

An Affiliate of the American Orchid Society



FORT LAUDERDALE ORCHID SOCIETY

N.E.W.S.L.E.T.T.E.R September, 2008

Linda Wilhelm from Woodland OrchidsTo Speak September 8th

Linda's topic will be *Oncidium - Types and their culture*. Linda and Rolf bring beautiful Oncidinae to our show as well as great *Stanhopeas*, mini catts, and other genera so this will be a night to learn more, buy more and certainly enjoy a North Carolina speaker.

Linda stared growing orchids in 1980 after a vacation to Florida. Already intrigued by orchids, she bought a small *Cattleya* seedling, not knowing at that time that it would take seven to eight years for it to bloom. It was the beginning of an addiction. After meeting Rolf in 1985, the addiction became severe when he too got involved with orchids.

When the hobby got out of hand and developed into a serious passion for both, they started Woodland Orchids. They specialize in breeding warm tolerant Oncidinae and several of their recent hybrids have been awarded. Compact *Cattleyas* are also line bread and *Stanhopeas* are a recent passion.

Linda is an AOS Accredited Judge, and is currently the Chair of the Carolinas Judging Center in Greensboro, N.C. and she is an AOS Trustee. She enjoys being involved in shows outside her region, including shows in the islands. She refers to this as ".. an opportunity to see a different variety of orchids as well as an opportunity to extend my group of friends".

Linda and Rolf will provide the plant raffle table and will bring a few non-pre-ordered plants for sale. She will be speaking at the Deerfield Orchid Society the following night. Plan to attend that meeting as well as our own. If you didn't go to the website in August, please check that out now:



Rolf & Linda Wilhelm

Hybridizers & Growers of Top Quality Orchids

www.woodlandorchids.com

Ramble South, October 4th

The Shirks, Bob and Loleita are dedicated day ramblers and often include a friend who comes up from Homestead to ramble back to Homestead. Now they have a sister and a friend who will join us from Jacksonville. I hope you see the picture? Our rambles are great fun, and going on them is worth a drive.

As usual we will leave from the Cardinal Gibbons student parking lot at 8:00 and return by 5:00 PM. (If you are a first-time rambler, take Commercial to Bayview Dr. and turn by the school sign to the student parking lot on 47th Street.) You need to bring a bagged lunch and an ability to lie about how little you spent at each stop. A couple of new and exciting stops are planned so this will be a no-miss ramble. Sadly the cost per person will be \$30. On the bright side, you can barely drive to Homestead for that, you won't win a bus raffle plant or get the discounts many give us. Another plus, besides the fun of being together, may be Jane De Padro's 'Wines of the World' collection that we didn't finish on the overnight!

Please pay Bob Henley at the meeting or send a check to our post office address on the front of the newsletter.

Weather Small Talk

I need to fill this space and think I can make you feel lucky to be living here!

California member Irma Hughes was 30 miles from the epicenter of their 5.4 summer earthquake. Objects tumbled from her shelves. In Kansas, our members Lee and Sharon Sharpe and Betty Kline had a 5" rain storm that caused flooding. That rain came up from the hurricane that hit Texas. The town's tornado warning whistles send them to their basements several times each summer and this summer they have had record heat that made our heat seem just a tiny bit unpleasant.

At least our hurricanes come with warnings! D.H.

Review: Laurel's August Program

Laurel Baldan Nanney began her talk by telling us about the 'orchid mania' time in the 1700s. The English had discovered non-orchid tropicals from South America. A plant hunter used Cattleyas as packing material for his tropical plants. When the amazing packing material bloomed, a new orchid mania began..

Laurel read an account by Herman Sweet describing an early orchid hunter's difficulty in collecting orchids in those early days. A really special find turned out to be *Phalaenopsis amabilis*. Its flowers were so beautiful they were reserved for local princesses. It was also unique because it has larger flowers than most species phals and it blooms in spring. Most of the other 40+ phal species plants bloom in summer. Most of them have small flowers but a bonus is their fragrance.

