The Atlanta Orchid Society Bulletin

The Atlanta Orchid Society is affiliated with the American Orchid society, The Orchid Digest Corporation and the Mid-America Orchid Congress.

Newsletter Editor: Margie Kersey

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APRIL MEETING

The Monthly Meeting:
Topic: Orchids of Peru
Speaker: Dr. Eric Christenson, Author
8:00 pm Monday, April 14
Atlanta Botanical Garden, Day Hall

Dr. Christenson is a research taxonomist with strong interests in the Aeridinae (Sarcanthinae), neotropical floristics, and the conservation of horticultural plants. He authored the definitive monograph of *Phalaenopsis*, published by Timber Press in 2001. He has done field work in both Guyana and French Guiana and authored the orchid treatment in the *Vascular Flora of Central French Guiana* for the New York Botanical Garden. He is also actively working with David Bennett of Lima, Peru, on a modern inventory of Peruvian orchids. To date they have published 800 illustrations as *Icones Orchidacearum Peruviarum*, including more than 150 new distribution records and describing more than 100 new species from Peru. This includes the world's tallest orchid, *Sobralia altissima*, with stems normally +/- 27 feet tall and an extreme stem which measured over 44 feet tall! His bilingual *Machu Picchu: Orchids* was published in 2003 and forms the basis for further inventories in the region. His current work in Peru can be seen at: www.andesamazon.org.

He also authored the orchids for *A Tropical Garden Flora* for the Bishop Museum, Honolulu.

Classically trained, Dr. Christenson has worked in most of the world's significant herbaria and national museums. He is an acknowledged expert in critically important historic specimens that form the basis for applying plant names. His overall research focus is the accurate definition of species, their precise distributions, and the correct application of names, three facets of botany required prior to considering conservation policies. He is honored by the genera *Christensonia* (Vietnam) and *Christensonella* (Brazil) in addition to a number of species such as *Ascocentrum christensonianum* (Vietnam).

A prolific author of more than 400 publications, Dr. Christenson is known for his articles that attempt to bridge the gap between taxonomy and horticulture as well as his in-depth book reviews. He is a strong advocate for orchid conservation, particularly *ex situ* propagation, and actively works with commercial growers to that end.

In addition to botany, Dr. Christenson is an avid gardener. His house in Bradenton, Florida is known for its unusual plants and complete lack of lawn.

The New Directories Are Here!

This year in an effort to conserve money and make the directory more useful and dynamic, the directories are being distributed via email. This means you can update your directory as changes occur! Be sure to save yours!

Haven't gotten yours yet? Contact Reba.

Don't have email? That's ok, there Will be a limited number printed for our members Who are email impaired.

Inside This Issue

THE ATLANTA ORCHID SOCIETY

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Atlanta Orchid Society Meeting Minutes
March 10th, 2008

The Atlanta Orchid Society Meeting was brought to order by President Jeff Whitfield. Visitors were welcomed and introduced. The minutes from the last meeting were approved as printed in the newsletter.

2008 memberships are now due. Cost is $30 for an individual and $45 for a family. Only members whose dues are paid by the end of March will be included in the directory.

Members were reminded of upcoming IPA meetings in the area. There will be an auction and talk at Peach State Orchids on March 22nd and another meeting at Lynes Orchids in Chattahooga on June 6th. Contact Roy Harrow for further information.

David Kessler is the new chair for Atlanta Orchid Society judging. See him if you are interested in becoming an orchid judge.

Geni Smith was thanked for agreeing to coordinate the refreshments at future meetings.

The annual orchid show is being moved from November to March. As a result, there will be no 2008 orchid show. The next orchid show will be in March of 2009.

The treasurer reported that the society's current balance is $10,203.90. The books were recently audited and came out to the penny.

The speaker was Mary Pat Matheson, director of the Atlanta Botanical Gardens. She talked about the Garden's relationship with the Atlanta Orchid Society, and how it can continue to develop and improve in the future. She also discussed the Garden's expansion plans that are already underway, and how they will affect the AOS.

Our thanks to the orchid judges: AnaLee Boyett, David Kessler, Fred Missbach, and David Glass.

Our thanks to those who donated plants to the raffle table: Roy Harrow, and others. Our thanks to those who donated refreshments: Geni Smith, Marianne Gilmore, Terry Glover and Bob Grzesik, and others.

The meeting was adjourned.

Respectfully submitted,
Carl Quattlebaum

Join the Atlanta Orchid Society

Membership in the Atlanta Orchid Society is $30 for individuals or $45 for households. Yearly membership runs January 1-December 31. Anyone joining in the third quarter will get a 50% discount on the current year's membership. Anyone joining in the fourth quarter will purchase a membership for the following year. You can join at one of our monthly meetings, or contact the society's Treasurer (see page 2) for a membership application.

For directions to the Atlanta Botanical Garden, please visit their web site at www.atlantabotanicalgarden.org or contact one of our society's officers listed on page 2.

Member Spotlight

Cora Ramborger

I was born and raised in Forsyth co. My folks were share-croppers, but we owned our own home. Mama always had many beautiful flowers, especial roses, lilacs and peonies blooming during the seasons. We(there were 13 of us) kids grew up learning to tend them and appreciating their beauty.

