



Next Meeting:
February 5
Dotty Woodson

LADYSLIPPERS

Dotty Woodson and her husband, Berry, have grown and hybridized orchids since 1973. They grow their orchids in 5,000 square feet of greenhouses, 2,000 in their back yard and 3,000 at D & B Orchids, 5608 Boat Club Road, Fort Worth, TX. They have registered 64 hybrids and won many awards for their orchids and orchid exhibits. Berry Woodson was named the Herb Hagar Hybridizer of the Year by American Orchid Society in 2013.

Dotty has presented orchid programs to orchid growers in many states, at two International Master Gardener Conference, two International Phalaenopsis Alliance Conferences and to international audiences on Norwegian Cruise Line. Woodson is a member of

the Fort Worth Orchid Society, Greater North Texas Orchid Society, Southwest Regional Orchid Growers Association and the American Orchid Society.

Woodson has also written articles about orchid culture for many newspapers and magazines and appeared on many television and radio shows to discuss growing orchids.

Dotty Woodson is an Extension Program Specialist for Water Resources assigned to the Texas A&M AgriLife Research and Extension Center in Dallas, Texas. Woodson is part of the Texas A&M AgriLife Urban Water Team. Woodson started with Extension in May 1995 as a County Extension



Agent in Tarrant County. Woodson has B. S. and M.S. degrees in Horticulture from Tarleton State University and a doctoral degree from Texas A&M and Texas Tech Universities.



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MINUTES

Barb McNamee

The meeting/auction was called to order by Mike at 2:45 with 28 people in attendance, several were visitors.

We began with our annual Christmas luncheon. Mike announced that dues are due every January.

The new offices were voted in; President - Judy cook; Vice President - Barbara McNamee; Treasurer - Kathy Halverson; Secretary - Kathi McKenzie. Mike then thanked everyone for all their help all year.

Upcoming show: there are 2 vendors

The January meeting was canceled due to the holiday, Northhaven was closed New Year's day.

Nancy announced the plant table winners for the year and explained the table rules.

It was proposed the move the mid-year auction to the June - Gerry Darver offered his yard and greenhouse for the summer auction.

Auction began.

Meeting was adjourned at 4:30.

The speaker for the February meeting is Dotty Woodson - topic is "Ladyslippers".



Wanna have another greenhouse tour? Let me know if you are interested and maybe we can put one together.

If we can get 4 or 5 people who want to show their greenhouse or their growing area be it a backyard or sun porch let me know.

I am thinking the third or fourth weekend in April so everyone participating will have their orchids moved outside

and will be ready to show. Also the weather is usually good.

This is an extra activity and is not in place of our usual meeting.

It would be for 4 or 5 hours on Sunday afternoon.

We can firm up the time and date if we get enough interest.

dave gould

GNTOS ORCHID SHOW

Mike Beber
Show Chairman

The Show date is getting closer and everyone can help. The date is the 10-11 March at the Richardson Civic Center.

We need volunteers for:

- Setup: Friday, 10 March 8am
- Registering plants
- Show Clerks -If you haven't been one, it is a great opportunity to learn while watching the Judges make their decision. You need to be there at 6:30 pm Friday
- Donations of money for food (Can be given to Kathy Halverson) We can't bring home made items into the center.
- Tear down at 5pm on Saturday night

Start preparing your plants for our exhibit. Label the pots with your name so they can be returned. Leave the bugs at home.