Back to *P. amabilis* and an early ability to hand pollinate orchid flowers. Those early English collectors eventually crossed an amabilis from island A to one from another island. When the cross took, the young plants were offered to the Sander's Collection Company for re-sale. They would record the names of the parents before they sold the plants, but more importantly, the Sanders Company became the Sander's National Registry. From that time until today, all orchid hybrids are registered with Sander's.

Move forward 200 years and in the 1950s hybrids from *P. amabilis* have turned into the huge white phals that are still sought after.

Other species phals have left their column footprints on today's plants. A yellow-mother is *P.amboinsensis*. Other important species include *P. mannai*, and *P. bellina* (violacea).

Laurel's personal love obviously was her flasking work. It was interesting to see green pod and brown pod flask culture. She then told us about meristeming and then something we might just do. If we have a mature phal and want to make a 'stem-prop' we should apply Kiki-pro or any other kiki paste and then re-apply it in a couple of weeks and maybe we can get an identical copy of the mother -plant from a stem node. As a general rule we should cut off a spent bloom spike an inch above the first node. The inch space protects the plant from virus.

Laurel talked about future phal trends. Green is not easy, it comes from yellows and progeny often are yellow. Orange colors are not yet bright enough, large red flowers are about 5 years away, and blue phals just might take 30-50 years before the hybridizers get there. Bottom line from this interesting program: what a lot of history and work have gone into today's orchids. D.H.

Welcome New Members

Heather Hire, Michaela Reval, and Jasette Richards

Thank You, Refreshment Providers

Carol Clarkson, Chris Crepage, Judy Crowder, Nora Dyke, Vicki Hallock, Bruce and Sue Muntz, and Doris Pearson. The treats were g-o-o-d.

August Ribbon Judging Results

Mary Burtoff /red/ Trichogloitis brachiata, and Dendrobium oligophyllum

Paul Gartner /blue/ Vasco. Fine Wine 'Burgandy' and Blc. Crowfield 'Mendenhall' HCC/AOS

Eddie Griffith /blue/ Cycnoches copperi, Mokara Kan Belle T, Ascocenda Queen Florist, V. Mini Palmer x Dr. Andre Falcon

Peggy Knight /red/ Ascda. Motes Burning Sands 'Mary Motes' HCC/AOS

Tom Kuligowski /blue and culture/ Dgmra. Winter Wonderland 'White Fairy' /blue/ Angraecum scottianum

Alan & Jan Mink /blue/ Brsda. Fangtastic Bob Henley AM/AOS, Blc. Taiwan Queen' Golden Monkey' HCC/AOS, /red/ Brs. Rex 'Christine' AM/ AOS, C. violacea (Columbia)

Bruce & Sue Muntz /red/ Bc. Binosa

Wayne Musgrave /blue/ Otr. Hidden Gold, /red/ V. Kasem's Delight x Fuchs Delight

Chuck Nicholls /culture/ Gram. scriptum v. citrinum Helen Rivenbark/blue/ Dendrochillum magnum

Peggy Steptoe /blue/ C. Clarissa x *C.loddegesii x* (C. Impassionate x C. Mendellii 'Model')

Thank you all for sharing your plants with us. A special congratulations to the two members above who got the coveted awards for culture.

Filler Email Wisdom

There comes a point in your life when you realize:

who matters who never did who won't anymore who always will.

So don't worry about people from your past, there is a reason why they didn't make it to your future.



