



THE KEIKI



Volume 28
Issue 11
November 2020

CONTENTS

Page 2
Officers, Committees
Treasurer's Report

Page 3
From The Desk of Steve
Mattana

Page 4
Membership Notes
NCOS Quiz

Page 5
September Show Table
Entries

Page 6
Show Table Pictures

Page 7
Pictures from visit to
Joy Orchids

Page 8
A Local Native Orchid

Page 9-10
Desire and Destruction,
By Jeff Rundell

Page 11-12
NCOS Member Profiles

Page 13
AOS Webinars & News
Page 14—15

AOS Orchid Culture
Notes

Page 16
NCOS library
Book of the month
Quiz Answers

Happy holidays, everyone! Our October meeting was our last of 2020, as we will be unable to hold our picnic or Christmas party this year. We will re-convene on January 16th, 2021.

Please note: Dues will be due in January.

Dues are \$20 for a single member, or \$25 for a family living at the same address.



EXECUTIVE BOARD

OFFICERS

<u>President</u>	Steve Mattana
<u>Past President</u>	Jeff Rundell
<u>1st Vice President</u>	Geary Harris
<u>2nd Vice President</u>	Sharon Wagner
<u>Treasurer</u>	Yvette Lewis
<u>Executive Secretary</u>	Pat Dupke
<u>Recording Secretary for meetings</u> (not an elected position)	Kara Ramsey

COMMITTEES

<u>Bulletin (The Keiki)</u>	Julie Smolka and Matt Riesz
<u>E-mail Co-ordinator</u>	Matt Riesz
<u>Historian</u>	Mary Lou Mattana
<u>Librarian</u>	Celeste Ogden
<u>Membership</u>	Arlene Appelbaum, Carol VanderLaan
<u>Publicity</u>	David Fowler
<u>Refreshment Table</u>	Volunteers please
<u>Refreshment Reminders</u>	Volunteers please
<u>Show Table Report</u>	Matt Riesz
<u>Speaker Segment Writer</u>	Kara Ramsey
<u>Trips</u>	Sonia Terrelonge
<u>Webmaster</u> (Website set up by Ken Dunn)	Bob East
AOS Representative	Matt Riesz

TREASURER'S REPORT

By Yvette Lewis

Corrected report from last month

Prior balance as of 8/31/2020:	\$10,239.08
Total receipts (raffle, etc.)	\$296.00
Total disbursements	<u>(\$215.49)</u>
Balance as of 8/30/2020	\$10,319.59
Outstanding Checks	<u>(\$350.00)</u>
Cash On Hand 9/30/2020	<u>\$9,969.59</u>

Current Report:

Prior balance as of 9/30/2020:	\$10,239.08
Total receipts (raffle, etc.)	\$317.00
Total disbursements	<u>(\$984.66)</u>
Balance as of 9/23/2020	\$9,651.93
Outstanding Checks	<u>(\$200.00)</u>
Cash On Hand 10/31/2020	<u>\$9,451.93</u>





President's Message

From Steve Mattana

Good day everyone

We just had our final meeting of the year. This year certainly was an eventful year with sickness, unrest and unfortunately deaths. With flu season and winter slowly approaching us, we still need to be vigilant for our health, and for the health of other people. We should maintain social distancing, and also wear a mask.

Our September meeting was certainly full of a big surprise for the 2020 paid members that showed up. To give everyone a recap that weren't able to make it to the meeting, what transpired was paid members that showed up received a certificate, of sorts, to go to Joy Orchids and receive a discount. The discount was what they paid for their membership! Congratulations to all that received this gift. From what I have heard so far everyone that went to Joy Orchids purchased multiple plants!! Again, congratulations guys!

We had our final meeting of the year just a couple weeks ago. It was awesome to see everybody's faces once again. We had an awesome bloom table had a lot of beauties. Bret Ullery talked about Dendrobiums and other little odds and ends of orchids and preparing your orchids for winter. Bret brought up a plethora of flowers to be sold and to be shown and many people walked out with several plants.

