

VOLUME 61
ISSUE 7
JULY
2015
gntos.org

Orchidist

GREATER
NORTH
TEXAS
ORCHID
SOCIETY

Next Meeting:
July 5th
Speaker:
Auction

This month we will have our Semiannual Auction and snacks. There isn't a speaker or plant judging, just bidding on plants and eating food. Bring a refreshment, finger food or dessert of your choice to share.

We will have many beautiful plants for the auction. Please bring plants or divisions for the auction, as well as collectibles or any orchid related item.

AUCTION

This is the event that we do to raise funds for the society, so bring your bidding spirit and get ready to bid to help support the GNTOS.

Officers

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Mike Beber

VICE PRESIDENT

Rhonda Whitson

SECRETARY

Barbara McNamee

TREASURER

Kathy Halverson

SWROGA

DIRECTORS

Brandenburgs

NEWSLETTER

EDITOR

David Gould

GNTOS

WEBMASTER

Manuel Aybar

PAST PRESIDENT

Gerry Darver

Well we are now into summer and the year is half over! Hope everyone has their greenhouses, outside and even inside plants ready for the onslaught of our hot dry days.

For our July meeting, we are having our semi-annual auction and eat in! Our July and December auctions raise money for the society to pay for speakers' fees and other society-related funds.

Presidents Message

This is the time when we ask our members to donate orchid plants, back bulbs, and orchid-related products for others to bid on.

Also during this meeting we EAT! So we ask you bring a food dish that can be shared during the meeting. This meeting is always fun and filling!

Our auctioneer extraordinaire, Jerry Brandenburg, will not be able to serve as auctioneer this time so Charles Hess has graciously volunteered to be our auctioneer for the evening.

So next meeting bring: orchids, orchid-related items, food, your appetite, and your checkbook and be prepared to get some good stuff.

Mike

Calendar

by Rhonda Whitson

July

Auction

August

Alan Koch

Mini Catts

Sept

Linda Horton

Show Prep

October

Emily Quinn

Sex and the

Single Orchid, or How to Get Pollinated

This calendar is accurate at the time the newsletter is published. However changes often happen. If you wish to hear a specific presentation please verify that the speaker is still scheduled.



Fall Orchid Show

Lorna Kissling

Friday thru Sunday, Sept. 25-27

Southfork Hotel
1600 N. Central Expy
Plano TX 75054

Hi!

I am looking for someone to line up clerks to help during Friday evening's judging. It does not require a lot of time or even require that you be a clerk. I will be able to give you the information you need to help out in this way. Please contact me at lornajk80@gmail.com if you are interested. And if any of you have questions about the show, check out our GNTOS.org website for information.

Lorna Kissling

lornajk80@gmail.com

Plant Table

Nancy Cropp



Den. Blue Violetta
x Den. Black Cat

Photos by
Forest Shipp



Den. Fire Wings
(Big Alex x Siler Wings)

GNTOS June 7, 2015
Judges: Jeanne Thompson & David Hines

CATTLEYA ALLIANCE

- Blue – Lc. Canhamiana coerulea 'Cobalt'
– David Gould
- Red – C. leopoldii v. coerulea – Dan Callahan
- White – Laelia Tenebrosa 'Taylor Bronze'
– David Gould

DENDROBIUMS & OTHERS

- Blue – Den. Fire Wings – Sarah Hardesty
- Red – Den. Blue Violetta x Black Cat
– Dan Callahan
- White – Den. Roy Tokunaga 'Spots' x Roy
Tokunaga 'Best Spots' – Mike Beber

ONCIDIUMS

- Blue – Oncidium Alliance (unknown)
– Kathy Halverson
- Red – Mdtm. Pacific Paragon 'Honey Butter'
– Kathi McKenzie
- White – Onc. Sharry Baby 'Red Fantasy'
– Kathi McKenzie