After my tour in the Navy I moved to San Diego, Ca, where I met and married my husband Ken. He also shared my love of gardening . We lived in an area that was a gardening paradise and everything grew as if by magic. We live there for 35 years raising 2 beautiful girls and a cat named Pete.

About 12 years ago Ken was out in the community and happened to stop at a store that had a going out of business sale. The only thing there he was interested in was a 5 gal bucket of beautiful cattlya's that was propping open the door and smelled heavenly. He said he had never seen anything like them and what were they? The lady said she didn't know ,that they had been her mothers, but she thought they were called cattlya orchids .He bought them for $35.00, brought them home, and we begin the journey of becoming orchidaphiles.

Over the next 2 years we acquired a few more orchids and I started to feel the need for more personal information about orchid. I did some research and discovered the San Diego Orchid Society and their big show in March. Ken and I went to it and our fates were sealed. We fell in love with this intriguing , beautiful group of flowers.

Our collection was expanding dramatically and we were beginning to feel fairly comfortable in growing different species. I joined the SDOC and even interred a few flowers into the mini-shows and the Del Mar Co. Fair where we took several blue ribbons.

Four years ago Ken and I retired and moved back to my old home place in Georgia. Knowing the local orchid society would be a good information source about local growing conditions and orchids, I joined the Atlanta Orchid Society 2 years ago and made many new knowledgeable friends.

The move here, radically different growing conditions and our ignorance, did much damage to our orchid collection, which we have tried to repair/ rebuild. We have learned to adapt with the different climes and growing needs. We now have a green house where we bring the orchids and other tropical plants into in late fall and early winter. We run the fans continusely for air circulation and heat with propane gas.We also still run back and fourth opening windows as the sun heats the greenhouse up on bright sunshiny days and closing them as it cools down, because regardless of the size of the fans, they are never quiet enough. Watering is much simpler with over-head watering and misting. We have learned to battle a new set of pest, i.e...brown scale (thank you Mark Reinke for info on Joy dish detergent, it really works). Phyton-20 and Neem oil are new best friends now.

Ken built a covered arbor that the orchids are moved to during mid spring. The orchids love it. Our latest nemesis , we have to deal with , are squirrels. They knock plants over, pull them up, chew on the roots and plant acorns or other seeds in the pot. If any one has a sure fire method of dealing with them, I really would like to know about it.

That brings you up to date on me,see you at the next meeting. Cora

Remarks on the Natural History of Orchids
Part 4 of many
Billy Frye

Editor's note: The first three installments appeared in the December 2007, February and March 2008 newsletters.

It should be obvious from what I have said thus far that orchids are prime subjects on which to study the processes of organic evolution. Darwin himself recognized that when he carried out the studies that resulted in his book, "The Various Contrivances by which Orchids are Fertilized by Insects". One of the cardinal rules of evolution is that every solution to a problem creates other problems. In order to gain an advantage in one area, something is sacrificed in another. This is the price of becoming specialists committed to very specific habitats and growing conditions. Many questions about the orchid way of life come to mind that reflect this principle: What are the benefits and costs of the epiphytic lifestyle? Why do orchids grow so slowly, and how do they obtain essential nutrition? How do they conserve water during alternating wet and dry periods of every day and of the seasons? How do orchid seeds with no stored nutrition grow and develop? And so on and on. The benefits gained by the difficult epiphytic lifestyle appear to be mainly freedom from competition with the rampant undergrowth of the forest floor and access to more light to support growth and flowering in an area that would otherwise be too shady. Entire books have been written around these ideas, and they certainly warrant further discussion.

But I will leave these questions for you to contemplate, and reflect briefly upon two other questions that are integrally tied to an understanding of their natural history: (1) why are there so many species, so much diversity of form and function, in this plant family, which by some accounts is among the most recently evolved flowering plant groups? And (2) notwithstanding the enormous size and success of orchids as a whole, why are some species relatively so rare, and so susceptible to extinction?

To answer these questions we must first remind ourselves of the meaning of the term, species, and of the essential features of the process by which new species arise. The simplest definition I ever heard was simply that "a species is a group of plants or animals that look alike…members of the group resemble one another more than they resemble any other group of organisms! Generally true, and practically useful, but this definition hardly reflects a profound insight into the concept of species. A better, and probably the *only* definition that will hold up universally is that "a species is a group of similar plants or animals that breed with one another under *natural conditions* without any loss of fertility in their offspring." I emphasize under natural conditions, because with artificial means, hybrids can be produced between many species and even genera, of plants and animals that would almost never occur in nature. Usually such hybrids show some degree of loss of fertility because of genetic and or chromosomal incompatibility. Orchids appear to be somewhat unusual in that it has been possible to produce a vast array of interspecific and intervener hybrids that would never occur in nature, in many cases without apparent degradation in the fertility of the hybrids. The probable explanation for this is that the natural isolating mechanism of many species, namely, dependence of many of the natural species upon specific insect species for pollination, has occurred so recently, or so early in their evolutionary divergence that genetic incompatibility between the species has not yet evolved.