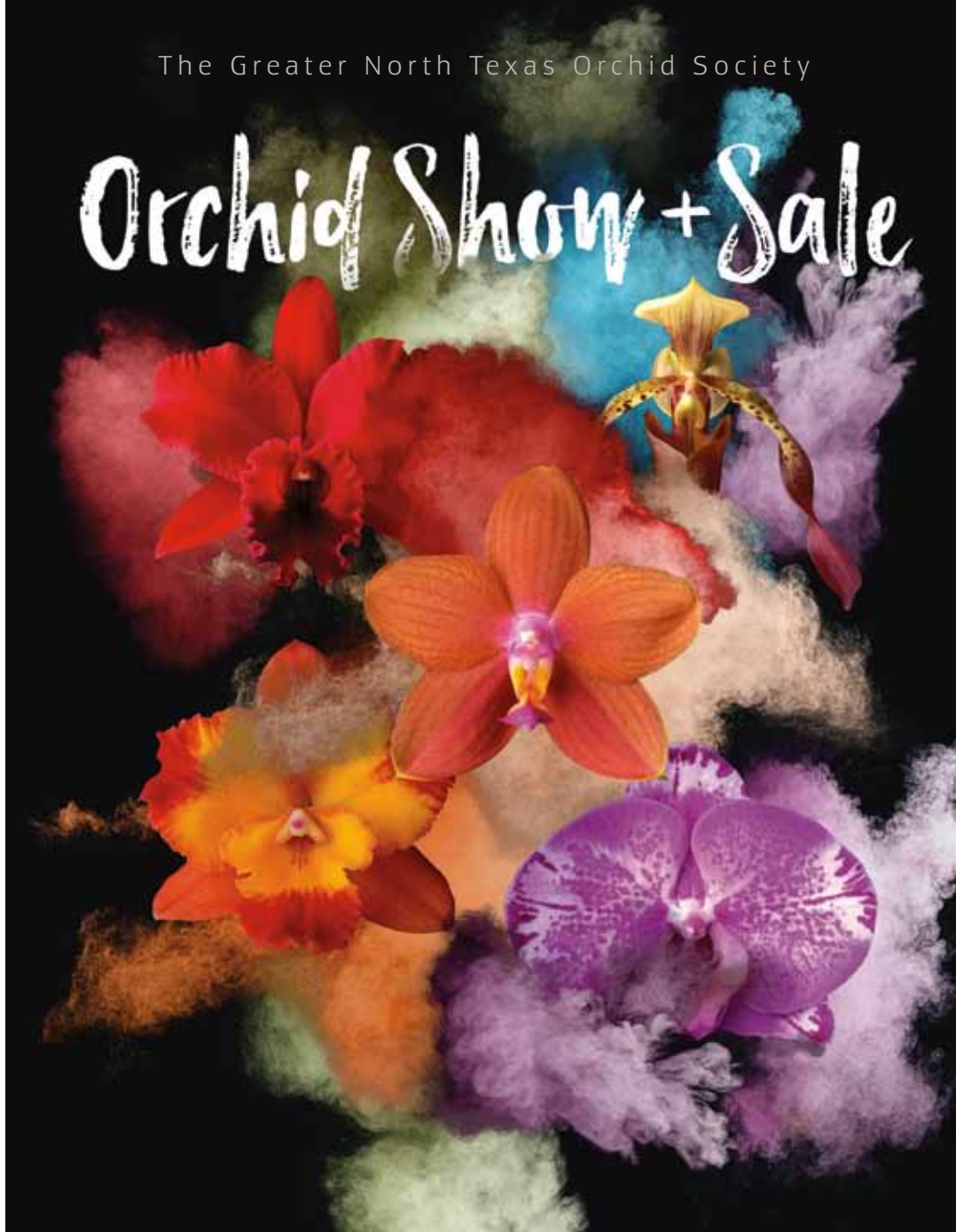
If you would like to sponsor a Show Trophy, they will be \$20 ea. A list will be provided at our meeting and through an email.

There is a lot going on and we need everyone's help to make it a great one.

Mike Beber

The Greater North Texas Orchid Society

Orchid Show + Sale



Come and see hundreds of orchids on display
and for sale at the Richardson Civic Center
March 10th and 11th. It's Free.