PAPHS & PHRAGS

- Blue – Paph. Moonstone – Kathi McKenzie

VANDA & PHALS

- Blue – Phal. (unknown) – Gerry Darver
- Red – Phal. (unknown) – Sarah Hardesty
- White – Phal. Chiara Xen Violin
– Sarah Hardesty

SPECIES OF THE MONTH

- Enc. dickinsonianna – Mike Beber
- Brassavola nodosa 'Freckles' – Charlie Hess
- Den. acerosum – Barb McNamee

PEOPLES CHOICE (TIE)

- Laelia Tenebrosa 'Taylor Bronze'
– David Gould
- Onc. Alliance (unknown) – Kathy Halverson

NO plant table judging at July meeting!



Paph. Moon Stone



Unknown



L. tenebrosa 'Taylor Bronze'

Nancy Cropp

Dallas Judging Center

JUNE 13, 2015

Eleven plants were submitted for consideration, no awards given.

A unanimous vote was conducted to recommend to the AOS Judging Committee that Daniel Callahan be elevated from Student to Probationary status. This will be considered at the Fall AOS Meeting. Congratulations to Daniel!



Awarded at the OOS show in May

**Paph. Cascade Creek
'Orchid Konnection Too'**
(Paph. adductum x
Paph. Prince Edward of York)
AM 88 points
owner: Meir Moses, Dallas

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

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

11am
Everyone is welcome.

Orchid of the Month



by Kathi McKenzie

Calanthe Orchids

Calanthe is a large (200+ species) and widespread genus of terrestrial orchids. The name arises from the Greek kalos, meaning beautiful, and anthos, meaning flower.

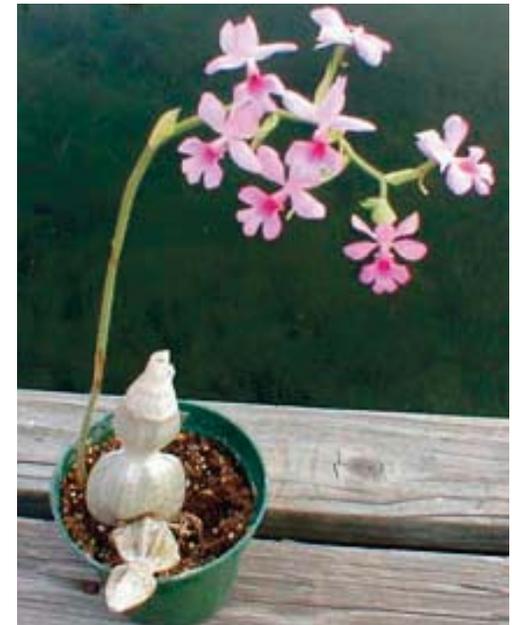
Calanthes have a special place in orchid history, as the first man-made orchid cross was between two calanthes, *Cal. furcata* (now *triplicata* and *Cal. masuca* (now *sylvatica*). The cross was made by Johnny Dominy, head grower for the English firm Veitch & Sons. and the resulting cross was named *Cal. Dominyi* (sometimes written as *Dominii*). The cross first flowered in 1856 and was registered two years later. Reportedly this cross led John Lindly to remark to Dominy “You will drive the botanists mad!” Shortly after, the first cattleya cross was made, and orchid hybridizing was off and running.

Calanthes are found in tropical areas across a wide territory. While most are concentrated in Southeast Asia, others are found in China, India, Madagascar, Australia, Mexico, Central America, the West Indies and various islands of the Pacific and Indian Oceans. The genus is divided into two main branches: deciduous species and evergreen species.