The process of speciation, the genesis of two or more new species from a previously existing species, involves the accumulation of genetic variants within a sub-population of organisms that are expressed as morphological, physiological, behavioral, or ecological traits. It is critically important to note that in the initial stages of forming new species, when the new variants are still capable of inbreeding with the parental variety, the new variants may be more or less continually reassimilated into the larger population as the gene pools of the varieties are shared and mixed. But as the differences between them increase, at some point the different varieties may become isolated from one another by some barrier (for example, geographic separation; different flowering times; dependence upon different pollinators) so that remixing of the gene pools cannot occur, or occurs more slowly than differences arise through mutation. At this point, identified by the failure of the variant and parental forms to inbreed naturally, a new species has arisen and the stage is set for further and more rapid divergence. From this point on, further differences may continue to arise and differentiate the species, until isolation again repeats the process, giving rise to yet another new species.

Continued on page 11

Table Awards

Photos courtesy of Danny Lentz

Class I – Cattleya Alliance

Blue- *Cattleya amethystoglossa* – Harrow

Cattleya amethystoglossa

Cattleya amethystoglossa is a robust bi-foliate Brazilian species from the state of Bahia, along the Atlantic coast some distance north of Rio de Janeiro. It grows in humid tropical forests, usually high up in the tree branches, and occasionally on rocks, where it gets ample sunlight and air movement. Mature plants produce large heads of up to twenty, fragrant flowers that can approach five inches across in the best clones. There is a tremendous amount of variation in the number and distribution of characteristic amethyst spots, and the background color can vary from near white to medium pinkish lavender. The lip is spade shaped and bright magenta purple. There are many awarded clones, and seedlings from selected parents can often be found in commerce. Probably the best collection of high quality plants existed with Jones & Scully of Miami, FL, a famous orchid nursery that was an unfortunate victim of Hurricane Andrew in 1991. As indicated by its habitat, *C. amethystoglossa* needs bright light, warmth, good humidity and air movement, with adequate water and fertilizer during the growing season, and less in winter to prepare the plant for blooming. Good humidity is particularly important to this, as well as most of the bi-foliate species, making them more difficult to grow in a home environment, and better subjects for greenhouse culture. Once a plant has become desiccated from lack of adequate humidity or disturbance, it may not recover. Repotting should only be attempted when new roots are beginning to grow. It pays to plan ahead in your choice of container and growing medium so that instead, you can simply slip the entire plant into a larger pot, leaving it undisturbed and happy.

Red – *Rhyncolaelia* Aristocrat – Pulignano

White – *Sophrocattleya* Dream Catcher - Frank

Class II – Cymbidium Alliance

No Entries

JOIN THE AMERICAN ORCHID SOCIETY

For $60.00 per year, you reap the following benefits:

- 12 issues of *Orchids*, the Society's monthly full color magazine chock full of insightful articles and tempting ads for plants and supplies.
- 10% off on purchases from the Society's Bookstore and Orchid Emporium. Reduced or free admission to participating botanical gardens.

For a limited time, if you join for two years ($108) you will also get a $30 gift certificate (good on an order of $100 or more) at any one of 13 commercial growers who advertise in *Orchids*. **JOIN TODAY**. For information, contact Evan Dessasau (404-241-4819)

EVENTS OUT AND ABOUT

April

April 12 (Saturday) AOS Atlanta Monthly Judging

5-6 - Orchid Society of Middle Tennessee Show, Cheekwood Botanical Gardens, 1200 Forrest Park Dr., Nashville, TN. Contact: Richard Schneider, 608 Hillwood Dr., Nashville, TN 37205; (615) 365-9655; richard.schneider@vanderbilt.edu.

18-20 - Mobile Area Orchid Society Show, Jon Archer AG Center, 1070 Schillinger Rd. N, Mobile, AL. Contact: Joseph Paine, 2104 Charingwood Dr. W, Mobile, AL 36695; (251) 666-6505; joe6w@aol.com.

April 26-27 - NE Alabama Orchid Show, at the Anniston Museum of Natural History in Anniston, Alabama. For information, contact Joanne Shearer Show Chair at (256 831-1587) or at joanne_she@cableone.net

Dendrobium lindleyi

Class III – Dendrobium Alliance

Blue – *Dendrobium lindleyi* – Dampog

The current accepted name for this showy species is *Den. lindleyi* instead of *Den. aggregatum*. It is native to seasonally dry forests in Southeast Asia, and is considered by some to by an easy species, while to others a difficult one to grow and flower well. Mounted culture is normally a requirement for success, along with adherence to a strict change in the care regimen during the winter resting period in order to initiate flowering in spring. During the growing season, plants should be watered and fertilized very generously, and given bright cattleya-type light and good air movement. But in winter, they must get cooler temperatures, especially at night, and much less water. The pseudobulbs will wrinkle some under correct culture, but there is a line that should not be crossed in the amount of shriveling without risk of harming the plant. Maintaining good humidity and air movement will help tremendously during this rest period. Once spikes emerge in the spring, resume generous watering to keep the plants hydrated enough to support the often heavy display of orange and yellow blooms.