PLANT TABLE

Nancy Cropp

2016 Plant Table Judging results

376 total plants at nine meetings with 460 points logged:

- 10. Sarah Hardesty - 18 points
- 9. Kathy Halverson - 21 points
- 8. Charles Hess - 24 points
- 7. Linda Horton - 26 points
- 6. Gerry Darver - 30 points
- 5. David Gould - 36 points
- 4. Karl Varian - 41 points

- 3. Mike Beber - 47 points, won \$50
- 2. Kathi McKenzie - 59 points, won \$75
- 1. Judy Cook - 69 points, won \$100

Congratulations!
Congratulations to all who brought plants and a reminder to those who didn't to start bringing them.

Photos by Forest Shipps

Here is a quick reminder of how points are awarded:

A first, second and third place may be awarded in each of these categories:

- Cattleya Alliance
- Dendrobiums & Others
- Oncidiums
- Paphs & Phrags
- Vandas & Phals

- 1st place 3 points
- 2nd place 2 points
- 3rd place 1 point
- Species of the month 1 point (up to three)
- Peoples Choice Award 1 point

Members bringing plants to display will be credited with one (1) point per plant, to a maximum of two (2) points per meeting.

Participation in our society show will be worthy of points as follows:

- Exhibit coordinator 7 points
- Individual exhibit 5 points
- Group exhibit (each family) . 2 points
- Plant(s) in the Society exhibit 1 point per plant (max. 6)

(Refer to the yearbook for full details on how plant table points are awarded.)



ORCHIDS 101

Kathi McKenzie
& Lorna Kissling



Orchids 101 classes are tailored to the beginning orchid grower. It will be an informal discussion so come and bring your questions.

We meet in the greenhouse at 2:30 for 30 minutes so we can get all questions answered in time for the meeting at 3:00.

WHAT IS AN ORCHID?

Answer on page 6



The orchid family (aka Orchidaceae) is the largest flowering plant family on earth with about 30,000 species. It is also one of the oldest plant families – developing about 84 million years ago. Being so old, orchids have had plenty of time to develop into very specialized organisms. It is specifically the orchid flower, rather than the foliage, that has developed in this specialized way. While orchids look very exotic, they are in their essence very primitive plants. The vascular system in their leaves is not nearly as developed as more modern plants and that leads to foliage that is not always very impressive. Their pollen is also very primitive – a fine dust, as fine as the spores of ferns, that is concentrated in “packets” known as pollinia. Because this pollen only comes in packets that cannot float freely through the air, orchids are entirely dependent on a pollinator – and over their eons of development, they have modified their flowers to trick a wide variety of pollinators into transporting their pollen from one flower to another.

What Exactly is an Orchid?

Sepals

Sepals, the remains of the flower bud, are not a distinguished part of the flower with most plants. But with orchids, the sepals have been modified to essentially become a part of the orchid's flower. Oftentimes they mimic the look of the petals, but they always function along with the rest of the flower to trick a pollinator into taking the pollinia to another orchid flower. There are always three sepals in an orchid flower except certain slipper orchids (such as *Paphiopedilums*) that have an overgrown dorsal (top) sepal and fused lateral (side) sepals.

Petals

The sepals of an orchid are unique in that they mimic the petals. An orchid has three petals, the bottom petal forms the orchid's lip.

Lip

All orchids have a petal that forms a lip. For the

pollinator, the lip often serves as a landing pad of sorts. Most orchids turn in the development of the bud so that the lip is at the bottom of the flower but some have a lip at the top and are called “non-resupinate”.

Native orchid distrobutionOrchids are found on every continent on Earth except Antarctica. While most people associate orchids only with tropical places they are found in a wide variety of ecosystems. In fact, Oregon boasts of over 40 species of orchid (interestingly, Hawaii, a tropical island, only has 3 native orchid species).

Supporting peoples’ association between orchids and the tropics, the densest orchid populations are in tropical areas of South America and Southeast Asia where many thousands of species exist.