Next month is a good time to start repotting all your fragrant/novelty Phalaenopsis. They do like it when the weathers a little bit cooler and it's a perfect time to do it. Plus, I'm sure we're all ready for a bit of cooler weather. Although it's going to be 90 today, I'm told that we are in fall season, doesn't that mean that we should have cooler weather??

Our membership dues will be payable at our January 2021 meeting. Remember, the membership dues that you pay are the means by which we can do things for you. We are planning a very robust 2021. Certainly, looking forward to the surprises from our second vice president, our spring show, and all the fun things that we do.

So, we all need to start thinking about our spring show which will be the last weekend in March. Sign-up sheets for all the volunteer positions for the show will be at the January meeting. We would love to see your names on them. Elections will need to be held also, so start thinking about what board position you would like to volunteer for. We will need one person to be head the nomination committee.

Well my friends, want to wish everyone a happy Thanksgiving it's just right around the corner. I hope everyone has a very happy Hanukkah, merry Christmas and a very happy New Year. See everyone January 16th.

Happy growing everyone

Steve

Membership Notes for July



By Arlene Appelbaum

For a complete membership list send a message to

ncos2gether@gmail.com.

After a very different and stressful year for our orchid society, I am very pleased to report that we have 127 members on the roster for 2020. Over the past two months, with meetings in September and October we added a total of 13 new members to our group. Welcome all. Our orchid society is alive and well thanks to you all.

Also, DUES ARE DUE IN JANUARY. Please come to the January meeting and bring your checkbook. Dues this year are \$20 for an individual member, or \$25 for a family all living at the same address.

MEMBERS:

Arlene has graciously taken over sending get-well cards and sympathy cards to members. If you know of any members who are ill or grieving, please send her an email to let her know at fluffy2cats@gmail.com

THANK YOU!