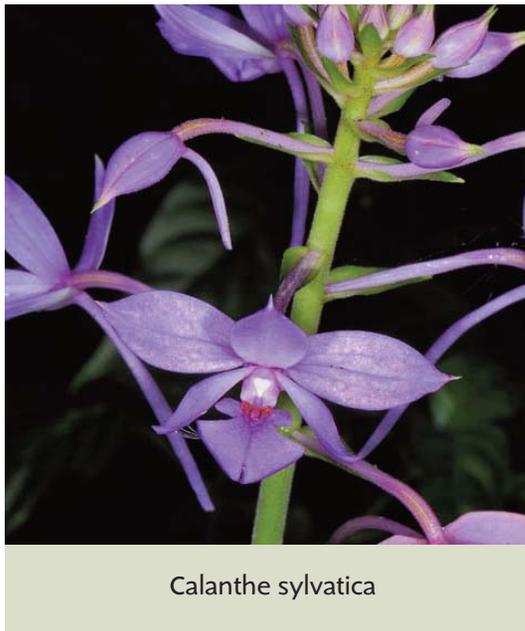
The deciduous types are more often found in cultivation, and can be grown alongside cattleyas in the summer, with bright light and warm temperatures. The bloom season is fall-winter. Since they are seasonal growers, they should be well watered and fed during the summer. Once the pseudobulbs have matured, watering should gradually be reduced, until the leaves fall. Throughout the winter, very scant water should be given; just enough to keep the bulbs from shriveling. In the spring, new growths will begin, and repotting can occur when the new growths start to make new roots. A terrestrial orchid mix should be used and watering and feeding may be increased.



Calanthe Sedenni Betty HCC.AOS



Calanthe rosea



Calanthe sylvatica



Calanthe vestita

Orchid Conservation Update

Charles Hess



Citizen Scientists Leading the Way

2015 has been a very educational year for me, and we're only

in June. Not only have I been discovering the amazing nature parks around Dallas, I have also found an orchid society I never even heard of. Yes, that's right. Did you know there is a Hexaletris Orchid Society here in Dallas, and it has been in existence for at least 10 years? It doesn't have a formal membership list, but rather consists of a group of volunteers that meets every June to survey the park trails of Dallas two times a week for two months, during which the participants record, mark, and measure each orchid discovery.

The beauty of this operation is that anyone can participate in what are called "Citizen Science Projects". The work of the Hexaletris Orchid Society is sustained by the Dallas Master Naturalist

chapter, with Jim and Stephanie Varnum organizing and conducting the surveys. Additionally, over the years this project has

involved the students of Dr. Marcy Brown-Marsden at the University of Dallas, as well as friends and family of the Dallas Master Naturalists. Dr. Brown-Marsden is well known for her work in studying mycorrhizal fungi and the relationships with mycoheterotrophic Hexaletris orchids. She has contributed to a number of technical papers that have resulted from these annual surveys. It was from this Citizen Science Project in 2005 that Hexaletris grandiflora was discovered in Dallas, when it was previously thought to reside only in the Davis and Chisos mountains in the Trans-Pecos region of Texas.

In June of this year I took part in two of these surveys. The outings last about 2 hours each, during which we hike a trail for an hour and then return on the same trail searching first one side, and then the other. Early in the season the orchids are just coming up, and all you may see are slender reddish, leafless flower spikes from 2 to 10 inches high. On my first outing we saw about a dozen or so. Some members of the group were more experienced, and were helpful to us newbies, showing us where to look and how to spot



Hexaletris spicata



Hexalectris spicata
Photo by Marcia Haley

these little plants. It helps to not be so color blind (which I am, unfortunately), as the reddish coloring stands out only if you can see reds. But, luck helps, and I did find my first North American orchid in the wild that first week.