Red – *Dendrobium* Yellow Chinsai 'Little Joe' HCC/AOS - Glass

Class IV - Epidendrum Alliance

Red – *Oerstadella centradenia* - Harrow

Welcome Our Newest Members

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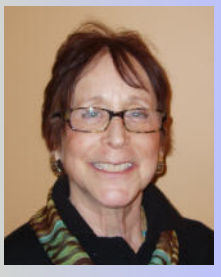

Be sure to greet our newest members and make them feel at home.

Congrats to the South Metro Orchid Society for winning First Place in their category for their table display at the Pennsacola show!

Photo courtesy of Tony & Maggie Kiss

Class V – Oncidium Alliance

Blue - *Psychopsis* Memoria Bill Carter – Lentz/Morgan

***Psychopsis* Memoria Bill Carter**

This plant was exhibited under the names of its parents, but was registered by Carter and Holmes Orchids in 1995. That particular nursery is probably the premier source for high quality *Psychopsis* seedlings in the world, having several stud plants that have been awarded FCC's by the AOS available as parents of their crosses. Many people find these fascinating and unique orchids a challenge to grow, and the cultural advice is often variable and confusing. All of the *Psychopsis* species come from wet montane forests between 1500 and 4000 feet above sea level in the Caribbean and the north half of South America where they grow epiphytically on the limbs of tall trees, receiving moderate light, good moisture, perfect drainage, high humidity and strong air movement. So success depends on providing your best approximation of this environment. These plants are usually potted in clay, most often using coarse tree fern fiber which holds moisture well without remaining soggy, and is at the same time fairly long lasting. The crown of the plant should be sufficiently above the level of the medium to keep water from sitting around the base of the flattened pseudobulbs, or rot can be troublesome. If a plant is happy, disturbance should be avoided at all cost, but being ever mindful of the need for both moisture and drainage! The long, tough, flattened inflorescences produce one flower at a time for a number of years, often with a rest in winter, and near constant flowers the balance of the year. An added bonus is attractive foliage mottled with purple.

Red - *Tolumnia* Sundown Reef 'Spotted Ewok' AM/AOS – Lentz/Morgan

White – *Psychopsis* Mariposa - Ramborger

Paphiopedilum lowii

Class VI – Cypripedium Alliance

Paphiopedilum Species

Blue – *Paphiopedilum lowii* – Hallberg

Please see the April, 2006 newsletter for detailed information about this species and how to grow it.

Red – *Paphiopedilum delanatii* – Lentz/ Morgan

White – *Paphiopedilum niveum* – Kessler

***Paphiopedilum* Bel Royal**

Paphiopedilum Hybrids

Blue – *Paphiopedilum* Bel Royal – Hallberg

Paphiopedilum Bel Royal is a primary hybrid between *Paph. rothschildianum* and the recently described (1984) *Paph. kolopakingii.* The latter is a one of the most robust of the genus, carrying a leaf span of up to three feet, and a large inflorescence often drooping under the weight of up to fifteen good sized flowers which open simultaneously. Its discovery brought exciting prospects for multifloral 'paph' breeding, but in many cases the negative traits of nodding flowers and a drooping inflorescence have dominated over the better habits of the other parent. *Paph.* Bel Royal has been one of the more successful crosses, garnering at least a dozen flower quality awards since 2000. Give these large hybrids moderately bright light, good air movement, intermediate to warm conditions, excellent humidity, year round feeding and do not let them dry out between watering.

Red – *Paphiopedilum* Berenice 'Riopelle' AM/ AOS – Kessler

White – *Paphiopedilum* Magic Lantern – Puligнano

Phragmipediums

Blue – *Phragmipedium* After-Glo – Ramborger

***Phragmipedium* After-Glo**

The exhibitor should please note the correct spelling of this hybrid between *Phrag.* Eric Young and *Phrag.* Sorcerer's Apprentice. The likely goal of this moderately successful breeding attempt is to transfer the bright color of the somewhat demure *Phrag. besseae* onto a plant with the robust nature of *Phrag. longifolium.* This latter species is a grand parent on both sides of the cross, and can make formidable clumps in its widespread habitat from Mexico to Colombia. Interestingly, *Phrag. longifolium* is one of a few orchid species that have actually benefited from the activity of man, finding suitable habit on road cuts through the mountains, where they receive regular runoff and limited competition. This tenacious nature assures hybrids that are adaptable to imperfect cultural conditions!

Red – *Phragmipedium* (*pearcei* x Franz Glanz) – Kessler

White – *Phragmipedium* Lutz Röllke 'Ginny Ingram' – Kessler

Class VII – Phalaenopsis Alliance

Blue –. *Phalaenopsis* Windsong's Smile – Lentz/Morgan

Red – *Phalaenopsis* Sogo Grape 'Y.N' AM/AOS – Kessler

There are actually two cultivars of *Phal.* Sogo Grape with similar clonal names which have received an Award of Merit from the AOS. The clone 'Y.N' was so recognized in Taiwan in 1999, and the clone 'Y-N' awarded in Oakland, CA in 2001. Given the prolific nature of commercial orchid propogation in Taiwan, I am choosing the former as the correct one for this plant! It is one of the most widely available *Phalaenopsis* to successfully combine a multifloral nature with rich red-purple color and heavy substance. Interestingly, its pod parent is one of the 'Harlequin' types displaying large irregular and intense purple spots on a white background. The pollen parent, *Phal.* Princess Kaiulani (*Phal violacea* x *amboinensis*) served to spread the intense purple over the entire flower. Current breeding attempts with *Phal.* Sogo Grape seem to be aimed at increasing the flower count further, while retaining deep color and heavy substance.

