

An Affiliate of the American Orchid Society

# FORT LAUDERDALE ORCHID SOCIETY

N • E • W • S • L • E • T • T • E • R

January, 2008

*January 14<sup>th</sup> speaker:*

## **Dr. Ron McHatton's Topic To Be the intimate lives of orchids ( sex, food, alcohol)**

Ron, a PhD Chemist by training, is currently the AOS Director of Education and Regional Operations. Prior to accepting this position he was Apopka production manager for Kerry's Bromeliad Nursery, possibly the largest wholesale orchid nursery in the United States and one of the largest Bromeliad wholesalers as well. Ron has been growing orchids for more than 43 years and has an eclectic collection of plants representing a wide cross-section of the orchid family. Ron's passion for orchids has spanned virtually every growing regime from windowsills to under lights to greenhouses running from a 200 square foot hobby house to several acres of commercial growing space. Over the years his private collection has numbered in excess of 2500 plants. In addition to his professional position, Ron is an accredited American Orchid Society judge and has been volunteering for the AOS for over 25 years. During that time, Ron chaired several national committees, twice held a seat on the organization's Board of Trustees and briefly served as vice-president.

In addition to Ron's volunteer support of the AOS, he has also been a long-time supporter of the Orchid Digest. In this role, he has served on its Board of Directors and Executive Committee for many years and as its President for three consecutive terms.

### **Important Note**

Please see the last page of the newsletter for directions to the WOC and for any updates on your work at the hospitality booth or on security. At press time there were no available updates.



## **The Holiday Party Was Perfect**

Nora Dyke and Marian Huber have planned holiday parties for several years and this year they outdid themselves. We loved the food at Brooks both last year and this year. The music was great for those who danced and not so overwhelming that those who wished to sit and talk could do that. Mac and Helen Rivenbark received the gift plants from Marty (Hawaiian Orchid Source) and guess what? There were two plants for each of us, and most got one blooming plant in the gift bag. The 77 good souls who attended had a great evening and it was especially wonderful to see some of our members with recent/current medical upsets in attendance: Marge Adler, Polly Fletcher, Janett McMillan, and George Csabon are the ones I know about.

Two members of our society were given Life Memberships. Jane DePadro has been an FLOS Board member, has been in charge of getting and then assigning judges for our recent shows, and perhaps most important she shows up at every meeting to oversee and participate in ribbon judging. I was the other life member. I think the Board gave me this honor for sitting at the raffle table for about 20 years, and for the 30-40 hours I have spent each month getting out the newsletter for the past 6 years. The award made me very happy. It will be great to be listed with the other people who have contributed so much to our society. Dot Henley

Yes, you can do it!

## On Growing Orchids Inside

We are living in orchid paradise and sometimes we forget that not everybody can grow orchids under a tree, on a patio, or in a backyard slat house. If we lived in most of the United States we would be growing orchids inside and it is time to exchange the tree environment for a window! We need to consider the same variables that are considered or provided under a tree:

**Light:** Instead of 'at the edge of the canopy or in deeper shade' you need to think of window direction, and we need to remember that the sun's coming up and going down are variable with the seasons. In other words the south window would be great for Orchid A in the winter and a slow-cooker in the summer. As a very general starting point in selecting window direction consider these 'rules':

\* **Most orchids bloom well with 4 hours of direct morning or afternoon light.** (Mid-day direct light will burn many orchid leaves even behind glass.) Angraecums, Arachnis, Renantheras, and most Vandas require 8 full hours of direct light and will not flourish with just window light.

**South windows** are probably the best for cattleyas, dendrobiums, most oncidinae, and brassias. A mid-day screen or sheer curtain may be needed especially in summer.

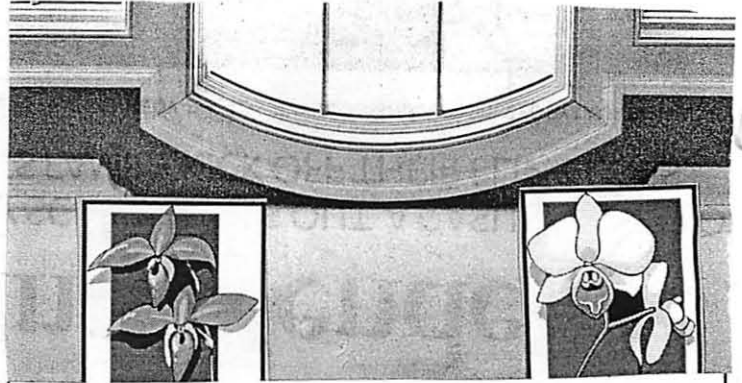
**East windows** will offer the second greatest amount of light and also may need a mid-day screen. Brassavolas and laelias as well as phrags and multifloral paphs may grow away from the window in this location.