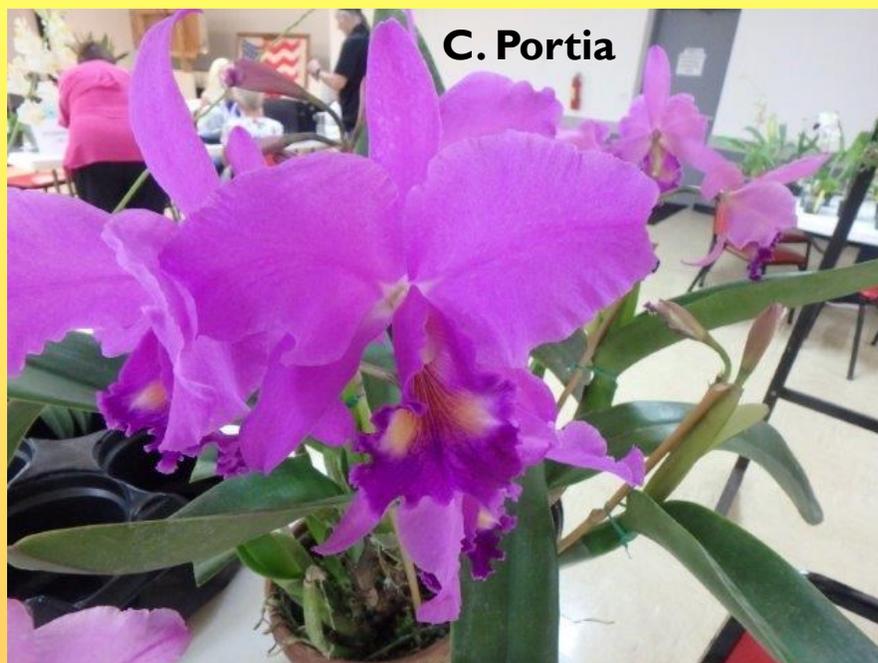
NCOS ORCHID QUIZ

Answers on page 16

1. *Who was the author of Spotted Cattleyas "Cheetahs of the Cattleya World?"*
 - A. Susan Orlean
 - B. John Laroche
 - C. Steve Mattana
 - D. Laura Newton
2. *Cattleya species known to have spots are:*
 - A. *Cattleya Skinneri*
 - B. *Cattleya aclandiae*
 - C. *Cattleya amethystoglossa*
 - D. B and c
3. *Cattleya aclandiae and Cattleya amethystoglossa are native to:*
 - A. China
 - B. Philippines
 - C. Brazil
 - D. Chile
4. *Cattleya aclandiae is nicknamed:*
 - A. The spotted sensation
 - B. Lady Ackland's Cattleya
 - C. Moth orchid
 - D. Butterfly orchid

NCOS Show Table, October 17th, 2020

Plant Name	Grower
Coel. usitana	Corbin Beller
Lc. Callistoglossa var. alba	Delia Dunn
B. nodosa	Delia Dunn
C. Joyce Hannington X C. Ben Nevis	Jeff Rundell
C. Dorothy Parks 'Lavender Splash'	Jeff Rundell
C. Portia	Joyce Fowler
Vanda falcata var. tosabeni	Matt Riesz
Rlc. Chunyeah '#10'	Matt Riesz
Rcv. David Sander	Matt Riesz
Epi. porpax	Matt Riesz
Phal. Samera var. coerulea	Matt Riesz
Phal. Purple Martin	Matt Riesz
Phal. LD's Bear Queen 'Wilson'	Matt Riesz
Oncostele Catatante 'Orange Kiss'	Regina Epple
Vanda falcata var. tosabeni	Steve Mattana
Phal. Indigo	Steve Mattana
Phal. Red Apple	Steve Mattana





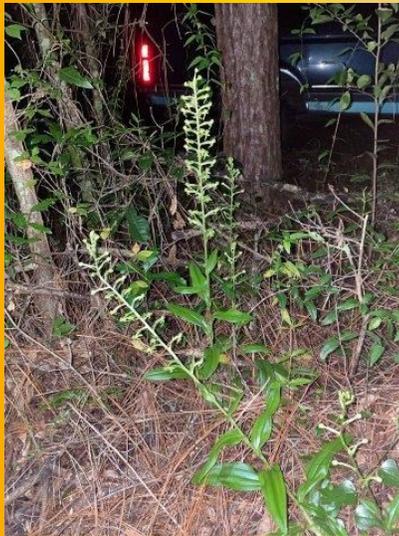


On October 3rd and 10th, Joy Orchids graciously opened their greenhouses to NCOS members, to redeem credits toward orchid plants that were a gift to our members. Everyone who took advantage of this opportunity had a great time, and we thank Joyce and David Fowler for their hospitality and their beautiful orchids!



Native Orchids

Corbin Beller shared these pictures with us, of some native orchids he found growing on his property in Brooksville. These have been identified as *Habenaria floribunda*, which is native to Florida. Thanks, Corbin !!



Desire and Destruction

by

Jeff Rundell

I promised the final chapter into my investigation of the *Phrag. kovachii* story for our last issue. Using Craig Pittman's book, *Scent of a Scandal*, I thought I had a fair grasp of the cast of characters and their respective roles. Now I realize this story has a life of its own and I owe it much more attention before any judgements. The more I looked at this web of deceit the more strands I found with a new spider in each corner. So to bring some measure of closure I'll summarize the general attitude of those I've surveyed on how this plant brought so many people first up and then crashing down.