Re: The American Orchid Society

- * In the last 6 months, 27 people who identified themselves as FLOS members became AOS members. By doing so they join many of us who have been members for YEARS! A quick look the August issue of Orchids convinced me once again that we all should be members, just to get this beautiful and interesting publication each month. Scan some pages with me:
- * Conservation. Global Warming and the destruction of tropical rainforests make orchid conservation a major priority for orchid society members. Rainforests play a major roll in controlling rainfall and regulating global weather. They process huge amounts of carbon dioxide and produce a significant amount of the world's oxygen. Once tropical rainforests covered as much as 12% of the earth's land and today the estimated percent is 5. An article in the Proceedings of the National Academy of Sciences, published in June, 2008 stated that in the period from 2000 to 2005, 25 acres of rainforest were destroyed per minute. This is equal to the size of the state of Rhode Island each month. The major thing an individual can do is to preserve the species orchids in his collection, since they may not survive in the wild. Pp. 568-569. AOS President Carlos Fighetti is the author.
- * Ghost Orchid. There is a photograph by Greg Allikas of a blooming ghost orchid growing in the Corkscrew Sanctuary near Naples. The page also includes information on that orchid which is pollinated by a sphinx moth. P. 570.
- * Reciprocal Admissions. You can show your AOS membership card and enter many botanical gardens free or at a reduced price. A current list of these gardens can be found at www.ahs.org. P. 572
- * Basic Orchid Care. Dr. Ron McHatton. Pp. 576-577
- * Shopping list. FLOS member Ken Slump tells you what to look for when seeking healthy orchids. P. 578
- I have just scanned the first few pages, further on there are articles on: aphid control, a check-list for August growing, summer blooming phals, growing indoors, the Taiwan show and growing orchids there, the genus Grobya, book reviews and much more. D.H.

Never Enough About Vanilla

"Oh, that's so vanilla.." is a commonly used phrase to knock something that is too bland or usual. Even though some associate it with a put-down, it is the worlds favorite flavoring, and Neiman Marcus is said to offer a jar of Sublimage face cream for \$350. It is special because it contains a magical ingredient from Vanilla planifolia.

Vanilla's history goes back thousands of years and I've written before about Montezuma's and Thomas Jefferson's enthusiasm for it, but didn't tell you why Casanova added it to his wine, nor about how today drug smugglers use it to mask the odor of the drugs from drug sniffing dogs.

There is a touch of vanilla in perfumes such as Shalimar and Chanel #5. Vanilla has been used to treat a variety of medical issues, and St. George's Hospital in London found that patients who wore a vanilla patch lost more weight than those without patches.

Realtors find that spritzing a house with vanilla will help it sell faster, and veterinarians report improved recovery of dogs after surgery when the odor of vanilla is in the recovery space.

The extract from real vanilla seed pods is being used less today than in the past. In 2003 a pound of vanilla cost \$227, while a decade before the price was about \$7. In the United States 98% of the vanilla used is synthetic. Because of the 2003 vanilla price, many countries started growing vanilla and in Madagascar there are 500,000 vanilla farmers. Not surprising the value of the crop has dropped by about 90%. In some areas, the farmers must post guards to keep thieves from taking the pods, and deaths have occurred due to conflicts over vanilla.

While Vanilla planifolia and Vanilla fragrans are the only orchid vines grown for the flavoring, there are at least 110 species of vanilla. Vanilla vines can reach 100' in length and the flowers come in colors ranging from greenish-yellow to pink, orange, and purple.

When DNA was used to build evolutionary trees, vanilla was found to have evolved 90 million years ago. Vanilla is related to asparagus, amaryllis, irises, onions, agaves and yuccas.

Siegel, C. 'The scoop on vanilla'. Orchid Digest. July-September, 2008. Pp. 144-148.

The Unisexual Orchids

Only 3 orchids do not have bisexual flowers. They are Catasetums, Cycnoches, and Mormodes. Mormodes can also be bisexual.

In Our Weird World of Orchids

You can decide whether this is science or obsession but between 1980 and 1984, 3,000 mostly volunteer, man -hours were spent searching for an underground orchid, *Rhizanthella gardneri*. The researchers and volunteers for the Western Australian Native Orchid Study and Conservation Group carefully scrapped away leaf litter in dense strands of broom honey myrtle (*Melaleuca uncinata*) to find the flowers which emerge from the ground to attract their pollinating termites. This unique, fungus fed, orchid was found in only 4% of what was thought to be areas where it would flourish.

