



Orchidacea

Newsletter of the
Triangle Orchid Society

Associated with
Sarah P. Duke Gardens

Program for Sept. 9, 2013 Steve Arthur

Steve is a scientist. He worked for the Medical College of Georgia in Augusta and with the Department of Veteran's Affairs for thirteen years, doing research on animal tissue culture. More recently he taught middle school science for eight years in a private Catholic school, also in Augusta. He and his wife live in Graniteville, SC. He has two grown daughters.

Steve began growing orchids over thirty years ago. His current greenhouse, in Graniteville covers 10,000 square feet of growing area. He grows a "mish-mash" of things, but tends to focus on Cattleyas. He has been making crosses for years. He has a lab in his greenhouse and does contract work (aka sowing and harvesting seeds) for other nurseries.

Steve is also closely affiliated with Carter & Holmes and manages their lab. He frequently sells plants for them. Steve is an AOS judge and has travelled extensively throughout Central and South America.

If you visit Steve's greenhouse you will enter the greenhouse and walk into a large meeting room where his local Orchid Society meets, and where he conducts classes on growing orchids. This meeting room is also home to sixteen birds – mostly Macaws, but also Yellow Winged Parrots and Quaker Parrots.

He says that he purchased each of the birds while at Orchid Shows.

Steve's presentation to us will be on orchid collecting in Central and South America. The presentation will include a multi-media presentation showing photos of orchids growing in their natural habitat. He will be discussing species and growing conditions.

Steve will be bringing plants to sell.

Monday Dinner with Speaker (note new venue)

5:30 PM - before the meeting at the Carrabba's Restaurant

5312 New Hope Commons Drive, Durham, across from New Hope Commons Shopping Center at the intersection of I-40 and US 15/501.

Call Alan Miller to reserve a seat at 919-969-1612 All are welcome

Inside this issue:

<i>This Month's Program</i>	1
<i>Cattleyas</i>	2
<i>Notes from Jim</i>	4
<i>Fowler's presentation</i>	5
<i>Growing Tips for July</i>	6
<i>Growers Day</i>	7
<i>Jack Webster</i>	8
<i>Show Table- August</i>	9
<i>Announcements and Future meeting</i>	10
<i>Map and directions to Sarah Duke Gardens</i>	11

The Triangle Orchid Society meets at the Sarah P. Duke Gardens, Durham, NC The Second Monday of the Month at 7:30 PM

www.TriangleOrchidSociety.org

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Cattleyas



Cattleya intermedia
Brazil



Cattleya perceiviana
Peru, Venezuela



Cattleya lobata
Brazil



Cattleya bowringiana
Belize, Guatemala



Cattleya skinneri - Mexico,
Central America



Cattleya walkeriana-
Brazil



Escape to the Triangle Orchid Society's Fall Orchid Auction

Lake Crabtree Park, Raleigh, NC
Saturday, September 21, 2013
Pot Luck Dinner at 12:00 Noon
Auction Starts at 1:00 pm



Expand your orchid collection.
A wide variety of unusual orchids will
be available.
Orchids will be shipped directly from
Hawaii.



Enjoy good food and experience the
enthusiasm of local orchid growers.

Open to the public



Directions:
White Oak Shelter at Lake Crabtree
Park
Enter Park from Aviation Parkway.
Turn right at the 5th driveway. White
Oak shelter will be on your right.
Please note that parking is first-
come, first serve.

www.triangleorchidsociety.org info@triangleorchidsociety.org

[Visit our website at:](http://www.triangleorchidsociety.org)
www.triangleorchidsociety.org

Speaker Notes

Jim Fowler

Newfoundland is the last place I would think of to look for Orchids. Swamps in South and Central **America maybe, even southern Florida. But Newfoundland???? I've always thought of it as a wild,** windswept island, with rocky shores and stunted shrubs clinging to cliffs above the invading tides; where the rugged people wrest their living from fishing on the Grand Banks, and where picturesque tiny villages dot the coastline and struggle with wild ocean storms. This view was certainly reinforced **when I read "The Shipping News" by Ann Proulx. So how did all that become a destination for orchid hunters??** It truly blows my mind!