Our leading man Michael Kovach, went to Peru and saw an orchid like no other. He transported it under false pretenses to Selby Gardens in Sarasota. Scientists there, who are always under pressure to make discoveries, hurried to publish the description of their newfound jewel. For Kovach that wasn't enough and he sought to congratulate himself further by naming the orchid for himself (a definite faux pas for schooled taxonomists). The unappreciative Peruvian government would have preferred "peruviana" and before you can say "C.I.T.E.S. cop" the orchid was stripped from its habitat and was being sold for thousands on the black market. At this point a number of Selby people have very dirty hands. The excuses were as diverse as orchid genera: The pressure of fund raising. We aren't cops, we're innocent scientists. It's the fault of our weak kneed administrators. The right hand can't control the left (translation - the administration was into wedding receptions and fund raising dances while the scientists peered through their microscopes). The discord put each faction at odds with the other. It sent the venerable institution into a tailspin that forced the resignation of the CEO along with mass resignations from the Board of Trustees. Worst of all, it caused this wondrous, respected institution to bleed money and lose the support of many donors. It just seems strange that one of our friendly little orchids led to police raids, ruined reputations and arrests. That is not to say that Selby is not still a wonderful place and should not be missed.

In an attempt to balance the bad karma of the previous paragraphs I investigated some of the delights of the internet regarding orchids. Sure it's full of the minutia of the orchid world with confusing multi-generic crosses, conflicting advice and orchid commercialism. But look deeper and you will enter the affective realm of orchid beings. Lots of this emotional transfer takes place in the orchid blogosphere. There are thousands of orchid blogs filled with the lovely little vignettes that always bring a smile to my face. So, in the interest easing up on all the

difficult to digest technical help on potting materials, watering, fertilizer and pest control, here is how orchids make people FEEL:

- A blogger posts a time lapse of his favorite phal. blossom opening to the music of “the stripper”.
- Orchid Karma, a lady from Sweden, says “The boundary between stark madness and unbridled devotion in the orchid world is filled with sensuality and weirdness. It’s what makes life interesting.”
- One blogger has a devotion to orchid back bulbs and has made it the title of his blog.
- Lady Orchid describes the Philadelphia orchid show (the largest and oldest in the east) as “making her eyes as big as moons and producing a damning attitude that straddles the realm of an orchid fun park and makes your senses go on a bender.”
- Orchids de Dangau (from Malaysia) says “I grow orchids to please my eye and soul, to challenge the elements and my patience, for novelty and nostalgia but mostly just to see them grow.”
- The Mad Orchidist confesses he has an abiding love of his orchid seed pods.
- Widi Utama says “His simple shape of phrase must only revolve around orchids.”
- Orchid Mania put her show together with the surreal artworks of Salvador Dali. Enlarged pictures of melting clocks juxtaposed with orchids.
- Cattleyaphilia confesses to like growing and even sometimes killing his orchids.
- WSBE Orchid Project from the UK sent students to once war torn Rwanda not to study the gorillas but to conserve the 160 orchid species they live among.
- One blogger calls orchids “eclectic epiphytes” and laments that of all the flowers Shakespeare wrote of, he never mentioned orchids. (note: they were never named until Lindley came along in 1845).
- And finally this from an unlikely sounding Australian blogger calling himself “Chuckie”: “I owe my mother, who taught me the sensual delight of orchids; their color, their form, their feel, their fragrance and even their taste. In essence she taught me about beauty and how beauty can positively affect one’s mood and approach to life.”

Hopefully we all find ourselves in some state of orchid bliss every now and then.

NCOS Member Profiles

NCOS would like to thank two of our newest members for submitting a member profile. We would love to share a little about our members in each Keiki. If you would like to submit a profile contact Julie Smolka or Matt Riesz

Our first submission is from Tiffanie Swigart

"My name is Tiffanie Swigart. I'm pretty easy to find in the crowd as I'm usually one of the youngest members of the society. I have been growing and killing orchids for 18 years. I recently moved to Brooksville in 2019 from Pinellas County to enjoy some acreage and country life. I started out growing Cattleyas but am always up for a challenge so after getting those to grow and bloom, I've moved on to Vandas, Paphs, Bulbs and even tried my luck at Draculas and Masdevallias. I have won several ribbons at shows and even a few trophies for "best of show" throughout my years. My life long goal is to one day earn an AOS award. I took a hiatus to focus on my kids for several years (though I still tried to grow my orchids, I drastically decreased my collection to a more manageable size). Now I am ready to get back into orchids full force again and looking forward to my new home at Nature Coast Orchid Society and meeting every one of you.