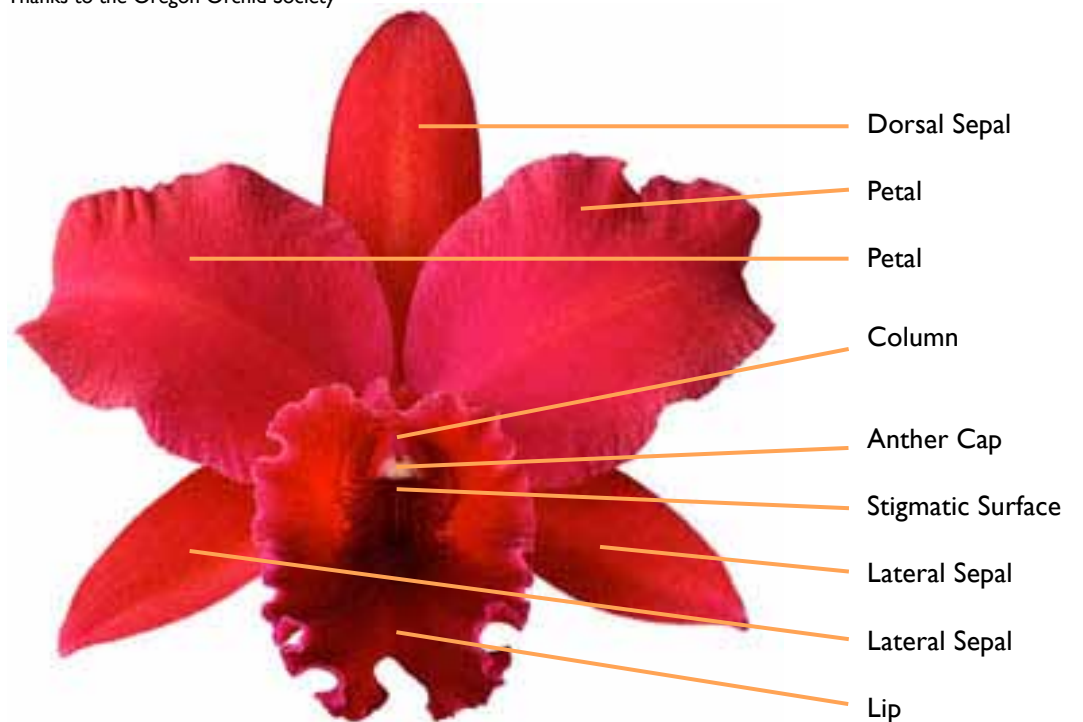
Many of these places are unprotected and unregulated making most orchids endangered or threatened species.

Asters vs. Orchids ...

Orchids are debatably the largest flowering plant family on Earth (30,000+ species). The only other contender for that title would be the aster family, Asteraceae, which is a much later development in terms of evolutionary history (42 MYA). This family includes asters, dandelions and daisies. The asters primarily differ from orchids in that they can have abiotic pollination – that is, they can reproduce via wind or water rather than depending on living beings. This produces a flower that has no need to mimic a pollinator, and therefore looks

rather “basic”. Instead of focusing on attracting pollinators, asters (and most modern plant families) put their evolutionary energy into foliage that can withstand different ecoclimes leaving their flowers looking like ... well ... flowers.

Thanks to the Oregon Orchid Society



Answer to Quiz (Page 5):

- A.: Wrong. Lots of petals. No Sepals
- B. : Wrong. Come on. It’s a banana. I mean, Really?
- C. : OK I can see where you might have gone wrong here.
But it has a dorsal fin not dorsal sepal.
- D.: This is the orchid. If you got it correct you are qualified to help work at the Orchid Show.

DALLAS JUDGING CENTER

AOS Dallas Judging Center
December 10, 2016

Seven plants were entered for consideration. One award given:

Den. Palebound 'Snowflake'

(Spellbound x Pale Doreen)

HCC 77 points

owner: Karl Varian, Plano



The Dallas Judging Center meets on the second Saturday of every month.