Jim provided an eye opening view of the island of Newfoundland. Jim says that on that tiny, isolated island there are over forty-five species of orchids. During a two week summer tour he actually found thirty of them blooming. What I found amazing was that several of the species he found, and photographed so superbly, are actually also native to North and South Carolina. The fact that they are all miniaturized versions of what grows locally is a testament to the harsh climate and the resilience of the orchids.

I went through Jim's book and compared the names of native orchids found in North and South Carolina against the list he provided of the species found in Newfoundland. To my amazement, I found that nine of the species he photographed are also found locally. These include *Arethusa bulbosa*, *Calypogon tuberosus*, *Corallorhiza makasin* and *pubescens*, *Gymnadeniopsis clavellata*, *Liparis loeselii*, *Malaxis unifolia*, *Platanthera aquilonis* and *Platanthera grandiflora*. Those of you who went to the Green Swamp will probably recognize some of these names.

I'm not going to even try to describe the species that Jim photographed and showed us. I can only say that he is a remarkable photographer with a talent for highlighting the most miniscule feature of the plants he found. The one photo he included of himself, photographing a plant, shows him on his hands and knees with his camera aimed at a Lilliputian tuft of vegetative material. The lens on the camera was enormous! I appreciate that you do need very specialized equipment to do justice to the material he photographs. What impresses me is effort he puts into getting these shots! Judging from the landscape he was in, he must have hiked for miles to find that particular flower. I am absolutely certain it was not sitting by the side of the road waiting for him to drive by.\

Thanks to Jim I now have a new appreciation for this Canadian island . Jim has provided a valuable services with his presentation in that he provided fuel for thought. Thank you Jim! After all, an island with its own time zone, offset by half an hour from everyone else, has got to be special



Dactylorhiza majalis subsp. *praetermissa* (Southern Marsh orchid)



Jim Fowler



Newfoundland



Cypripedium reginae (Showy Lady's-slipper orchid)

Cypripedium reginae

Thank you to Joy Lemieux, of the Sandhills Orchid Society,
for this transcription of Jim's talk.

Courtney Hackney..Growing Tips for September 2013

Dept. of Biology, Univ. North Florida

Email: Hackneau@comcast.net

Optimal time to repot is rapidly coming to an end as days get shorter. Repotted orchids need time to grow new roots into the medium so that they can acquire water and nutrients during winter and in **early spring. Always remember that plants are “cold blooded”, which means only that their growth is** entirely determined by temperature.

Each orchid can survive within some temperature range, but within that range is an optimal temperature range where it grows fastest because it can take up nutrients and water at a rate sufficient for it to use all of the light it is getting and move water to its leaves fast enough to keep its leaves cool while it absorbs sunlight. At higher temperatures an orchid may not be able to keep its leaves cool enough to prevent burning and at lower temperature it may not be able to obtain nutrients fast enough to turn light into new tissue.

The ideal temperature range for most orchids was determined by the natural environment of **an orchid’s ancestors. This may be easy to determine for a species, but more difficult for hybrids.** Hybrids, however, have been selected for best growth at typical greenhouse temperatures. Vandas whose ancestors are from the lowlands of the tropics generally stop growth at a much warmer temperature than phragms from the Andes where it is much cooler.

Most hobbyists pay attention to the temperature in their growing area. That, however, is not exactly what your orchids experience. Direct sunlight on a plant leaf warms the interior of the leaf far above the air temperature. If there is no air movement around the leaf or the orchids cannot obtain enough water to cool its leaves through transpiration then an orchid leaf can quickly burn even though the air temperature is below the maximum temperature recommended. Conversely, lots of air movement can allow an orchid to survive in an environment where air temperature is far above what is recommended.