**West windows** will probably be better for phrags and most paphs and would be the spot for gongoras and colognes.

**North windows** may be just the place for **phals which are probably the easiest to grow genera indoors.**

If your adult plants have not bloomed in a year, you might try moving them to a window where more light is available or, you may want to add artificial light. Gro-Lux fluorescent lights are almost a necessity in the north and may be just what you need even here in the sub-tropics.

**Temperature:** Your orchids will probably be comfortable if you are. For orchids that need a winter cooling, you can provide this by putting them nearer the glass which will cool more than the rest of the room.



**Air movement:** Even in the house this is an important variable. A ceiling fan which runs for a few hours a day in your growing room is a good idea. It is a bad idea to cram your plants close together and have no moving air.

**Humidity:** The easiest rooms for keeping humidity at at least 50% are kitchens and bathrooms. Cooking grease in even small amounts will in time clog up the stomata (openings for the exchange of gasses and the release of water through transpiration.) Kitchen grown plants need sturdy leaves and pseudobulbs that can be washed off with soap and water and then rinsed from time to time.

Humidity can be added to other rooms with a humidifier, with a small decorative fountain, with a fish tank, and to a degree with pebble trays. A pebble tray is easy to construct. Fill the bottom of a pyrex dish with pebbles (or marbles) and add water up to the top of the pebbles. Set orchid pots on the dry pebble tops and the pebbles will cause the water to evaporate faster than the water would evaporate if it were just under a grill.

**Watering:** You will need to follow the general rule for water needs for each genera that you grow, but you will find that the frequency of watering will depend on the potting medium, the air movement in the room, and the rooms humidity.

**Fertilizing:** You may want to use half strength fertilizer inside and you will need to flush the pots with plain water once or twice a month since you will not have the needed flushing away of fertilizer salts provided by rain when plants are grown under a tree.

Learn more by checking out these library books:

- Fennel, T.A. Jr. **Orchids for Home and Garden.** Rinehart & Co. New York.
- Fitch, C.M. **Growing Orchids Under Light.** The American Orchid Society. Delray Beach, FL
- Kramer, Jack. **Growing Orchids at Your Windows.** Hawthorne Books. New York.



FLOS 2007  
Holiday Party



## About Explorer-Collectors

The golden age of orchid fever began in England in 1869 when Veitch and others could no longer fill the demands for orchids. Prior to this time missionaries and sailors had brought orchids into the country as tropical novelties, but when orchid fever really hit, explorers were sent out in numbers to collect orchids. Often the orchid hunters led nasty and short lives.

Some died of fever or intestinal complaints. Thomas Lobb lost his legs in the Philippines. Benedict Roezel lost a hand which was replaced by an iron hook. Even with the pirate-like hook he was robbed by bandits 17 times while he explored Mexico and Central America. Roezel was not deserving of too much pity. Priests had encouraged rural Guatemalans to decorate their church facades with the alba form of *C. skinneri*. Roezel bribed the parishioners to pilfer the orchids growing on the churches so he could fill his quota. Roezel and other orchid hunters prized themselves on how little they paid the natives to help them and they prided themselves in deceiving competitor hunters with false map, trails, and threats of death.

Orchid hunting was not only hard on the hunters but on the orchids and their habitats. Whole trees were chopped down to gain a few orchids on a branch. Some orchids were collected to a point of extinction and many orchids did not survive the long trip to England which began on the backs of mules, to exposed docks, and then into stuffy crates with insects and rats. The orchids that survived the trip were auctioned and those that were considered rare went for great sums of money.

Bernhart, Peter. 1989. *Wily Violets & Underground Orchids*.  
N.Y. William Morrow and Co. pp. 189-190

*Note: The orchid hunters also embellished the truth about their collection trips. Favorite embellishments concerned sex and/or hostile natives. A good story often increased the sale price at auction and what the hunter would be paid on the next exploration.*

## Use Your Feet To Halt Your Cough



The soles of your feet are quick to absorb oils. Rub them with garlic and you can taste the garlic in 20 minutes. If you have a cough, slather your soles with Vicks Vaporub and put on socks. Your cough won't come back for hours. (Thanks, John Wrench.)