Our second submission is from Corbin Beller

My name is Corbin Beller, I am 19 years old and am an avid collector of species and some hybrid orchids. I got my first orchid two years ago from a flea market. It was just your typical winter blooming hybrid phal. At the time I had gotten it as a christmas present for my grandma. I found myself not ten minutes later returning to the booth to buy two more, explaining to myself that one is for my grandma, one for my aunt, and one for my mother. It was the only way to rationalize the amount of money I had just spent on plants. At the time I never thought that this would spark a revolution in my life two years later. The next year, so 2019 in October I was researching more about orchids in an attempt to bareroot a phalaenopsis. I found myself on <https://www.orchidsbyhausermann.com/> looking at the wide array of various orchids. I found myself on the sale page and bought three more orchids. A psychopsis, a hybrid cattleya, and a species phal. Then after doing more research I found myself at Lowes buying two more orchids, then one more and another. Those were the last orchids I had bought until spring of the next year. I decided to visit an orchid greenhouse for the first time, I figured it was about time to see what I am really getting into.

Cont. on next page

So my first visit was to Everlast Orchids and Supplies INC. in Spring Hill, I had bought a dainty little orchid with a couple of blooms that I had no idea what it was. There was no tag, just a beautiful soft colored bloom pleasing to look at. It was *dendrobium aphyllum*, from there my love for pendulous orchids was ignited. I then of course did more research and soon returned to buy at the time my biggest and most expensive orchid, one of the famous black orchid *monnierara millennium magic 'witchcraft'*. After returning a few times buying only one more orchid I decided my bedroom was full and couldn't have any more orchids. After a tragedy in my life going out of state to deal with it, I found Smiley's orchids in Clermont. It was the very next day after returning from my trip that I visited her. The first step into her greenhouse I knew I wanted that for myself one day. An orchid paradise found in the middle of nowhere. I bought a hybrid vanda that smelled like cinnamon apples, *Vanda mimi palmer x denosianana*. After that first visit I was hooked! The excitement I had within me to visit Smiley's was nothing I had felt before. So I visited every week after for about a month. Smiley and I became friends and now she is not only my friend but my mentor and teacher. I study with Smiley every couple of weeks at her greenhouse, we pull weeds and talk and I learn about things I never even considered. I currently have around 70 orchids in my collection, most being species but a few are hybrids. It was at her greenhouse that I found my love for *Coelogyne* orchids, she has *Coelogyne Ro-chussenii* a species of orchid having long pendant inflorescence having upwards of 50 flowers on each spike. This species has the ability to produce 5 spikes per bulb, on mature plants you can have a curtain of blooms. *Coelogyne* is my favorite group of orchids and comes in all different sizes, shapes, and colors. Some being epiphytes, lithophytes, and terrestrial growing on fallen trees. I collect the species *coelogyne* that grow in the hot and humid environment we have in Florida. Some *coelogyne* are cool growing, in their natural environment temperatures never going about 75 and never falling below 55. Here in Florida we can grow the intermediate to hot growing *Coelogyne*. With *Coelogyne* orchids ranging in environment and how they grow they will be cared for differently. Most to all *Coelogyne* will want to be consistently moist, but not soaking wet. The roots are different as well, some are thick and hairy, these plants being potted in sphagnum moss. While others are thin and smooth, these types are potted in wood chips. This type also has a wide range of light levels all the way from phal to the lower spectrum of cattleya. I currently have 11 *coelogyne* orchids in my collection. *Coelogyne* orchids grow like a weed once established. They can have two growing seasons in our environment giving them the potential to be specimen size in a short amount of time compared to other orchids. We all have that one orchid we know we spent way too much on but we just had to have it. Mine being *Coelogyne Multiflora*, this species is native to one island in Asia, Suwales east of Borneo. This orchid is found growing on trees as an epiphyte and on fallen trees as a terrestrial. The bulbs on this orchid are quite large being about 6 inches long and 4 inches wide. The leaves are huge on this type, being able to reach lengths of just below 3.5 feet tall. This type of *coelogyne* blooms from the base of mature pseudobulbs, however, some *coelogyne* blooms from the apex of immature bulbs. While *coelogyne* may be my primary focus, I have many other species one of them, probably most, haven't heard of is *Eria Convallarioides*. This orchid has a small cluster of flowers and is close to miniature in size. This is a little piece of how I got started in orchids and what my favorite type is and how to care for them.