It soon became clear that the trick is to focus more intently around the base of cedars and oaks. Since the Hexalectris genus are myco-heterotrophic, they produce little or no chlorophyll, therefore no photosynthesis is possible. Instead, they

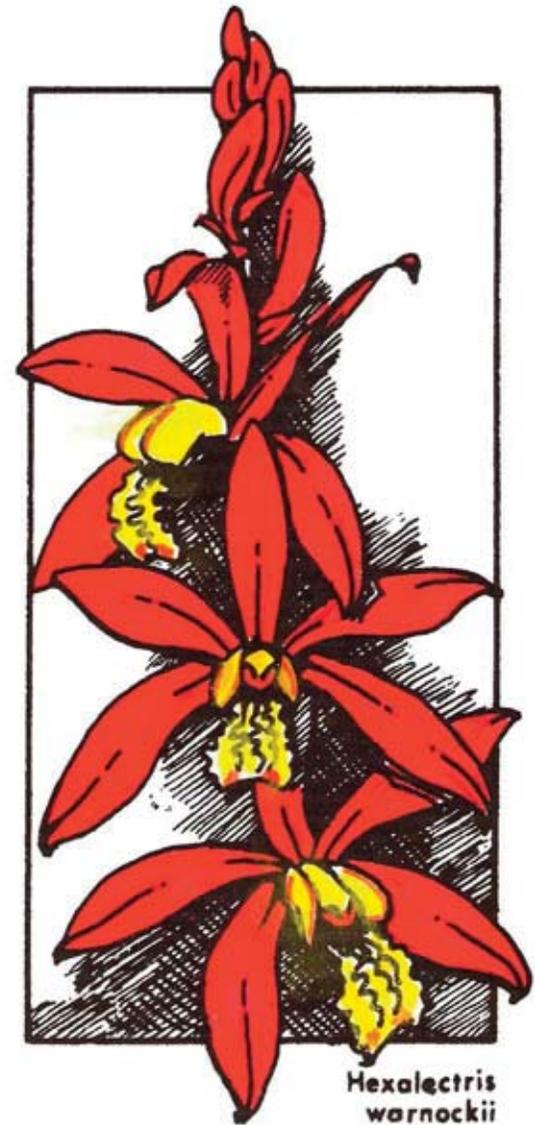
rely on the mycorrhizal fungi almost exclusively for nutrition (See “Go Orchids” on-line for full description). The fungi, trees, and orchids are in a symbiotic relationship.

Hexalectris flower spikes may occur singly or in clusters of 3 or four spikes, occasionally even more than that. But regardless of the exact number of spikes, a find is counted as a single “site” for the purpose of

the survey, assuming the spikes are part of the same plant, interconnected below the surface.

On these early trips we found *H. spicata*, *H. nidita*, and *H. warnockii*. The species *H. warnockii* was named in 1937 in honor of Barton Warnock, a professor, naturalist, and environmentalist. At the time of its naming, *H. warnockii* was known to exist only in the Trans-Pecos region and SE Arizona. It has since been found in the Edward Plateau and the Dallas area. If you have access to a copy of the South West Regional Orchid Growers Association (SWROGA) membership directory, you will notice the *H. warnockii* sketch (shown below) adorning the front cover as being the official flower of the 5 state organization.

The park survey will continue into July and I hope to report on more findings and take some pictures of the *H. warnockii*. The photos of *H. spicata* shown here are from our latest survey, expertly photographed by one of the Dallas Master Naturalist members, Marcia Haley. These seem to be the most common Hexalectris in this area and the first to bloom. We are so lucky to have such a rich orchid heritage right here in Dallas County.



Orchid Growing Tips

by Courtney Hackney

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

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

Low Humidity Conditions

I have always been curious about what it would be like to grow orchids someplace where the humidity was very low. Extreme drought and low humidity these past three months have provided me with an experience that taught me a great deal about my normal culture and the importance of water to orchids.

Initially, I tried to outlast the drought and occasionally misted lightly with the limited water supply in my cistern. Not only did bulbs shrivel and roots die, but there was a covering of salt on the medium that continued to buildup. Eventually, it was necessary to try something different. The key has been to water extremely thoroughly and often, which would not be possible in the normal summer's heat and humidity. Under drought conditions, which have included very low humidity, the medium dries very quickly allowing more frequent, but time consuming watering, which works to keep my orchids alive, at least until the rains come.