## Photo Credits: ( Thank you all!)

Ken Workman took the party photos on page 3 except for the one of himself and Deb. This was taken by Bruce Muntz and Bruce took the page 1 photo. Deane Hall assembled the party page and formatted the pictures into a form that our printer finds best.

'Tis the season for a cold snap...

## Planning Ahead to Keep Your Orchids Safe

1. **Group your cold-tender plants** so they can come inside if the temperatures go below 50 degrees. Cold tender plants are Phals, Vandas, Rhyn. and a 'heap' of species plants that you might be growing. Go to [www.orchidspecies.com](http://www.orchidspecies.com) and get temperature information on these. You might also bring in most *Dendrobiums*. They will live through a cold snap, but lose their leaves and bloom less well in season. It is also good to bring in baby plants, and adult plants in bud.

2. **Buy a soaker hose** and keep it below your outside benches/trees/orchid space. If you turn it on when the temperatures dip, the tap water (which is about 70 degrees here) will rise and warm your Catts and other orchids which are not SO cold sensitive. Others will tell you to turn on your overhead sprinklers until the temperatures go back up, but you will have to load these over-soaked plants with fungicide.

3. **Assemble NON-PLASTIC covers** (old sheets, blankets, draperies, etc.) to top benches of plants or to wrap around tree trunks/limbs that hold plants in case you need to move fast to protect orchids from cold winds.

4. If you can't bring your orchids inside, one and all, and you can't protect them outside, know two things: **orchids want to live**, and if you lose a few, you will have space to hold more cold tolerant plants. Think of the shopping fun. D.H.

## Cold Weather and Blushing Leaves

Usually when orchid leaves have a red glow it is because cool weather brought out their anthocyanins. This red pigment can also be promoted by high light, high sugar content, or a phosphorus deficiency. A purple tint on Vanda leaves would be due to cool temperatures. (*Remembering Biology 101, green chlorophyll usually masks other leaf pigments, but other pigments are there and show up when the chlorophyll is masked. Yellow-orange comes from carotene, brown from tannins, and if you can't spell it or pronounce it, it is one of the red or purple pigments. Many B. nodosa crosses have 'blushing leaves' come spring. A couple of tablespoons of magnesium sulfate, Epsom Salts in a gallon of water will take away the blush, D.H.*)

Red pigment information from Ardeti, J. (editor) 1977. *Orchid Biology*. Cornell University Press. V.1, p. 119

## Dates To Keep:

Most of you know all about our co-sponsoring the WOC, but just in case the dates have slipped your mind, they are January 23- January 27, 2008.

Since you are going to be in Miami, please attend another orchid event, *The Tamiami International Orchid Festival*. The dates are January 25-27 at the Dade County Fair Expo Center. For more information email [vandas@mindspring.com](mailto:vandas@mindspring.com). (See inside back cover of the Nov. Orchids Magazine as well.)

### Neat new evidence that

## Plants Are Just Slow Green Animals

*Companion planting of some vegetable plants was a hot topic in gardening about a decade ago and it did appear that some kinds of plants grew better in the proximity of a given plant of another kind. Some plants also produce allopathic chemicals to keep other plants out of their space, and now there is evidence that certain plants can recognize their siblings!*

At McMaster University in Canada plant ecologist Susan Dudley grew both related and unrelated sea rocket plants which are found along North American beaches, together in pots. Unrelated plants made more roots to compete with their pot-mates, sibling plants allowed their relatives space to grow. Since the related plants did not have to put as much energy into root growth, they put their energy into better growth and reproduction when compared to the unrelated plants.

*I've found that orchid seedlings grow better out of community pots if they are put in 'room-mate' pots for another year or two. Could the same lessened root growth and kin recognition growth occur? D.H*

Sue Blackmore is thanked for sending me this information from page 10, of the October-November *National Wildlife*.

## On Friendly Nuts

This is not about your obsessed orchid friends, it is about nuts that you should eat to keep healthy. For your heart try macadamias, peanuts (really legumes) and pistachios. Almonds are good for your bones and they help lower blood pressure. Brazil nuts are good for the prostate, but they are so rich in what's right men should only eat two per day if they take a multivitamin.

Pecans are good for the eyes and inhibit bad LDL's from sticking to your blood vessels. After fish and flaxseed walnuts are the third best source of omega-3 fatty acids which promote healthy levels of serotonin which is needed to fight depression.