The American Orchid Society Webinars

Webinars are online video presentations. You can register for an upcoming webinar or watch the recorded webinars any time. Some webinars require you to be an AOS member.

Upcoming Webinars

Greenhouse Chat for November

Tuesday, November 10th, 2020
8:30pm EST

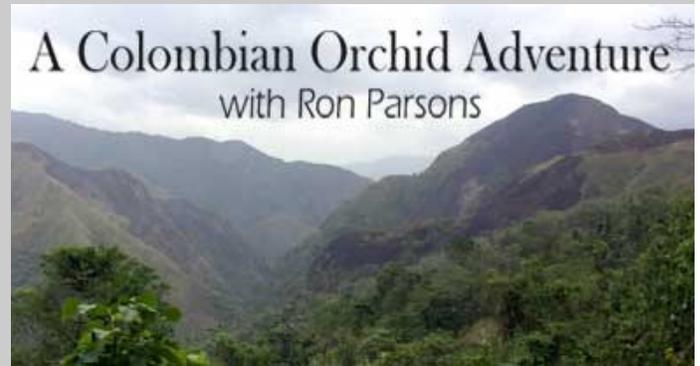
Join AOS Education and Science Officer, Ron McHatton, for a fun filled hour of orchid questions and answers. Send questions to greenhousechat@aos.org by November 7.



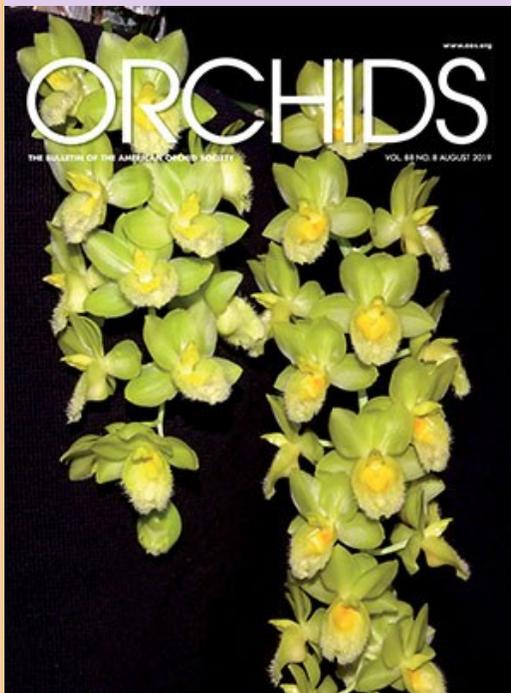
AOS Members: November Webinar

Thursday, November 5th, 2020
8:30pm EST

Join Ron Parsons, renowned photographer, on his travels in Colombia.



Just click on: <http://www.aos.org/orchids/webinars.aspx>
and you can watch these videos at your convenience.



Orchids Magazine

In addition to our normal monthly issue, October brings our annual supplement to Orchids magazine. Seeing spots? Perhaps stripes? Maybe both? This year's supplement is devoted entirely to spotted and striped orchids across a wide array of often-grown genera. Just how did all those fabulously colored hybrids we have come about. You won't want to miss this supplement.