The next meeting is February, 11th at the
Garland Senior Activity Center
600 West Avenue A,
Garland, TX 75040

11am. Everyone is welcome to bring plants
or to just watch and learn.



DALLAS JUDGING CENTER

AOS Dallas Judging Center
January 14, 2017

Five plants entered for consideration,
three awards given:

**1. *Barkeria palmeri*
'Jaliscan Adventure'**

HCC 77 points

Owner: Robert Marsh, Garland

**2. *Fredclarkeara After Midnight*
'Louisiana'**

(Fdk. After Dark x Ctsm. Mark Dimmitt)

AM 81 points

Owner: Al Taylor, Leesville, LA

**3. *Barkeria Glyn Marsh*
'Happiness'**

(lindleyana x shoemakeri)

AM 81 points

Owner: Robert Marsh, Garland



AN ORCHID TRIP COME TRUE

ORCHID CONSERVATION UPDATE

by Charles
and Trudy Hess



To start the New Year off on a positive note, please give yourself a big pat on the back for your support of our conservation fundraising efforts. Your contributions are actively preserving orchid habitats and adding to scientific knowledge of the amazing local species we have literally right in our backyard. Both the Rainforest Trust and the Smithsonian's North American Orchid Conservation Center have important projects in the works, made possible partly by the support we give. We play an active role in their ultimate success.

After years of email correspondence, there is nothing like a face to face meeting to feel the depth of appreciation from the organizations we support. This past December Trudy and I had the rare opportunity to enjoy that experience. Finally, the individuals with whom we had been corresponding had actual faces and personalities.

It all began last fall when we donated a print for the silent auction to be held by the Rainforest

Trust. They were planning a party to celebrate their 22nd year of conservation work. One of their donors owns a beautiful restaurant in Washington, D.C., near their Virginia headquarters, and this donor generously hosted the party. Along with the Rainforest Trust's Thank You note for the print, they sent us an invitation with the question: "Do you think you would be in the DC area at that date?" It didn't take us long to make the decision to go. We had been wanting to visit the Smithsonian museums, and we especially wanted to see the Smithsonian's Environmental Research Center (SERC).

What a way to start the holiday season! Seeing D.C. all decked out for Christmas, and at the same time attending the Rainforest Trust anniversary dinner, where I got to meet the talent behind this dynamic preservation initiative, and where I also had conversations with the directors for various regions around the world. I even met a botanist who had been personally acquainted with my heroine Margaret Mee, whose breathtaking botanical art has been the inspiration to my mission in conservation.

Following the CEO's presentation on 2016 successes, many of which have had support from

SWROGA members, I had the honor of being asked to end the evening's festivities by sharing my story with the other guests about how we had become a "Rainforest Trust supporters", and why we value their work. That is what happens when you travel all the way from Dallas! The distance alone defined us as celebrities, including picture taking with the winners of the auction for the donated print.

Another day of the trip was devoted to a tour of the Smithsonian Environmental Research Center (SERC), the center of activity for the SWROGA supported North American Orchid Conservation Center (NAOCC). To finally meet Dr. Dennis Whigham, Jay O'Neill, and Melissa McCormick, and see the facilities where their research is being done, was an opportunity that I had not ever imagined tak-



Dr. Whigham and Jay O'Neill



Melissa McCormick



ing place.

The SERC Plant and Molecular Ecology labs support research both on orchids, and on the Chesapeake Watershed, including much of the wetlands along the river. It is appropriately located about an hour's drive east of Washington DC. Seeing the facility itself is worth the trip. It is a world class research campus, built to LEED certification (Leadership in Energy and Environmental Design). The building was opened in 2014, replacing the historic facilities originally located in a renovated dairy barn. The property, donated to the Smithsonian in 1965, has a history that goes back all the way to 1652.

