing and likely pollinating a ghost orchid bloom, in the Florida Panther National Wildlife Refuge. It was previously thought only one species pollinated these flowers: the giant sphinx moth.

Deep in remote Florida swamps, a team of researchers and photographers have made a new discovery that upends what we thought we knew about the ghost orchid, one of the world's most iconic flowers, and how it reproduces.

These rare, charming orchids were long thought to be pollinated by a single insect: the giant sphinx moth. This massive creature sounds like a miniature jet as it zooms through the swamp with a six-inch wingspan, says conservation scientist Peter Houlihan.

But now, photographs by Carlton Ward Jr. and Mac Stone show that a couple of moth species other than the giant sphinx visit and carry the ghost orchid's pollen—and the giant sphinx itself may play a completely different role than previously thought.

These results provide insight into the plant's virtually unknown reproductive biology, and they suggest that conserving the endangered species may be less difficult than assumed, since it's not dependent on only one pollinator, says Houlihan, who collaborated with Ward and Stone to make the discovery. The findings also show the ghost orchids can be important food sources for moths.

"It's very good news," Stone says.

Ghost orchids are found in Florida and Cuba, and there are only about 2,000 ghost orchids in the state. As few as 10 percent of them flower each year during an unpredictable window in the summer. The plant has no leaves, consisting of green roots that cling to the bark of several tree species. When they aren't blooming, they look like unremarkable bits of green linguine, and are difficult to find.

They also generally live in swamps that are not easy to access—and home to animals such as bears, panthers, alligators, and several venomous snake species, which dissuades many from attempting to see one.

#### Orchid fever

On a recent summer day in Florida Panther National Wildlife Refuge, home to a quarter of the state's ghosts, I spent many hours searching for one in bloom with Ward and refuge biologist Mark Danaher. We hiked through knee-deep water the color of sweet tea from early morning until afternoon, marveling at the abundance of diversity of air plants and orchids. When we finally found a ghost, it was really magic.

The plant's bright white, delicate flowers seem to hover above its stems, and the modified petals have long, curly legs that flutter in the breeze. In the center of the flower is the entrance to a tube called a nectar spur, which contains sweet secretions. Ideally, the nectar will attract a moth, which will elongate its tongue-like proboscis and stick its head into the tube. If all goes well, the moth will contact the plant's bundle of pollen, called a pollinium, which will stick to its head, and hopefully be carried on to fertilize another ghost.

These orchids have long nectar spurs, stretching five inches or more in length, though this varies. Given the size of the tube, it has long been thought that only the giant sphinx moths would be capable of reaching the nectar.



The first-ever photo sequence showing a streaked sphinx month (*Protambulyx strigilis*) probing and potentially pollinating a ghost orchid flower.

But when Ward set up several remote camera traps in this wildlife refuge, he documented five species of moths visiting these ghost orchids. Two of these species, fig sphinx and pawpaw sphinx moths, had ghost orchid pollinia on their heads. Stone and Houlihan worked out of Corkscrew Swamp Sanctuary, one of the world's largest old-growth cypress forests. The sanctuary has set up a scope for visitors to see a massive ghost orchid, known as the "super ghost." The orchid currently has eight flowers, "which is just insane," Stone says—most plants put out only one flower at a time.



(Above) The first ever photo of a fig sphinx (*Pachylia ficus*) feeding from a ghost orchid—note the yellow ghost orchid pollinium attached to the top of its head.

All experienced a bit of orchid fever. "I do think it's possible that orchids drive people crazy," Ward says: The two photographers had their cameras trained on the flowers for a total of 7,000 hours.

But all this work paid off. In August Mac captured photos of a fig sphinx visiting the flower with ghost orchid pollinia on its head. Both photographers also revealed giant sphinxes visiting the ghosts—but the insects weren't carrying any pollinia. In one shot by Stone, the moth can clearly by seen drinking nectar, but its head is not nearly close enough to the flower to pick up the pollinium.

This led to a wild hypothesis: Perhaps the giant sphinxes steal nectar from the ghost orchids without pollinating them, Houlihan says. His research also turned up a dozen local hawkmoth species (including the two species Ward photographed pollinating orchids) that have tongues that are long enough to theoretically sup the orchid's sugar.

"There are probably lots of moths that can pollinate these flowers," he says.



Orchid thief? A giant sphinx moth (*Cocytius antaeus*) drinks nectar from a ghos shows that the giant sphinx is capable of taking nectar from the flower without pollinating it.

### Blame Darwin

There are many flower species that are pollinated by a single moth or butterfly.