Clearly, it is extremely difficult to grow orchids well without good water. Good water contains few dissolved solids; these are mostly salts. The amount of dissolved solids are

measured with a simple instrument that measures the amount of current water will carry; i.e. more dissolved stuff in the water equals more current. Pure rainwater or distilled water contains 0 parts per million (ppm) dissolved stuff, while seawater contains 35,500 ppm.

Recall that most orchids in your collection are derived from ancestors that grew attached to trees, so their only water source was rainfall, and their primary nutrient source was dust that falls on the leaves of trees and drips down with each rainfall.



Most orchids evolved in this nutrient poor environment, which is why they are very in-



tolerant of water with lots of dissolved minerals. When we add fertilizer to our water we raise the dissolved solids in the water because fertilizers are nothing more than nutrient salts. Most commercial orchid growers try to add 100 ppm of nitrogen when they fertilize. Fertilizers typically also contain other nutri-

ents, e.g. phosphorus and potassium, further raising the dissolved nutrient levels. My primary water source is normally rainwater collected from the greenhouse roof. There are always a few dissolved solids, but rainwater flowing into my underground cistern is still very pure, usually between 10-20 ppm dissolved solids. When I add fertilizer, my water contains about 280 ppm dissolved solids.

Under the present weather conditions my rainwater already contains 250 ppm dissolved solids because less than 1 inch of rain has fallen over three months, and numerous ocean storms have caused heavy surf, putting lots of salt in the air and on my roof. Worse yet, these salts are mostly sodium chloride, both of which are very toxic to orchids. What is an orchid grower to do?

The only other source of water available to me

is from a community well, which is 360-380 ppm. Fortunately, most of the stuff dissolved in this water consists of calcium, magnesium, and iron. These salts are not toxic at these levels but do leave unsightly residue on leaves. This water is also extremely basic, which severely limits the ability of orchids to absorb nutrients.

Some orchids in my collection have surprised me and thrived because they are not epiphytes and instead were derived from orchids that grew on the ground, notably Paphs. Many paphs grow in limestone rich soils and have thrived in the basic well water. Others have done very poorly, most notably phrags and some pleurothalids. They need very pure water and could not tolerate hard water.

Much to my delight, and surprise, almost all the cattleyas, phals, and vandas are growing extremely well despite the high dissolved solid content of the water using the following process. First they are watered thoroughly with well water. This dissolves any salts that have accumulated on the medium since that last watering, but does render the medium surface basic. Then the surface of the medium is misted lightly with my very limited supply of rainwater to which fertilizer had been added. Most high nitrogen fertilizer is acidic, neutralizing the well water. This does, however, take a lot more time.

Orchids that Grow Well In Dallas Part 2 of 3

Daniel Callahan, local Greater North Texas Orchid Society member and an American Orchid Society (AOS) student judge at the Dallas Judging Center, gave a talk at our May meeting on Orchids For Dallas: "What Generally Does Well and Where to Get Them". His talk covered many key lessons learned including common failures and successes in growing orchids.

Here is a three part summary of his presentation.

Dallas has a specific environment

A greenhouse in Dallas is different than a greenhouse in San Francisco or Houston

Some important subtleties that are often missed.

- Growing an orchid is not the same as blooming an orchid.
- There are orchids that will grow well in Dallas but not bloom.
- There are orchids that bloom in Dallas much easier than in Florida or California (most notably Cattleyas).

THE 4 BASICS:

TEMPERATURE

Dallas Typical Temperatures

Dallas has a day-night difference of 20 degrees; this is good for the orchids that need it an usually not harmful for the ones that don't

Outdoor highs – > 100° in the summer, sometimes for days and days

Outdoor lows – lows typically in the 20°s; below freezing in any case

Indoor highs – your choice, probably 80-ish

Indoor lows – your choice, upper 60°s.