The temperature within the orchid pot is another important facet for orchid growth. Typically, the temperature within an orchid pot is different than the air temperature; cooler during the day and warmer at night. The temperature within the pot determines the rate of root growth, nutrient uptake, decomposition of the medium, etc. In winter, a dark pot will absorb heat and roots remain well above the ambient air temperature at night. A soil temperature probe is ideal for understanding growth of orchids because it indicates what is happening in the pot. Hobbyists often note that root growth in vandas ceases much earlier in the fall than other groups of orchids. To some degree, this occurs because we generally grow vandas in baskets where root temperature is at or near that of the air.

White plastic pots in a greenhouse remain much cooler than dark green pots even when there seems to be little direct light on the pot. Most surprising is the temperature within clear plastic pots. These act like little greenhouses and warm up quickly. A clear, plastic pot with medium exposed to direct sunlight can warm to well over 100 F in a matter of 15 minutes, while a white or even green pot remains below 90 F.



This can be a problem in summer, but ideal in winter when air temperature is low and days short. *Phalaenopsis mericlones* grown side by side in clear and white pots with open their first flowers a week or so apart simply because of the difference in medium temperature produced by different types of pots.

This heat gain is most extreme when the medium is dry as the water in a wet medium absorbs large quantities of heat. Many successful hobbyists who live in environments that are not ideal for orchids take advantage of the different characteristics of pots and use it to mediate temperature extremes. Clay pots tend to be cooler than plastic in summer. Water evaporates from the exterior of the pot cooling the pot and its roots. Water is pulled continuously from the medium through the pot as long as the medium is wet. This works extremely well to cool orchids in hot climates during summer as long as there is lots of air movement and a supply of good water. The quality of water is critical since water is continuously evaporated from the surface of the pot and any dissolved salts are deposited on the pot surface.

If water quality is poor, i.e. lots of stuff in the water, a silver or grey sheen will develop on the pot surface that limits water movement through the pot. This salt buildup can become so severe that roots die when they come in contact with the pot. Fertilizer dissolved in R/O or rainwater can produce the same effect unless there is a sustained effort to flush pots. Pots can become so filled with a surface glaze of salt that water no longer moves from inside to outside a pot. In fact, salts can move back into the clay pot and make even the interior surface toxic to orchid roots. Hobbyists who use water high in dissolved solids are well advised to discard clay pots and not reuse them. Many arid areas in the U.S. have water with lots of dissolved solids. This combined with low humidity and high temperature leads to clay pots with lots of surface salts.



Certificate of
Appreciation
and gift

For Jen & Neil

Presented at
the dinner
with the
speaker from
all those who
went on the
Green Swamp
Walk this
year.



Jack Webster Awards
Non-Greenhouse
Grown

1st Place Ribbon:
Bulbophyllum "Frank Smith"
Grown by Robin & Josh Gurlitz



2nd Place Ribbon:
Dyakia hendersoniana
Grown by Charles Walker



3d Place Ribbon:
Dendrobium rigidum
Grown by Charles Walker

!!!ALAN MILLER PROVIDES ALL OF THE SHOWTABLE PHOTOS..THANK YOU ALAN!!!!

Jack Webster Awards
Greenhouse Grown



1st Place Tie Ribbon:
Aeranthus Grandiose "Hsingying"
Grown by Robin & Josh Gurlitz



1st Place Tie Ribbon:
Christensonia vietnamica
Grown by Lee Allgood



2nd Place Ribbon:
Pecteilis susannae
Grown by Nick Plummer

—FALL AUCTION—

OUR FALL AUCTION WILL BE HELD AT LAKE CRABTREE PARK, WHITE OAK SHELTER, MORRISVILLE, NC., ON SATURDAY, SEPTEMBER 21.