Bauer reported that the levels of fats in nuts is not a source of concern since the fats are the healthy fats.

Bauer, Joy. 'The Miraculous Power of Nuts'. Nov. 1, 2007. *Bottom Line Personal*. pp. 9-10

## Member News

\* **Bill Arney's** brother-in-law Jim Baker has for years worked with the Intergovernmental Panel on Climate Change (IPCC). Jim's work on global warming contributed greatly to his organization's sharing the Nobel Peace Prize with Al Gore.

\* **Deane Hall** is slated to become an AOS Trustee as of the January AOS Members' Meeting. Deane has served on important AOS committees for a number of years. Deane has been active with other plant groups for all of the last 15-20 years. His list of plant related offices and honors include being on the boards of, or being a director of: The American Camellia Society, The Betty Ford Alpine Gardens and The Denver Botanical Garden.

### Ora, the orchid explorer goes to

## Guatemala and Central America

If the theory is correct that North America, Mexico and part of Guatemala were cut off by ocean from the rest of Central America then it would explain the great variety of orchids in Guatemala, many of which are not found in the rest of Central America.

Guatemala has two seasons, the rainy season and the summer season and is called the Country of Eternal Spring.

At the time of Ora's trip there were about 650 species of orchids from 90 genera. Common genera included: *Cattleya*, *Lycaste*, *Odontoglossum*, *Oncidium*, *Encyclia*, *Epidendrum*, *Stanhopea*, *Gongora*, *Cynoches*, *Brassias*, *Sobralia* and a number of miniature orchid genera.

Ora found *E. radicans* growing in great tall masses on the ground and on rocks. *Enc. cilare* was also seen growing on rocks and on trees. She found *Enc. cordigera* with lips ranging from white to deep magenta. *Cattleyas* included *skinneri*, *aurantiaca*, *bowringiana* and the natural hybrid *Guatemalansis* which was seen in a rainbow of pale colors. *Rhyncholaelias digbyana* and *glauca* were found in Guatemala as was *B. nodosa*. *L. anceps* and *rubescens* were common as were *Brassias maculata* and *varicosa*. Ora felt right at home with the orchids mentioned specifically in this article since they also thrive here in South Florida.

*Lizama, C.* 'Orchids of Guatemala and Central America.' from *Proceedings of the Eleventh WOC*. 1984.. International Press. Singapore. Pp.234-237

Make your WOC shopping list for—

## ***Sobralias* for Here**

*I ask for Sobralia growing help a few issues back and got no response. The December Orchids had some answers. Russ Curtis brings Sobralia flowers into AOS when he is 'Orchid Doctor' and they are so beautiful and so fragrant, that adding them to our and your collection might be a plan.*

### Points from the article:

\* Never let them get bone dry, you can't water them too much, and never disturb their roots. If you have to repot be very careful to keep the root ball intact. According to Rogers, you should move them into a pot that is twice as big as the old pot. They can also thrive in the ground if you amend our soil with agents that provide more aeration and drainage.

\* Rogers describes the two kinds of *Sobralia*. The Ephemeral group which may produce many flowers, but the flowers last but a single day. The Field group produces flowers that may last a week or so. Ask the WOC vendor which group his plant belongs to.

\* Rogers listed species that thrive in our warm climate. The following species are on the list: *bicolor*, *callosa*, *elegans*, *fimriata*, *fragrans*, *powelli* (Ecuador form), and *rosea*.

Orchids. Rogers, Bruce. 'Growing Sobralias'. December, 2007. Pp.912-919 (The pictures of the *Cattleya*-like blooms will make you want to shop!)

## **On Pollinator Bees**

Dressler stated that some orchids are very specific and can be fertilized by just one species of pollinator. Many orchids are not so specific and certain bees can pollinate several species of orchids as they make their daily rounds.

This is possible because there are 13 spots on a bee's body where pollinia could be attached. Of course if a bee tried to fly with all 13 spots filled it probably would be too heavy to fly and few wild habitats would have 13 kinds of orchids in flower at the same time. It would be more likely that a bee would carry just a few kinds of pollen at a given time. If 2 or 3 kinds of orchids bloomed simultaneously they would have different floral anatomies that would require that the pollinia would attach to 2-3 different points on the bee. A further requirement would be that when the bee passed a new flower the anatomy would be such that a right pollinia would be deposited there.