Dixon, K.W, J.S. Pate and J. Kuo. 'The Western Australian Fully Subterranean Orchid *Rhizanthella gardneri*' from , **Orchid Biology Reviews and PerspectivesV.** (J. Arditti editor) 1990. Portland Oregon. Timber Press. Pp.44-47.

Meet two energy saving orchids:

Brassavola nodosa and Rhyncholaelia digbyana have pale green-white flowers and produce odors at night to attract pollinating moths. When they are brought into a lighted room they turn off their odors but begin to produce the odors again in about half an hour when taken back into the dark. It takes energy to produce fragrance and orchids seldom waste energy.

Meet a monster:

Gramatophyllum speciosum is reportedly the heaviest orchid with a mass of 4,000 pounds being reported. Of course the plant doesn't reach this size in a decade, but even young plants develop upward growing, 'trash basket roots'. The upward circle of roots collects moisture holding debris. As the debris breaks down it may also contribute nutrients to the monster.

This pigeon notes temperature drop:

Dendrobium crunnenatum, the pigeon orchid, is planted by entrance doors in the Perak and Pahang states of Malaysia. This orchid is considered a talisman to protect the house from evil forces. While the flowers last a single day it blooms exactly after a 10 degree Fahrenheit drop in temperature. The temperature drop usually occurs after a rain and the blooms usually emerge 9 days later.

Velamen, a Good Thing for Epiphytic Orchids

Epiphytes live in one of the most stressful habitats used by the plant kingdom. Even when there is plenty of rain or cloud mist, it runs off rapidly and the plant must store and conserve water. Epiphytes must also survive during long periods of drought, so water conservation is a matter of survival. Think velamen, but before you do, think about terrestrials.

Terrestrials can regain moisture from soil and if they live in a habitat with a dry season, they drop their leaves, usually, and they conserve water because they do not lose water through transpiration, or 'leaf sweating'. They can 'rest' and recover when the rainy season begins again. Terrestrial plants absorb water with root hairs which are ever growing on root tips. (Once upon a time I learned that the root hairs on a single vegetable plant, if laid end to end, would circle the globe about 4 times.)

Epiphytes have aerial roots with velamen. Live young velamen will have water absorbing root hairs on the side of the root touching a substrate (tree bark, clay pot) but there are no root hairs on the rest of the root. There is velamen all over the root. Mature velamen is comprised of dead, air-holding cells. Sinclair reported that Pridgeon (1987) found that the velamen on most orchids was from 2-5 cells thick, bu. could range from 1-25 cells thick. There are passages in the velamen that allow water and air to pass to the root and toward the base of these passages are trilosomes. In 1914 these fibrous cells were believed to condense water vapor from the air. Later workers believed they increased the diffusion pathway and prevented water loss. Pridgeon (1987) hypothesized that the trilosomes might serve as plugs to prevent the entry of bacteria and fungi into the root. It is not unusual for Cyanobacteria (blue-green algae), green algae, and fungi to live in the velamen. researchers may decide that these cells are symbiotic and serve to furnish nutrients to the orchid or the fungi may serve the role it serves in lichens which is to conserve water. Enough Biology 101, but the next time you water a Vanda and watch the velasmen turn from white to green, appreciate this 'magic' layer.)

When you watch the quick color change also note that the most nutrient laden rain water falls first, and

by absorbing this nutrient water rapidly, the spongy vela men itself helps provide nutrients.

Sinclair, R, 'Water Relations in Orchids from Ardetti, J. (edited 1990 Orchid Biology Reviews and Perspectives, V. Timber Press. Portland, Oregon. pp. 65-68

Alex Pridgeon's study is found in Volume IV of this series of

books edited by Joseph Ardetti.

Sable Palms Are Dying

The Sable, or Cabbage Palm, is the state tree for both Florida and South Carolina. It became our state tree in the 1950s and is on the Florida state seal.