POT LUCK LUNCH STARTS AT 12:00 NOON AND THE AUCTION STARTS AT 1:00 PM.

THERE ARE LOTS OF VOLUNTEER OPPORTUNITIES . CONTACT SIDNEY COX TO VOLUNTEER TO TRANSPORT PLANTS, SET UP AND TAKE DOWN, BE AN AUCTIONEER. SEE SIDNEY AT THE NEXT MEETING.

THE SECOND SET OF MUGS DESIGNED BY SUZANNE HENS ARE ALMOST GONE.

ANYONE WISHING they HAD ordered them can purchase the 2 remaining mugs.

Triangle Orchid Society Meeting Agenda:		Calendar 2013	Speaker	Topic
7:00-7:30	Set Up Show Table and Chairs	Sept. 9, 2013	Steve Arthur	Orchids of South & Central America
7:30-7:40	Business Meeting Announcements			
7:40-8:30	Program	Oct. 13, 2013	Tom Nasser	My favorite Miniature orchids
8:30-8:50	Refreshment Break			
8:50-9:20	Show Table Review, Show Table Awards	Nov. 2013	Mark Reinke	TBA
9:20-9:30	Raffle			

Welcome Table	Refreshments
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September	Jenny Sears	Erica Wolfe
October	Jenny Sears	TBA



Associated with

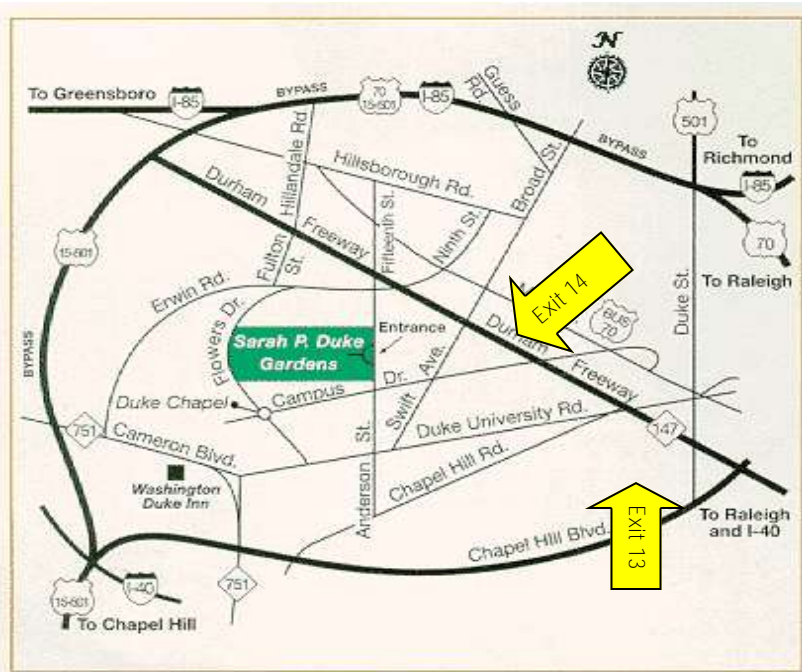
Sarah P Duke Gardens

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Cattleya maxima
Equador, Peru, Columbia



The Triangle Orchid Society
meets at the
Sarah P. Duke Gardens,
Durham, NC
The Second Monday of the Month
at 7:30 PM

Visitors are Welcome!
www.TriangleOrchidSociety.org

From the East. Exit 13 on the Durham Freeway(#147)
Head South on Chapel Hill Rd. Turn right on Anderson St.
The Gardens are on the left.
From the West. Exit 14 on the Durham Freeway (147)
Head South on Swift Ave. Turn right on Campus Drive ,
Turn right on Anderson St. The Gardens are on the left.

Triangle Orchid Society Dues are:

\$20 per year single, or \$26 per year for two persons living at the same address.

Send your dues to: Anne Williams, TOS Treasurer, 1506 Kent St. Durham, N.C. 27707