In the main October issue:

- The New Refugium Botanicum - TBD
- Collector's Item - The Good, the bad, and the real stinkers; Bulbophyllum section Racemosae by Charles Wilson
- Orchids Illustrated - James Bateman by Peggy Alrich and Wesley Higgins
- GreatIdeas - Another method to minimize seed loss by Charles Wilson
- Paphiopedilum sukhakulii and its Hybrids. Seeing Spots! by Esteban (Steve) Gonzalez-Costa
- Some Unusual Orchids From the Papuan Highlands by Spiro Kasomenakis
- Growing Orchids is a Partnership - Allan Watson
- Lindleyana - Rare and Threatened Orchids of Central Africa, Part 2 by Murielle Simo-Droissart, Tariq Stévar, Bonaventure Sonké and Vincent Droissart

AOS Monthly Checklist for November and December

Cattleya

Growers of just about every level of expertise will have begun to notice autumn conditions by now. Days are becoming shorter, hence cooler; the sunlight has less intensity as a result of the sun's lowering angle, nights are longer and generally cooler. Plants are responding by slowing and ripening their growth in preparation for winter.

The first cultural change noticed should be a reduced frequency of watering, as the plants dry out more slowly. This is a function of both the reduced day length and lower temperatures, as well as the plants' slowing growth rate. Reduced water needs signal a reduced need for fertilization. Note that the key word is reduced, not eliminated. Feed less frequently and at lower dosage, but feed. Growths, made during summer's heat, and relatively soft and green, will be ripening -- hardening -- in preparation for a brief period of rest (in many cases).

Many of these ripening growths will have a sheath, presaging the coming winter or spring flowering season. In some cases, these sheaths will have been evident since as early as July. (Early sheath development does not mean early flowering on plants with winter-spring seasons.) You may notice that some of these sheaths are showing signs of yellowing. This is not abnormal. Autumn's more pronounced temperature fluctuation can lead to water condensation inside the sheath, hastening the normal process of senescence, so yellowing sheaths can be left on the plant only so long before they must be carefully removed to preserve the bud primordia within. Water condensation left unchecked can rot the bud primordia. The sheaths can be safely removed by slitting open and peeling down toward the pseudobulb.

Cool-Growing Orchids

One can almost hear a sigh of relief from all of the cool-growers, from masdevallias to odontoglossums. As day temperatures decline, one can see a noticeable improvement in these plants. Shorter days and lower light levels do not seem to bother them. Repot before winter arrives.



Cymbidium ensifolium produces delicate flowers with a delightful citrus fragrance.

Cymbidium

Finally we begin in earnest the main cymbidium season. *Cymbidium ensifolium* can give some early and fragrant hybrids, but it is now that the bulk of the crop will be flowering. The season lasts for about seven months, adding color to any collection. Miniature varieties will peak for the next three to four months. There are three important things to do: stake inflorescences ramrod straight for best presentation, watch for slugs and snails (especially just after a rain), and fertilize with a mild balanced formula regularly.

Oncidium crispum Complex

This is the season for plants in *Oncidium* section *crispum* from Brazil to shine. Extremely vigorous hybrids come in wide varieties of markings dominated with chestnut and brown and butter yellow. Give plants high light to produce strong upright inflorescences. The pseudobulbs should be plump, so do not let the plants dry out while they are in bloom. Later, plants will enter a dormant period.