Most famously, in 1862, Darwin examined a Madagascar orchid now named after him (Darwin's orchid, or *Angraecum sesquipedale*) that has a foot-long nectar tube. He was somewhat exasperated, as he hadn't heard of any moth with a 12-inch tongue. "Good heavens," he wrote, "what insect can suck it?" He hypothesized that there must be an insect in the area with just such a proboscis.

He was proven right 130 years later, when Morgan's sphinx moth (*Xanthopan morganii*) was seen feeding from the orchid with its huge tongue. Houlihan's studies of this moth, funded by the National Geographic Society, helped lead to his work on ghost orchids.

But having multiple pollinators, which apparently isn't the case for Darwin's orchid, will help to provide more opportunities for the ghost orchid to successfully reproduce.

"It's good to have redundancy in ecosystems," says Mike Owen, a biologist at Fakahatchee Strand State Preserve, where he and his colleagues have discovered 450 ghost orchids since 1993.

### The importance of old-growth

It's also crucial to conserve remaining old-growth forests, which are home to ghosts and many other rare plants and animals, says Shawn Clem, research director for the sanctuary.

The super ghost itself shows people that the flower is not an abstract concept—but a very real plant that depends on a healthy flow of water to survive, she says. The new discovery about the ghosts' pollinators "speaks to the need for conserving places like Corkscrew so that we can continue to understand the complex ecology of the region," Clem adds.

Cypress trees once covered much or most of southwestern Florida, and Corkscrew offers a glimpse of how the land once appeared. Many trees reach to heights of around a hundred feet, and some of them are about 600 years old.

The super ghost is by far the highest situated of its species, and one of only few known to occur in cypress trees. But Houlihan and Stone think that, once, it was probably a common scenario—and these highly perched plants were likely incredibly important for seeding the understory below.

When I finally saw my first such bloom, chest-high, with lip-like petals and a striking bright white color, I began to see how orchids hold such strange power over people. Ward is a good example.

After seeing his first flowering ghost in July 2012, in the Fakahatchee preserve, he returned for three days in a row to get the right shot—and has been photographing them ever since.

"The ghost orchid motivated me to explore these swamps," Ward says, "and I hope its story can inspire others to protect the places where it lives."

Paphiopedilum concolor in situ photographs by Thang Vu Ha, Long Bay Vietnam.



### **Reliable Bloomers Wanted**

By Pam Everett

At the May meeting, Pam had an idea, for those who wish to participate, to send Pam a list of two or three of their orchids that are regular bloomers and have been easy to grow. This may help, especially newcomers, to be on the lookout for plants which they can be successful in growing as they begin their journey into the orchid world. It may also give some of the more seasoned members ideas for plants they haven't yet thought to cultivate.

The main idea, though, is to give each member one additional way of participating in GAOS activities.

To participate provide simple info on the following growing requirements:

- 1) Orchid Name
- 2) Light and Air
- 3) Humidity and Temp
- 4) Media
- 5) Repotting
- 6) Fertilizer
- 7) Side Notes

Send to Pam at <u>pjoeverett@aol.com</u> where she will start a database for us.

## **Upcoming Orchid Events**

'Orchids Under the Dome'

Presented by Niagara Frontier Orchid Society November 9-10, 2019 Buffalo & Erie County Botanical Gardens 2655 South Park Ave, Buffalo NY

# **Photo Gallery**

**July 2019 Meeting** 



Zygo Advanced Australia Barb Ford



Paph Mystic Isle Barb Ford



Mtssa Shelob Bernie Skalak



Lyc Shonan Harmony Frank Skalak



Ang distictum Bernie Skalak



Oncidium Pam Everett



Oncidium Hula Halau Pam Everett



Laelia tenebrosa Pam Everett



Oncidium Wildcat Pam Everett



Specklinia Lore Yu



Ang magdalanae Lore Yu



Phal "Magic Art" Lore Yu



Vanda NoID Mary Bell



Den Silver King Mary Bell



Lc Tropical Pointer Mary Bell



NoID Phal Claudia Englert



Cattleya NoID Mary Bell



Rananthera Gerald Mary Bell



Phal equestris Chester Kieliszek



Phrag Betheva Darlene Thomson



Den Sea Marion Dave Miller



Banfieldava Gilded Tower Dave Miller



Mtssa Shelob Dave Miller



Paph Virtuous Darlene Thomson



Paph glaucophyllum Darlene Thomson



Paph concolor Darlene Thomson



Paph Grace Henry Darlene Thomson



Laelia tenebrosa aurea Darlene Thomson



Phrag Hanne Popow Darlene Thomson



Paul Bujak Donation Plants



Paul Bujak Donation Plants