White – *Doritenopsis* I-Hsin Black Jack - Hallberg

Class VIII – Vanda Alliance

Blue – *Jumellea arachnantha* – Ramborger

Jumellea arachnantha is an attractive, compact Angraecoid originating from the Comoros Islands, in the Indian Ocean between the northern tip of Madagascar and the African mainland. It likes to grow in conditions similar to *Phalaenopsis*, preferring moderate light, warmth, and very good humidity. The leaves are arranged in an neat fan shape from a nearly stemless plant, which sends up several to many, wiry, single flowered inflorescences at once in spring. Each pristine white flower carries a long nectary, and lives up to its 'spidery' epithet, especially when viewed in profile. They are highly fragrant at night, like many other members of this orchid subtribe, which are all moth pollinated. There are but two registered hybrids for this species, both with other members of the same genus.

Jumellea arachnantha

Red – *Vanda coerulea* - Kessler

White – *Renanthera* Tom Thumb – Lentz/ Morgan

Please visit our web site at
http://www.atlantaorchidsociety.org

The Atlanta Orchid Society web site contains recent newsletters and articles, cultural information for growing orchids in Atlanta, as well as a calendar of events and information about our annual shows.

Newsletter Submissions

To submit material for the newsletter, or to sign up for the email version of the newsletter, please contact Margie Kersey. The deadline for submissions is the 20th of the previous month.

MAIL TO: Margie Kersey
PO Box 464381
Lawrenceville, GA 30042

EMAIL: Margie@callkbs.com

Advertising

Advertising is now being accepted for our newsletter. The size and number of ads may be limited at the discretion of the editor. Advertising Rates per issue are: ¼ page $10, ½ page $20, 1/8 page text only $5.

Mormolyca ringens

Class IX – Miscellaneous

Blue – *Mormolyca ringens* – Lentz/Morgan

This interesting and attractive orchid is one of six species in the genus, closely related to *Maxillaria* and growing primarily in Central America. The interesting striped flowers of this particular species are somewhat small for the medium sized plants, but the fairly open growth habit and erect inflorescence keeps them from being lost in the foliage. It grows well in baskets with moderate shade, warmth and ample water during the growing season. If happy, blooms will be produced over an extended period of time in spring and summer. The full potential of this orchid is shown in the cultivar 'Judith Lynn,' which received a CCM in January, 2001 with 33 open flowers and 20 buds while growing in a 12 inch octagonal wooden basket. A web search brought me to a particularly fine close up photo of *Mlca. ringens* taken by our own member, Maureen Pulignano!

Red – *Lycaste campbellii* - Missbach

White –*Lycaste* (Chita Sunset x Rosamond) – Dampog

White – *Maxillaria tenuifolia* - Missbach

AtlOS member, Scott Smith sent these photos of a newly named orchid That you may have seen or purchased from Sam Tsui, Orchid Inn at the 2006 AtlOS show.

Paph Mary Ott 'Golden Boy' x rothschildianum 'Scorpion King'

Scott reports, " Earlier this year it sent up a spike and recently flowered. As you can see from the pictures, the flowers are quite large and very attractive. Since I was the first to bloom the plant, Sam gave me the rights to name it." This previously unregistered grex is now:

Paph. Edna Frances

Congrats Scott!

Photos courtesy of Scott Smith

Continued from page 4

The great insight of Charles Darwin was to recognize that isolation and natural section, together with mutation and the natural variation that occurs spontaneously in all species, are the principle "forces" by which speciation occurs. Speciation is, of course, the seminal event in organic evolution. With the forgoing discussion in mind, the great number and variety of species in the orchid family can perhaps be best understood in light of two features of their natural history that have already been mentioned: their epiphytic life style; and obligatory insect pollination.