Dressler, Robert. 1981. *The Orchids Natural History and Classification*. Harvard University Press. P. 228

## **Be An Orchid Conservationist**

So you can't afford to buy a hundred acres of rain forest, you can still make a difference. Start by keeping the species orchids in your collection healthy. Know what they need and provide it for them. This is *ex situ conservation* which is the preservation of a species outside of its natural range. Each division that you share of a species orchid may mean that one less plant is removed from its increasingly decimated natural habitat.

As orchid society members we can share information with each other that might insure that we are growing our species orchids the best way possible and I would urge you to share your growing expertise with readers of the newsletter by letting me pass on your hints.

On a larger scale we can vote sometimes for a more environmentally aware person to hold office and we can support the American Orchid Society with membership and perhaps a check ear-marked for conservation. Conservation is a major AOS concern. D.H. (bobdot@bellsouth.net)

*Some information here came from the AOS website on Conservation p.2*

## **Cold Water Spider Mite Control?**

Spider mite season is still a bit a way, but have just gotten a hint that might work. Mites flee from cold water and will leave if exposed to it. Keep a spray bottle of water in your refrigerator. When you suspect mites, spray the cool water on the plant and don't forget the undersides of leaves. Do it daily for several days and with luck your plant will be mite free. *The brief cold should not kill your orchid, but I would not try this on many plants. Do begin to check your Phalaenopsis, Phaiacalantes and other spider mite tempting plants early. The mite season begins in January and gets progressively worse through spring. As a trivia lover I like the theory that Calanthes lose their leaves in spring as a way to not feed spider mites. Mites are not insects and the word spider tells you that. They are Arachnid Arthropods. Crustacean Arthropods are a huge chunk of the earth's animal population, and insects (Orchidists think scale, thrip, mealy bugs and others think termite, roach, etc.) make up a huge percent of all the animals on earth. Once I read that there are a million insects for any one other animal! More biology, only about 1,000 species of insects are destructive and our life on the planet is better since the good insects pollinate most of our fruits and vegetables and most of our orchids Oops old biology teachers just can't quit. D.H.*

## The New Grower:

### Correct Your Orchid Labels

Many are full of errors!

The **Genus name** (*Vanda*) comes first. The genus name begins with a capitol letter. The genus is written in Italics if it is followed by a species name.

The **species name** comes next. It begins with a lower case letter and the genus and species are shown in slanted Italic letters. (*Vanda tessellata*)

The **Hybrid (Grex) name** also follows the genus name. It is not in Latin or written in Italics. The hybrid name begins with a capitol letter (Vanda Robert's Delight).

The **Clone (cultivar) name** is not in Latin, it begins with an uppercase letter and is placed within single quotation marks ('Midnight Magic'). It is found after the species or hybrid name.

**HCC/AOS, AM/AOS, and FCC/AOS** are among the awards given to a particular plant. Find this right after the clone or species name for example:

*Vanda tessellata* 'Norma' AM/AOS

Vanda Robert's Delight 'Midnight Magic' AM/AOS

**Selfing** (abbreviated xself) means that the pollen of one flower was placed on a stigma of the same plant.

**Sib** (xsib) and **Sib-cross** (xsibling) refer to crosses when the pollen of one plant of a species is transferred to another plant of the same species.

---

### "Inflorescence" Word of the Month

The "T" word refers to a group of flowers on a stem rather than a single orchid flower. A branched inflorescence is called a panicle.

### Again, Orchids of Old

In 1552 the Aztecs published a manuscript stating that extracts from a vanilla bean (*Vanilla planifolia*'s seed pod.) could be used to flavor chocolate beverages. It could also be used as a perfume and a body lotion. As a body lotion it could overcome fatigue, give the wearer strength and help him overcome fear.

In 1640 John Parkinson stated that Discorides said that if men ate the greater boiled roots of *Cynorkis* orchids (*Cychnoches* ?) they would beget sons, while females who ate the lesser roots would bear daughters. Women could boil the roots in goats milk to procure lust, and if things got too lusty she could use dried orchid roots to extinguish the lust.

Sheehan, T.J. 2001. *The Ultimate Orchid*. Published by the Smithsonian and AOS. P. 12

### Variables in Orchid Evolution

*Before I launch into some of the variables that helped shape orchid evolution, let me tell you about one of my favorite variables in the evolution of man. There was a time when we were weak and dumb. Certainly our senses of smell and vision were not that great but our unwashed bodies smelled SO BAD that animals, other than leopards, would not eat us! Moving on to orchids:*

**\*Flowering time:** Many orchids flower when water is more available.

**\*Photoperiodism:** Flowering occurs according to short or long day rules. (*In our hemisphere short days begin in the fall and long days being in spring.*)

**\*Thermoperiodism:** Here flowering is initiated by reduced temperatures. (*Think Phalaenopsis or Cymbidium.*)

**\*Periodic events:** For instance *Den. crumentum*, the Pigeon Orchid, blooms nine days after a heavy rain. This heavy rain can insure that many plants will bloom at the same time and increase the chances of pollination. This is called gregarious flowering.