Monica Elliott, a University of Florida plant pathologist, said that it's not likely that disease can be eradicated. It is caused by a microscopic killer and is probably spread by an unknown insect. At this time the disease has killed trees mostly in the Tampa Bay area.

Bill Arney sent this Associated Press release, dated July 23, 2008.

A Palm Disease Post Script

I don't know his name, nor the name of his nursery, but a man who owns a palm nursery in Palm Beach County told me that he had had a UF professor come to his nursery to take samples from dying palms of several genera. He feels that this mystery disease can be spread by using unclean frond cutting tools from one palm to the next.. We already know to clean our orchid tools, now it's time to include this plan for palms and perhaps many other plant genera. D.H.

More A Day Later

The Sun-Sentinel, July 24, 2008, p. 12B, had another AP release. This palm killer also affects among others, Canary Island Date Palms and queen palms. It is caused by a small phytoplasma, a bacterium without a cell wall. It is transported through the plants phloem, sap tubes, as opposed to xylem, water tubes. (Again clean tools help prevent infections from plant fluids on tools.)

Symptoms of the disease are shown first by the loss of lower fronds followed by the death of a "spear leaf". Diseased trees and their parts should be bagged, at least, to confine the microbes.



Weakly Weekly Is Still Right

A couple of months ago I used some of Dr. Ron McHatton's article on helping orchids beat the heat. He suggested in the newspaper article that we fertilize with 20-20-20.

A Michigan State study showed that 20-20-20 is a bad formula for South Florida, and I appreciated that long-time member, Dr. Martin Motes, pointed that out. Martin agreed that bloom boosters (10-30-20, or 10-30-10)) are also not perfect for us either. Martin's email stated that the lower the middle, Phosphorous, number is, the better.

When I asked Dr. McHatton about the 20-20-20 he was well aware of the Michigan State study, but explained that he was writing for the newspaper where the readers probably had just a few orchids and bought their fertilizers at a -- Depot or -- Mart. (I should have been smart enough to figure that out and not pass on that less good fertilizer to you.)

Ron went on to explain that <u>Jack's Special Orchid</u> formula which is not 20-20-20, but 30-10-10 and <u>Norman's Nutrients</u> which is 20-16-15 were among the good choices for orchids since their numbers are lower. He also stated that a 14-14-14 would also be a good thing to use.

After decades of being told to use 20-20-20 and sometimes bloom booster, we now have new ideas. Aren't you glad the researchers are working on a more perfect fertilizer? You can bet that there won't be one universal formula for all orchids or all climates.

I've been adding <u>Maxicrop Liquid Seaweed</u> to my fertilizer solution about once a month since Hyla Levine suggested that. I am seeing better root growth, and think you might want to try that. Warning, if the spray touches your house, wash the touched wall. It does stain.

Mini-Rambles

Many/most/some FLOS members collect other wonderful kinds of plants. This shot shows what five of us stuffed into a van. The 5th person, Stan Tillotson captured our lack of abandon. From left to right you see Bob, and me, Eddie Griffith and John Wrench. We set out to buy landscape bromeliads and FLOS member, Thuy Pham, led us to Barbara Wilkins', semi-annual sale, with 200 +kinds of bromeliads growing in an amazing setting. Thirty years ago Barbara sold many orchids, today she sells just a few, but just to see her place is a treat. You may get to see why we lost our minds, since the October 4th, south, bus ramble will include her place. Keep stuffing your change in a 'ramble jar' D. H.

Global warming:

Failing Phals and Others Needing Cooler Seasons

Member, Mercer Stowers, commented at the last meeting that he once grew magnificent phals, but lately they were sad. I told him that I had never been a good grower, but that I had put most of our failing phals on a tree, and was trying to keep my two favorites doing well in our cooler dining room. I now have read the culture sheet from AOS. Phals 'want' a day temperature range from 75-86.degrees and the maximum tolerated temperature ranges between 90-95 degrees along with major air movement

We with failing phals have probably been following what was once good phal growing rules. We are growing our plant in low light at about 1,000-1,500 foot candles.