Paphiopedilum

The flowering season for the "toads" or "bulldog" paphs is just getting underway. These cannot be grown everywhere, but where cooler summer nights allow their growth, there is no longer-lasting or more exotic display than these. Paphiopedilums are, in general, not heavy feeders, and it is especially important with this type to reduce nitrogen levels now for best flowering and spike length. Be watchful for water accumulating in the growth around the sheath, or for the late-season warm spell, either of which can lead to the sheath's rotting. As the spikes emerge, do not change the orientation of the plant toward the light, as this can lead to a crooked or twisted spike

While paphiopedilums rarely like to dry out entirely, water needs are significantly reduced beginning now. Overwatering at this time of year can quickly lead to root rot or erwinia problems. Now is the time to practice good sanitary practices in your greenhouse or growing areas, as pest and disease problems have a way of multiplying rapidly in the darker and more crowded conditions that generally mark the winter growing area. With paphiopedilums, especially, "cleanliness is next to godliness" and if the growing area is littered with old foliage, weeds and dying flowers, keeping the plants alive and flowering will be next to impossible.

Phalaenopsis

Shortening days and cooler nights are the signals for inflorescence initiation in phalaenopsis. In more northern climates, or on the west coast, growers have already begun to see the early inflorescences that may be ready for Christmas. In the eastern areas, nights in the greenhouse will now be in the low to mid 60s, depending on the thermostat setting, so the first of our phalaenopsis will not begin to bloom until Valentine's Day at the earliest.

A reduction in nitrogen levels will go a long way to giving the best possible spiking, as will a boost in potassium and phosphorus. In other words, a "bloom booster"-type fertilizer is definitely indicated in the next few months. Disease and pest problems are best dealt with now, especially as mealybugs hide in the bracts and flower buds. Once they have established themselves, they are difficult to eradicate, and flower damage or crippling results. Potential disease problems can be dealt with by the application of a copper-based compound to control/alleviate rot problems before they start. There is nothing more frustrating than to have shepherded your plants through a growing season, only to have them decline before your eyes.

Neofinetia falcata will thrive in cooler temperatures and produce graceful vanilla-scented flowers.



Neofinetia falcata will thrive in cooler temperatures and produce graceful vanilla-scented flowers.

Vandaceous Genera

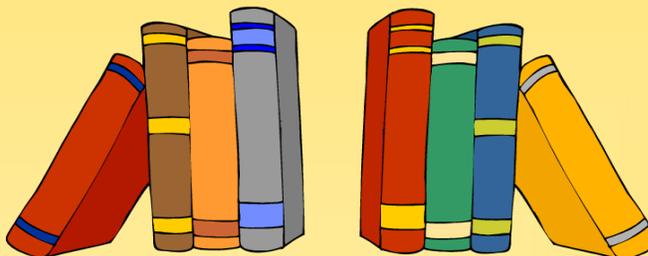
Whereas the general decline in temperatures is beneficial to cool-growing orchids, it is not for vandaceous plants. The only cold-hardy member is *Neofinetia falcata*. Orient your plants in such a way as to take advantage of as much light as possible. This can be a problem in northern latitudes. Reduce watering and feeding schedules.

The AOS thanks Ned Nash and James Rose for this essay.

YOUR ORCHID LIBRARY

By Celeste Ogden

<http://www.naturecoastorchidsociety.com/library-checkout-books.html>



How do I get a book from the Club's Library?

1. Just Click on: www.naturecoastorchidsociety.com/library-alphabetical-list-books.html
2. Select Books or CD's you think would be useful and order right on the web page.

Select any number(s) that you would like to spend some time with and then you can sign them out at the next Members' Meeting. Keep them for 1 month and return them at the following meeting and remove your name from the list.

If you have any questions about our Library Books, my email address is:
c1948ogden@gmail.com



The Society meets on the 3rd Saturday of each month, at 1pm, at the Spring Hill VFW Post 8681 18940 Drayton St. at County Line Rd

Enjoy great speakers, fantastic raffle prizes and beautiful orchids on display.

www.naturecoastorchidsociety.com

Answers to quiz

1. D. Laura Newton
2. D. B & C
3. C. Brazil
4. B. Lady Ackland's Cattleya

Please read this article in AOS Supplement "Spots and Stripes"