Dennis and Jay gave us the grand tour, and we observed first-hand the sample vials of all the various fungi being studied, along with their effects on orchid germination and culture. This brought to life everything I've read about the need to store the exact species of fungi, as well as the orchid seeds to ensure future germination and propagation. The state of the art DNA research lab is shown here and is where Melissa and her team identify and sequence the countless fungi, many of which never take on a form that can be differentiated other than through DNA analysis. I learned from the experts

at SERC how intimately orchids and fungi are tied in nature. Orchids like their particular fungus species, and often will refuse to grow and thrive without them.

SERC is unique in the world for being dedicated to conserving orchids through an ecosystem approach. Understanding the interaction between orchids and their mycorrhizal fungi is essential to ensuring the survival of orchids in the wild and in botanical gardens.

One of the goals of SERC is to promote interest in orchids among the younger generations. To that end, they have launched the "Orchid gami" project. This consists of a series of North American orchids, depicted on punch-out cards, which are made to be assembled into realistic, 3-D representations of the plants. Viewing this project rounded out the tour, and emphasized the education aspect of science supported by SERC as part of the mission of all the Smithsonian organizations.

Our 4-day DC visit also allowed us time to take in the spectacular display in the Botanical Gardens. For the 2016 holiday display the designers depicted the nation's National Parks through models built along a winding railroad track. Orchids are always part of their botanical displays, which

makes it especially interesting for me.

But the major conservation collection of orchids is housed in the remote Smithsonian Greenhouses, a good distance from the mall. Fortunately, we were able to schedule a tour of this collection, so generously arranged and conducted by Tom Mirenda. AOS subscribers will recognize Tom from the two articles every month he has been writing for the last 12 years. If you have read his bio, in addition to maintaining the greenhouse orchid collection, he lectures on orchids around the world.

These remote greenhouses are in a large campus outside of DC in the community of Suitland, MD. From the name of the place you might guess it is smack-dab in the middle of DC ("Suitland!"), but it is actually located about 20 minutes by the Metro subway system, followed by a 15-minute walk from the Suitland station. The complex is known by the Smithsonian employees as the "attic" because this is where they store display materials not currently in use in the Smithsonian museum displays. It was not difficult to spot the dozen or so large greenhouses holding orchids and other tropicals.

As we walked through the many greenhouses, Trudy took



Tom Mirenda



hundreds of pictures, while I devoured orchid lore from Tom's vast trove of knowledge. Photos from this tour will soon be on our website as a slide show (Orchid-artbyCharlesHess.com). Touring through these amazing greenhouses, I felt an overwhelming desire to buy some orchids. I was like a kid in a candy store. But none of these orchids had a price tag. They are not for sale. The good news is, I can continue to enjoy them for years to come, because we have so many pictures to remember them by.

Some of the plants had "bi-cycle" reflector stakes inserted in their pots. Tom explained that these reflectors are part of the emergency rescue plan whereby in the event of a fire or a natural disaster the most critical and important specimens could be rounded up, day or night, and moved to standby trucks with generator-powered climate controls. Learning of these plans increased my awareness of our responsibility, as well as the fragile nature of ex situ preservation. This greenhouse facility is a vital part of a network of cooperation around the country for maintaining living specimens.

We were very fortunate to meet Tom in person. But you can do the next best thing by listening

to the podcast of an interview on the website www.indefenseofplants.com. Go to the Podcast section and look for Episode 79. You will learn about Tom's history with marine biology, his experiences in Hawaii, and the story of how he found his way to the Smithsonian. His expertise is quite remarkable, and you will enjoy increasing your orchid knowledge from him. Also, if you are not already doing so, be sure to read his articles in AOS Orchids. What you will read in Tom's articles is always fascinating and often surprising. I certainly consider him the international ambassador for orchids and their conservation.

Our D.C. trip turned out to be so much more than we ever expected. Starting with the Rainforest Trust event one evening, and continuing with the day at SERC, and another day at the Smithsonian Greenhouse facility, added a great deal to my knowledge of orchids, and my determination to continue our efforts to do all we can to ensure the survival of these amazing plants.