Epiphytic Life Style: when orchids first acquired those traits that enabled them to adapt to an epiphytic habitat (think of their dust like seeds that are wafted by the breezes to lodge in crevices in the bark of neighboring trees; their mycorrhyzal symbiosis with fungi that enable orchids seeds to dispense with weighty stores of starch or soils to support their initial growth; their unusual roots with an absorptive adhesive velum; their enlarged leaf stems or pseudobulbs which can store water and nutrients; their intrinsically slow growth and modest nutrient requirements; and so on) they opened up for themselves a vast and highly heterogeneous new habitat that was relatively unoccupied by other, competing organisms. Orchids probably originated as terrestrial plants, but epiphytic species are by far the greater part of the family. Had they remained on the ground it is likely that there would be far fewer species of orchids today. The essence of the matter seems to be simply this: the epiphytic habitat presents an extremely large and diverse epiphytic habitat. Tropical forests, especially, present an almost infinite variety of potential niches. In addition to a great variety of potential host trees and bushes, as one passes from the forest floor to the top of the canopy, one goes through life zones almost as great as when one goes from a valley floor to the top of a mountain. And within each zone there is a wide gradation of conditions – light, moisture and humidity, temperature, biological communities, and so on. These conditions invite ever greater specialization by potential inhabitants. Thus, as natural variants arose in orchids by the process outlined above, they were able through trial and error – survival of the fittest – to recognize and exploit many of the possible habitats presented by the epiphytic environment. Over time, as orchids adapted to this environment with increasing specificity and radiated through the epiphytic habitat, they became increasingly isolated from one another, perhaps by location, differences in pollinators, genetic incompatibility, or other means, eventually resulting in many new and different species, corresponding to the diversity of niches in the epiphytic habitat. Put in layman's terms, this simply suggests that 'nature abhors a vacuum". One can think of it as if the availability of unfilled niches acts like a negative pressure, sucking incipient new species in to fill the available biological space. Once the problems of epiphytic life were initially solved well enough for orchids to climb into the trees, speciation must have occurred at a very rapid rate with the result that orchids quickly flowered into the very large and successful family that we know today. The marvel of it is that this phenomenon need not be understood in teleological or purposeful or "intentional" terms but is completely understandable in terms of the chance creation of new and more successful marriages between orchids and their environment. The wonderful variety we find in the orchid family is a premier example of familiar Darwinian principles at work: profligate reproductive potential producing vastly more offspring than can survive, genetic variation, natural selection, and survival of the fittest.

Insect Pollination: The alliance between insects and orchids must have acted in an essentially similar way to accelerate the rate of speciation in orchids. Originating initially as a "better" way of assuring successful pollination, as the relationship between orchids and their pollinator insects became increasingly specific, it resulted in earlier and more complete isolation between parental and incipient new species of orchids. Once inbreeding and mixing of their gene pools was blocked by their dependence upon different pollinators, speciation was effectively completed, and the variants were free to diverge further without the nullifying effects of cross fertilization. The evolution of some groups of tropical insects was probably similarly driven by their dependence upon specific species of orchids, and in this way a high degree of co-evolution between certain insects and orchids came into play. With a bit of reflection it is easy to see how this relationship contributed to the great diversity of the orchid family.

With the foregoing in mind, lets turn to the question "why are some orchids relatively so rare and so susceptible to extinction?" Many of the orchids that we call species may have come into existence relatively recently, in evolutionary terms, and they may not have spread much beyond the locale in which they originat-

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2007 Table Award Points

Name	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Year
Collier / Reinke	49	46	42	53	190
Mellard / Marino	34	47	27	27	135
Lentz / Morgan	35	46	26	26	133
Kessler	26	17	35	0	78
Ramborger	8	3	31	36	78
Whitfield	20	22	12	6	60
Harrow	0	0	9	25	34
Hartong	6	5	10	12	33
Quattlebaum	20	0	0	8	28
Gilmore	5	19	0	0	24
Wolf	11	11	0	0	22
Brinton / Park	11	9	0	0	20
Grzesik	11	0	9	0	20
Smith, Geni	11	0	4	5	20
Kiss	12	0	0	7	19
Glass	3	0	6	8	17
Hallberg	0	0	10	6	16
Boyett	15	0	0	0	15
Pulignano	0	0	3	12	15
O'Connell	0	12	0	0	12
Walkosky	0	5	3	4	12
Dampog	6	1	4	0	11
Frank	5	5	0	0	10
Johnston	0	0	4	4	8
Van Horne	0	5	0	3	8
Brand	3	4	0	0	7
Herzfeld	0	3	3	0	6
Jacobson	3	1	1	1	6
Weil	5	0	0	1	6

ed. This could be so merely because there has not been time enough for these new species to spread far geographically. Or it could be because many of them have such highly specialized habitat and pollinator requirements that they have not been able to meet their requirements across a wider range of the tropical forest than the one in which they first arose. That is to say, they have remained restricted more or less to the area where they originated, because the required conditions for their success are met there and nowhere else. The highly endemic nature of many orchid species – by some estimates up to 50% of the entire family – may be taken as strong evidence in support of this hypothesis. By the same token they are very vulnerable to extinction because (1) they are so dependent upon specialized conditions that they are incapable of moving into alternative habitats if their primary habitat is altered or destroyed; and (2) being highly endemic, there are few if any other populations from which a population may be restored once it becomes extinct in any given area.

To be continued……

Thank you to all of our members who take the time to bring in their plants and participate in the table awards. It wouldn't be the same without you!

Barnett	5	0	0	0	5
Caine	5	0	0	0	5
Emerson	0	5	0	0	5
Kersey	0	0	0	5	5
Landau	0	5	0	0	5
Phillips	3	1	0	0	4
Gollub	0	0	0	3	3
Missbach	2	0	0	0	2
Demeritt	0	1	0	0	1
Dufano	0	0	0	1	1

THINGS YOU MIGHT HAVE MISSED IN MARCH

Geni Smith provided refreshments including her wonderful 7 layer dip!

Why is Ron Kersey smiling? Because he got a great deal at the auction table below. Two days after acquiring this Paph. Calenthe Vintage Wine, he found out a cutting of this plant was awarded a Silver Medal at the WOC !

Orchids are everywhere! Even in new member, Cheryl Bruce's hair.

Keep an eye out for one of Georgia's native orchids.

The Orchid Ladies showed up with some beautiful plants - at a good price!