We are watering in the morning when the plants are nearly dry and we are not allowing water to sit in the crowns. If we grow outside in South Florida, enough humidity is not a problem. We fertilize weakly weekly or add ¼ teaspoon of 20-20-20 per gallon of water at every watering.. We repot every year and we don't use moss for phals exposed to rain. What to do when this is not enough?

A/ Attach your phals to a shady tree or move them inside. B/ Toss them after they bloom, some megagrowers look at them as a bunch of cut roses or a pot of Christmas poinsettias. C/ If you are growing well outside, undercover, please share your tips!

We are losing our *L. purpurata* and *L. tenebrousa* plants when they are still living after being moved to the coolest part of our growing space, they are not blooming well. Please also send in a list of your plants that seem to be going down-hill due to our heat. Maybe we can grow smarter, bloom smarter or at least buy smarter? Why not also share a list of your orchids that seem to thrive in this heat from hell. D.H.

Encyclia alatum

This species natural range is from Mexico to Nicaragua. While there is some variability in color the 2-2 ½ inch flowers are usually a greenish brown. While this is a robust plant and the flowers are large for an *Encyclia*, you don't own this orchid to look at the flowers. Robust is always a reason to buy, but the strong spicy fragrance is amazing and make this a must own orchid. Expect flowers from spring to fall.

Hawkes, A.D. 1978. Encyclopedia of Cultivated Orchids. Boston, Faber and Faber. P.184

How Long Will My Blooms Last?

Bulbophylums and Epidendrums- 1 week+/-

Cattleyas -1-8 weeks. (Bifoliates with heavy substance usually last from 4-8 weeks and less waxy flowers last from 1-2 weeks.

Dendrobiums -1 - 5 weeks

Aerides-2+/- weeks

Calanthes and Phragmidpedilums - 4 +/- weeks

Angraecums- up to 5 1/2+ weeks

Cypripediums- 8 weeks

Paphiopedilums and Phalaenopsis - up to 17 weeks.

Of course this list is very narrow and these flowers may all last even a shorter time if it is too hot, too dry or if the plant is not healthy. If ethylene gas is present that will shorten bloom time. Avoid leaving orchids near ripening fruit which emits ethylene. The final thing that almost always shortens bloom time is a desire to hold the bloom for judging or any special event.

Prepare to Plant Shop

These general rules apply whether you are rambling for the first time or going to an outdoor plant sale.

- 1. The weather will probably not cooperate. Wear light weight clothes for a hot afternoon, but bring a long sleeved shirt in spring or fall, just in case it turns cool. A cheap rain poncho from the dollar store, will keep you dry.
- 2. Have at least one bottle of water with you and a snack. Sun screen, bug repellant, and cash for vendors who don't take credit cards are good to have as well.
- 3. Have a stash of change and small bills. You may split a big plant with a friend, or run into a vendor who is out of change.
- 4. If possible bring a wagon or something to haul plants in if you at a large outdoor sale where large plants are sold.
- 5. Bring bright ribbon or return address labels to put on your plants as you buy them. This will be a big help in sorting out your plants at the end of a trip.

6. Plant vendors are NOT antique vendors. Don't haggle for a lower price.

Plants Can Clean Indoor Air

The NASA study didn't list orchids as air cleaners, but they probably didn't use them as test plants! A two year study of 19 house plants to make space craft air better can give us ideas for relatively new, tight -air construction. (If you live in an older leaky window/door house or work in such a place, this is not for you.) If you live or work in a newer, air-tighter place, consider adding some non-orchids to your space.

Plants do take in carbon dioxide at night for photosynthesis and produce oxygen during the day in that process. They also absorb benzene, formaldehyde and trichloroethylene as well. (These bad babies are emitted, or 'off gassed' from synthetic carpeting, fabrics, laminate counter tops, and wall paper.)