ORCHID GROWING TIPS

by
Courtney Hackney

A monthly growers
advice column by
Courtney Hackney.
Hackneau@comcast.net

This column was
written in humid
coastal North
Carolina and
Florida, and the
advice given should
be adjusted to our
climate.

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LESS LIGHT AND HEAT MEANS LESS WATER

Days are finally getting longer now that we are past the winter solstice. Many orchids use a lengthening day as a cue to begin the flowering process. Greenhouse growers can sit back and let Nature do its thing, but those growing indoors need to provide an increase in day length in the next month to initiate spring flowering.

While we typically think that winter is a difficult time for our orchids, remember that many tropical orchids come from relatively high elevations and so the cooler nights and days are ideal for them. Miltoniopsis, Lycastes, Odontoglossums, Phragmipediums, and numerous other genera that suffered from the heat for much of the year now thrive. Some orchid growers include cool growing orchids in their

collections and provide lots of shading or even air conditioning in summer to provide cooler temperatures. Even many orchids that do well in summer thrive when the stress of high temperatures is relieved.

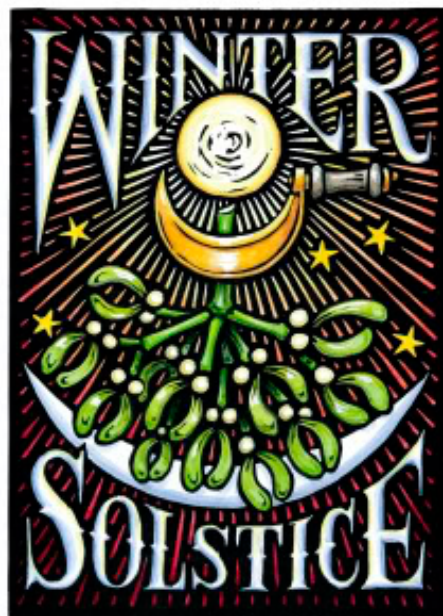
Cool days and even cooler nights slow down plant metabolism (activities in the plant that use energy). When light is hitting orchid leaves the temperature inside the orchid leaf is much higher and the plant can regulate that temperature to maximize photosynthesis even in cooler conditions. At night, however, cooler temperatures also slow down an orchid's metabolism allowing your orchid to retain and store more of the energy it captured during photosynthesis. If you have a cattleya that grows new pseudobulbs in

ORCHID GROWING TIPS

winter and summer, winter bulbs are usually thicker as a result.

Unfortunately, orchids from very warm, tropical environments, such as phalaenopsis and vandas, may almost cease growth if temperatures remain below 60° F for long periods. Remember that there are exceptions to every rule and hobbyists that have added species to their collections need to consult the orchid literature to determine the natural conditions for a species and do their best to maintain those conditions. While most phals like it warm, >65° F, some of the miniature species and their hybrids, e.g. *Phal parishii* and *lobbii* do better with cooler nights.

Cymbidiums are a group that suffers during hot summers, but grow extremely well in winter. They will even thrive outside in the southern part of the country, as long as they are not allowed to freeze. Once spikes are observed, however, move them inside or somewhere where they can be maintained above 50° F to avoid damage to sensitive buds.



Most cattleyas need to be kept on the dry side now. It is OK if there is some shriveling of the bulbs, but the leaves should not shrivel too. A dry period is especially important for cattleya species to ensure quality blooms and to maintain a

healthy root system. One common mistake is to substitute misting for watering. Misting can help maintain higher humidity in winter, when low humidity can be a problem, but plants still need a thorough soaking just less frequently. If you do mist, use deionized or distilled water to prevent salt buildup on leaves.

Phalaenopsis and most of the popular intergeneric oncidiums are in bloom this time of year and require more moisture than cattleyas. They too, are growing more slowly and care is required to prevent rotting roots.