Daily Temperature Variation

Dallas outdoor – typically 20° between day and night

Dallas indoor? – your choice, probably at most 10°

LIGHT

Dallas also has very strong seasonal changes in light, this is generally good for getting blooms if plants get outside lighting. Indoors you have to adjust the time lights remain on.

Outdoors – really, really bright and lots of sunny days.

- Because direct mid-day sun in summer will fry any orchid I've heard about, it is cheaper to make shade than add lights.
Hint: my greenhouse for 'high light' orchids was built in full oak shade.
- We have a strong seasonal variation in sun altitude (clear day brightness)
- Dallas has a strong seasonal variation from 10 hours/day in Dec/Jan to > 14 in June/July
- Strong seasonal variation in cloud cover 49% sunny days average in Jan up to 78% in August

Indoors

- South facing windows can get direct sun
- Inside plants that get outdoor light will see same seasonal variance
- Fluorescent light counts. It emits useful wavelengths for plants
- Incandescent light really doesn't emit much useful light for plants

HUMIDITY

Outdoor highs – early morning ~ 80%

Outdoors lows– afternoon ~ 50%

Indoors low – Heating and Air Conditioning
dry your home air

Most orchids prefer humidity in the 60's to 80's in the daytime

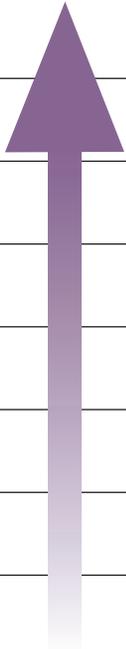
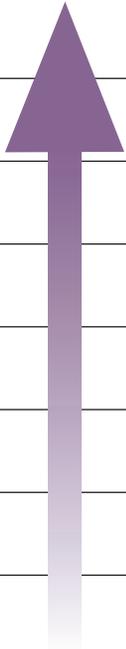
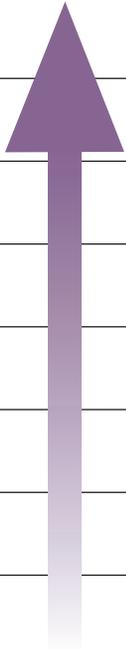
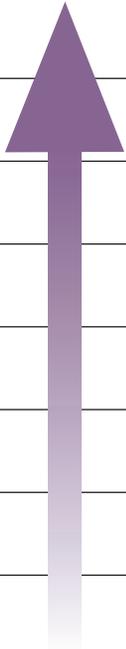
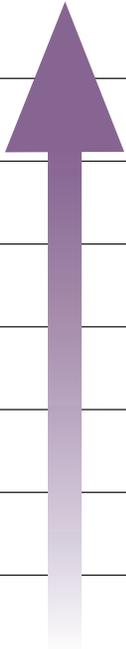
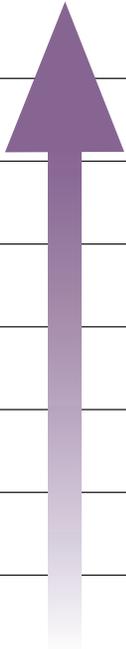
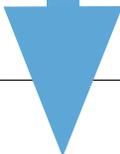
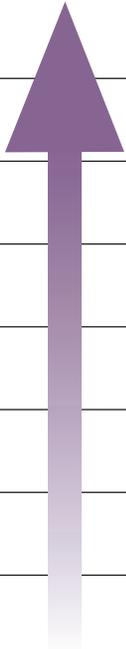
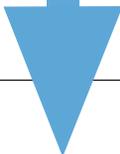
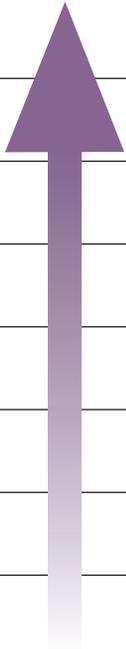
Orchid roots can dry out and die very rapidly in low humidity...

- Automated orchid greenhouses have foggers or misters to add humidity
- Or if you have the time, you can also just hose the floor daily...