**\*Pollinator co-evolution:** This is often a most important variable. Both orchid flower shapes, colors, and scents have played a part in the evolution of both the orchid and its pollinator.

Ardetti, J. 1992. *The Fundamentals of Orchid Biology*. New York, NY. John Wiley and Sons.

### Relax, The Experts Are Wrong Too

We still use the binomial (genus and species) scientific name for plants and animals. It was created by Swedish botanist, Carl Linnaeus (1707-1778) who described some 7,300 plants using the Greek and Latin names given them by previous herbalists.

Theophrastus described 500 plants (300BC), Pliny described about 1,000 plants 300 years later, and today between 250,000 and 300,000 species of plants have been described and probably even the earlier scholars had trouble with pronouncing the names! Experts don't agree today, so relax and do the best you can. There are a few rules, with exceptions of course, that might help you sound right most of the time.

\* Divide the name into syllables keeping one vowel in each syllable.

\* If you have a two syllable name, emphasis goes on the first syllable.

\* If you have more than two syllables, emphasize the one with a long vowel (*vul- GAR-is*). If you have no long vowel play it by ear. (*EL-e-gans* or *Di-TAX-is*)

[www.calflora.net/botanicalnames/nomenclature.html](http://www.calflora.net/botanicalnames/nomenclature.html)

## GREEN BARN ORCHID SUPPLIES

Everything you need to grow beautiful orchids



5185 Conklin Drive  
Delray Beach, FL 33484  
(561) 499-2810

website: [www.greenbarnorchid.com](http://www.greenbarnorchid.com)

Co-Proprietors:  
Lynn Lappin and Hyla Levine



Sandi Jones  
Tom Wells

**BROWARD ORCHID SUPPLY, INC.**  
ORCHID SUPPLIES FOR ALL YOUR GROWING NEEDS  
CUSTOM ORCHID RACKS & BENCHES  
ORCHID REPOTTING & SITTING

2411 Garfield Street  
Hollywood, FL 33020

954-925-2021 phone/fax  
[browardorchidsupply@comcast.net](mailto:browardorchidsupply@comcast.net)  
[www.browardorchidsupply.com](http://www.browardorchidsupply.com)

## Ways to Get to the WOC

### The wrong way!

Folks who used MapQuest to get the Sheraton last year for the SFOS show ended up at Bayside. Bruce and Sue will put directions on the website, but hopefully Bob's directions will work for you?

**The Florida Turnpike way:** This is the easiest according to Bob. You take the Turnpike South to State Road 836 where you will make a 270 degree turn to the right. This puts you on SR 836 heading east. Go to the 3<sup>rd</sup> (?) exit and you will see the Sheraton, enter and follow the signs to the back of the complex for the show and for parking.

**The I-95 way:** Take I-95 South until you get to SR 836. Take 836 west to Red Road. Get off and go under 836 heading south. Go to the 7<sup>th</sup> Street stop light, turn right (west) and go into the Sheraton as above.

Web Site: <http://www.flfos.org>

Call these numbers: Sunshine- (954) 563-3548  
Newsletter- (954) 772-4836

President.....Mac Rivenbark  
First V.P.....Joan Connors  
Second V.P.....Wayne Musgrave  
Recording Secretary.....Marian Huber  
Corresponding Secretary.....Chris Creage  
Treasurer.....Bob Henley  
Newsletter Editor.....Dot Henley

Directions: Use Oakland Park Blvd. from I-95.  
Go East for 2.4 miles, go to rear of the church  
which is on the North side of Oakland Park Blvd.  
Or take US-1 (Federal Hwy.) to Oakland Park  
Blvd. and go West for 2 blocks.

1955 East Oakland Park Blvd.  
Place: Christ Lutheran Church Social Hall  
Time: 7:30 P.M. Workshop, 8:20 P.N. Program  
Regular meetings: Second Monday of each month  
Ft. Lauderdale, FL 33338

P.O. Box 4677

**FORT LAUDERDALE  
ORCHID SOCIETY**