Soil microbes and plant roots absorbed some of the air pollutants described above. A short -list of plants to use in your more newly constructed office or house/apartment include: English Ivy, spider plant, golden pothos, peace lily, snake plants, philodendron, dracaena, and ficus.

-- University of Minnesota Extension Services. www.extension.umn.edu/yardand garden/ygbriefs/hllolndoorair.html

More Trivia for September

I am SO glad that many of you who emailed about an emailed newsletter, like my filler trivia. Here comes more, and thank you. D.H.

- * Dog treats: Milk-Bone, the country's best selling treat, has been selling the treats for 100 years or 700 dog-years! P. 93
- * Honeybees: Since 2006, America's major food-crop pollinator, have been in decline. Colony Collapse Disorder may be the reason, or pesticides, a virus, or other causes may be the reason. How can we help the bees? Replace some lawn grass with flowers, reduce our pesticide use, and visit organicgardening.com for more information P.96.
- -- County Living Magazine, May, 2008
- * McDonald's, the world's largest fast-food chain, now buys 39 million pounds of apples a year-more than anyone in the USA and buys about as much chicken as beef. Jim Skinner, the McDonald's CEO graduated 2nd in his class from the company's Hamburger University. (This shows that not all CEO's went to Harvard!)

-Smart Money. August, 2008, P.22

Human Trivia

- * The world's termites out-weigh humans by 10 to 1.
- * The cost of owning a medium sized dog to age eleven is \$6,400. (Worth every penny.)
- * Humans shed 600,000 skins cells a day, 1.5 pounds per year. By age 70 people have lost 105 pounds of skin. (Most of the dust in our houses is said to be shed cells from people and pets.)
- * Every inch of human skin is nourished by 20 feet of blood vessels and has 32 million bacteria on it
- * If a human male never trimmed his beard, it would be about 30 feet long in a life time.
- * Humans lose between 40-100 strands of head hair per day.
- * When humans cough into the air the speed of the air expelled is 60 miles per hour. A sneeze travels at about 100 miles per hour.
- * Your nose and your ears grow your whole life.

Except for Italics, these factoids came from www.pick brains.com/articles/animals-facts-4

IFAS

The University of Florida's Institute of Food and Agricultural Science, is a \$300-million agricultural research component which has offices in each of Florida's 67 counties as well as 13 research and education centers in 19 locations. It is currently faced with state budget cuts as well as changing needs in Florida. Traditionally it has focused on: 1/ agriculture including breeding crops that are disease and freeze resistant, 2/ food safety, 3/human nutrition and 4/ pest research.

Today the newer areas of study include: 1/ control of emerging pathogens which cause new and recurring human health, agriculture, and tourism problems, 2/ resource efficient landscaping which would need less water and care, 3/ growth and land use, and 4/ bio-energy.

More than 5,000 students are enrolled in IFAS College of Agriculture and Life Sciences. (While Florida faces challenges, look at the hope provided by all those smart students!)

Barnett, C. 'A tough row to hoe'. Florida Trend. August, 2008. Pp. 62-65

Animal Filler Factoids

These gems, probably full of errors, came from www. pickbrains -com/articles/animal-facts 3.

- * Some scientists think that 10% of the animal biomass on earth comes from ants. Amazon ants (Western U.S. red ants) steal larvae from other ants and make them their slaves. The slaves do all the work and the only thing the red ants do is fight.
- * Chinese entomologists studied 378,046 house flies and reported that each had an average on 1,941,000 bacteria on its body. There are 16,000+ types of flies in the United States.
- * Spiders eat enough insects in one year to equal the weight of all the people on earth.
- * Insects destroy 1/3 of all human food, and rodents destroy another 1/3 of human food. (Don't you wonder how some developing countries can ship their foods here?)



Sandi Jones Tom Wells

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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-I (Federal Hwy.) to Oakland Park Blvd.

Ft. Lauderdale, FL 33338

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

PORT LAUDERDALE