Speaker Notes
Mary Pat Matheson
"The Future of Atlanta Botanical Gardens"

The future of the ABG is so bright, they have to wear shades! They are in the middle of a $55 million dollar campaign to improve the Gardens. Targeted areas include adding a new parking deck (to open next year), a new visitor's center and a canopy walk 600 feet long. They have already raised $47 Million of the needed funds. There will be some changes for our meeting space, but they assured us they value our presence! How can we help them grow? Consider joining the Gardens as a paying member. Volunteer opportunities also exist in the Fuqua Orchid Center which is the largest in the US.

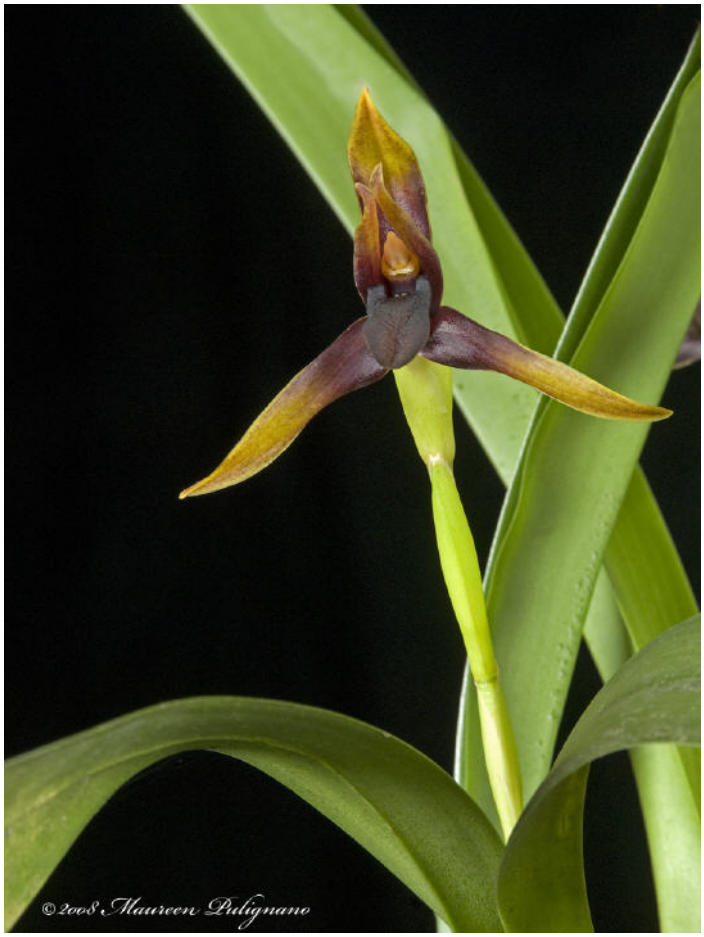
Atlanta Judging Center Awards March 2008

Photos courtesy of Maureen Pulignano

Phrag Young Lindley 'A.O.C.'
Atlanta Orchid Company

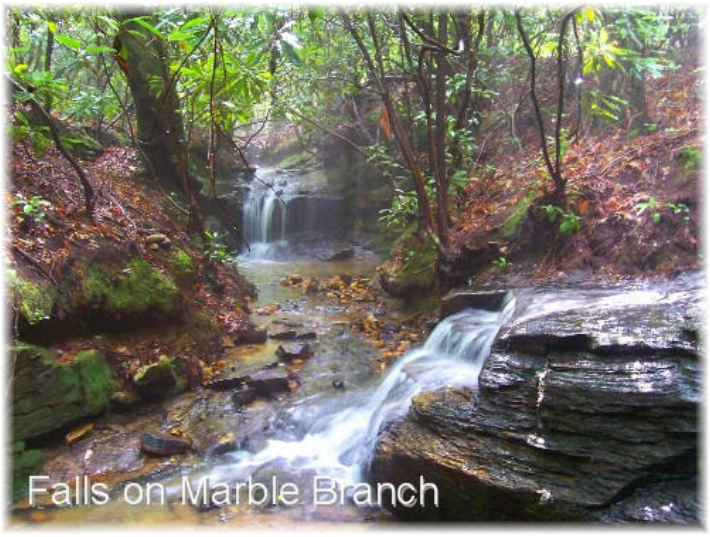
Pln forrestii 'Mello Spirit'
David Mellard/Sal Marino

Max cucullata 'Mello Spirit'
David Mellard/Sal Marino



AtOS Green Grower's Outing – May 3, 2008

***Marble Branch Farms*,**
home of Gary Collier and Mark Reinke
155 Marble Branch Trail
Walhalla, SC 29691
(864)718-0152 – *Please R.S.V.P.*
Starting at 12:00 noon



Marble Branch Farms is a small commercial orchid nursery specializing in miniature & compact Cattleya Alliance hybrids and species, and introducing many unique hybrids created on site. You will be able to browse through the 26' x 92' greenhouse, and see the laboratory where orchid seed is flasked. The greenhouse features several innovative systems including rainwater collection and storage, and solar heating, which provides 85% or more of their heating needs in winter. *There will be many plants for sale at a discount, including items not found on their website: www.marblebranchfarms.com.*

Marble Branch Farms is a 54 acre secluded tract adjoining a National Forest wild area and bordered by two mountain streams. It is a botanical paradise where rare species from the Smoky Mountains and Coastal Plain meet. Mid-April will feature many native wildflowers, trees and shrubs in bloom. A woodland walk up a magnificent hardwood cove will lead to a small, but beautiful, double waterfall, so wear casual clothes and good walking shoes. A large bog garden is currently under construction on the property, so bring shoes that can get a little muddy without being ruined!