SOCIETY HISTORY

The history of the GNTOS goes way back. In the mid-40s there were only three orchid growers in town: Eli Sanger of Sanger Brothers, which was Dallas' biggest department store at that time; Roy Munger, known for Munger Place and Munger Street, and Percy Larkin.

Margie Corn, a garden columnist, was the source of any orchid information they could find and she gave their names to a woman running Hardy's Seed Company, Mrs. Moses. They gathered at her house one day in 1946 and it was Mr. & Mrs. Polhemus, Mr. & Mrs. Roy Carter, Homer Baldwin, Percy Larkin and a young man from Waxahachie named Costalanus. They decided they would apply for AOS membership and started receiving the Bulletin and meeting monthly. More and more people started to show up and they elected Percy Larkin, Jr. their first president in 1947. This was the North Texas Orchid Society.

They held their first show in 1950 at the Marsh Kaiser Fraiser automobile agency on Ross Avenue. Jack Morris was president of the society and Homer Baldwin sent out invitations to everyone who grew orchids in Dallas. Invitations also went to the big orchid firms who would send representatives from around the country to the show. They had everyone sign a book that came to that show.

There was an incident

that year that upset several members of the North Texas Orchid Society, so several members chose to leave and form another society calling themselves the Dallas Orchid Society. Percy Larkin was one of the members who left to form the Dallas Orchid Society. This society was never sanctioned by the AOS.

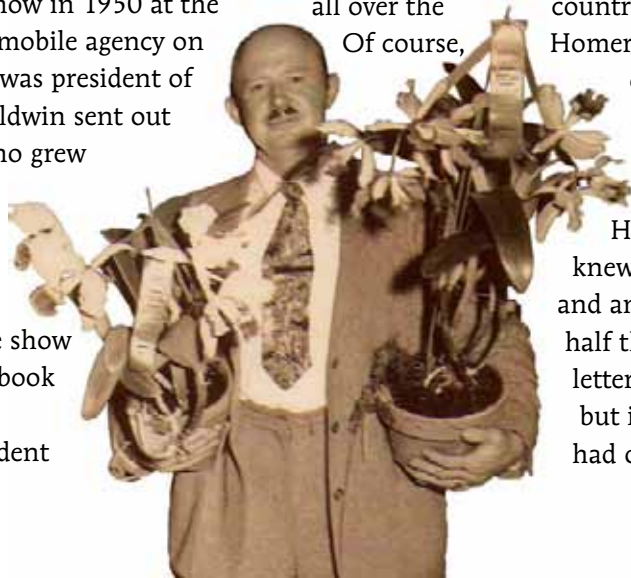
The following year with much encouragement from Homer Baldwin, most of the members from the Dallas Orchid Society came back to join the original society.

Later, they decided to become affiliated with the American Orchid Society so they wrote a Constitution and Bylaws for the society. On March 19, 1954, they were issued a charter by the AOS as the Greater North Texas Orchid Society.

They put on a show in the Dallas Garden Center but there weren't enough plants in the area so the bulk of the show was made up of boxes of blooms sent to them for free from commercial growers. They'd get five, six, or seven boxes of flowers from different growers from all over the country - even overseas.

Of course, Homer had mailed cards to everyone who had an ad in the Bulletin to achieve this.

Fortunately for Homer, Lena Baldwin knew how to type and she and another woman spent half the night writing letters on two typewriters but it worked and they had orchids for the show.



MEMBERSHIP DUES

GNTOS membership dues are paid yearly by January 31, in order for you to be listed in the published Yearbook.

- \$30.00 - New or Renewing Member (individual)
- \$15.00 - Additional Member (each additional person in same household)

Please mail completed form with payment to:

Kathy Halverson
1922 Baylor Drive
Richardson, TX 75081

Make check payable to GNTOS.

New Member Renewing Member

Name (#1): _____

Name (#2): _____

Address: _____

City: _____

State/Zip: _____

Phone: _____

E-mail (#1): _____

E-mail (#2): _____