- Small orchid greenhouses also use evaporative coolers (swamp coolers) for cooling and humidity in the summer
- Larger orchid greenhouses uses 'water walls' –wall sized evaporative cooler
- Can be handled indoors by combination of planting medium and watering
- Certain rooms and areas of the house will have locally higher humidity
- Bathrooms with used showers/baths. Near an often used sink.

GROWING MEDIA

and moisture retention

Growing Media	Water Required	Root Rot Risk	Dry Root Risk	Media Lifetime	Notes
Sphagnum Moss (AAA)				2- 3 years	Commercial Phal medium. Use New Zealand moss only, lasts 2-3 yrs. Most stores have it from Chile or Canada which breaks down faster.
Bark-moss mix				2- 3 years	Fir bark and peat moss mixes are very common Peat moss is typically decomposed sphagnum moss. Must pack firmly. Lasts 2-3 years
Fir Bark				2- 3 years	Common, the bark typically used in mixes; holds some water but breaks down. 2-3 years
Aged Radiata Pine Bark				5 + years (2-3 for smallest)	Relatively new and lots of pros and senior orchid growers are using it alone. Holds water reasonably well and lasts a long, time (5 years+)
Lava Rock				Eons	Inorganic. Holds water well, the rest don't. Lasts forever but roots grow into it which makes dividing plants very difficult.
Clay / Brick / Clay pellets				Millenia	Lasts forever, requires more water but some people really like it
Other Rock, Nails etc.				Varies	Next best thing to air
Mounted / Air					Most resembles how plants naturally grow. Water or mist 1 - 2x per day

GROWING MEDIA

Use what works for you. If you can water or mist daily, mounting is great! Hard to over-water in air.

Different types of orchid require different amounts of water.



Rtc. Grezaff's Blue ' Shawn '

There are two 'normal' ways to deal with this

- Water them differently
- Use different media
 - Moisture retaining media for plants that like more water: sphagnum moss, mixes with higher moss content, and smaller size bark
 - Less moisture retaining media for plants that need to dry between watering: less moss, larger bark sizes, rock

I do not recommend my watering schedule, it is basically forced by my work schedule. I violate all rules and water once per week on schedule, possibly once every other week in winter. I do NOT recommend this unless (like me) your work schedule forces it; the rules are there for a good reason.

I address plant variation by having very different bark sizes:

- Small for plants like phalaenopsis where roots stay moist
- Larger, sometimes much larger, for cattleyas where roots dry between water

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.

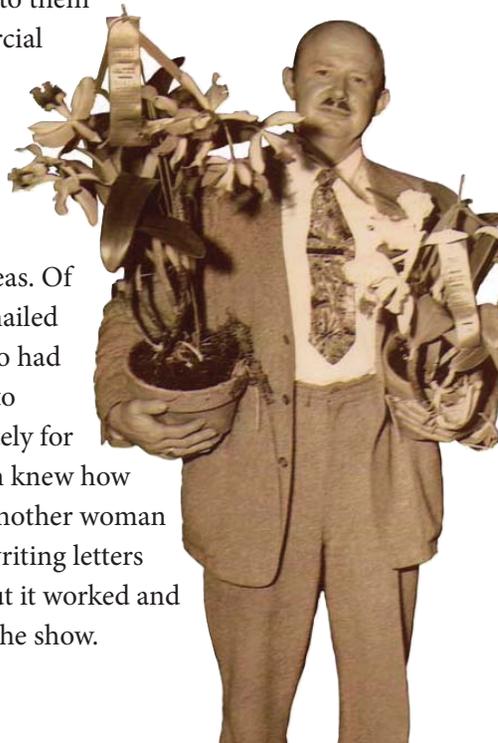
There was an incident over a plant raffle that year that upset several members of the North Texas Orchid Society, so several members chose to leave and form another society calling themselves the

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.



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)

Membership Dues

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): _____