A picnic pot-luck lunch will be served featuring, like last year, Abed's famous Arabian Rooster Fried Chicken! A $3 donation per person is requested to help defray the cost of the chicken, or bring a dish of your choice to add to the festivities. If you plan to attend please let Mark & Gary know at (864) 718-0152 or info@marblebranchfarms.com.

Directions (allow 2 hours travel time from the center of Atlanta) PLEASE NOTE: DIRECTIONS HAVE CHANGED SLIGHTLY SINCE LAST YEAR SINCE THE LEFT TURN IN THE TOWN OF WESTMINSTER HAS BEEN MADE IMPOSSIBLE DUE TO ROAD RECONFIGURATION.

Marble Branch Farms is exactly 100 miles from the intersection of Interstate 85 North and Jimmy Carter Blvd. Proceed on **I-85 NORTH** out of Atlanta and then take **I-985 NORTH** towards Gainesville. **I-985** is also **GA-365**, and you will follow **GA-365 North** to the SC state line with two key turns:

1. Immediately after **milepost 52**, be sure to exit to the right off the main 4 lane divided highway towards Toccoa. **This will still be GA-365, but seems to be an exit off the main road**. Once on it you will see that this branch too is a 4 lane divided highway.
2. Shortly after the above turn, the highway veers SE and descends a long grade off the 'Dahlonega Plateau.' At the bottom of the grade is a traffic light where you will turn **LEFT**, onto a two lane highway towards Toccoa. (Curahee Mtn. will be a significant landmark immediately off to your right, with numerous antennae on its summit). **The left turn will *STILL* be GA-365 (and also US123), but once again, an apparent turn off of the main road.**

3. Pass through the town of Toccoa, and continue on to the SC state line. GA 365 ends at the state line, but continue on **US123** into SC and about 8 more miles towards the town of Westminster.

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1. **Before you actually reach the town of Westminster, and right as the speed limit drops to 45 MPH – SLOW DOWN!!!!! Here is where the route is different than previous years! TAKE THE FIRST LEFT TURN (THAT IS ACTUALLY A STREET) AFTER THE 45 MPH SIGN. THIS IS HOBSON ST. The street sign with the name on it is partly bent over and hard to read. Just ahead of this turn you will see guard rails on BOTH SIDES of the road with signs with black and yellow diagonal lines. Hobson St. is a LEFT TURN right before these signs.**

2. Take **HOBSON ST.** until it dead ends at a stop sign. Here you will turn **LEFT** onto **LONG CREEK HWY**. Yes, this means you just made two left turns in a row. Continue on **LONG CREEK HWY** for ½ mile and bear right on **COFFEE RD**. The turn is right before a small Pecan Grove. There is a wooden painted sign for 'Westminster Speedway' at this turn.

3. **You will stay on COFFEE RD, a narrow country road, for 3.5 miles.** At the 3.5 mile mark you will see the metal canopy that used to cover the pumps at **Five Forks Grocery and Gas** visible on the left. (It burned down in 2006)

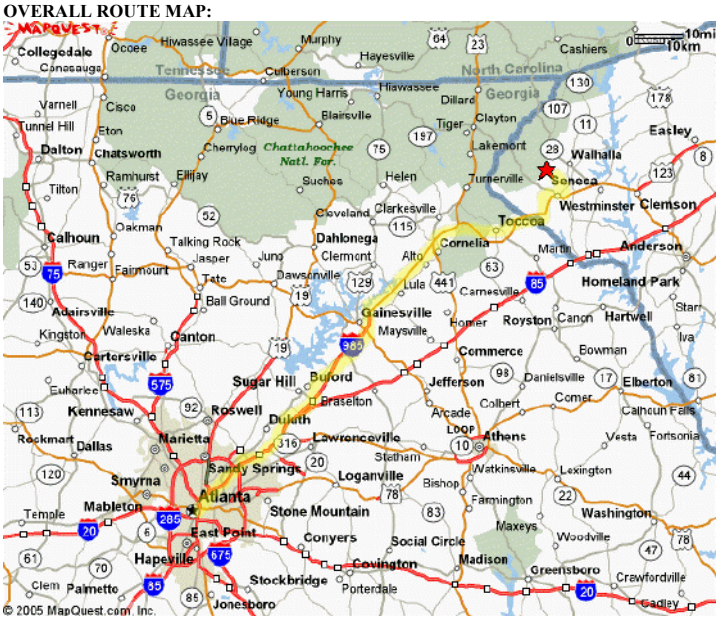
4. Turn **LEFT** here onto **STRIBLING SHOALS RD**. You should see a low range of mountains ahead of you after you make the turn. YOU ARE ALMOST THERE!

5. You will travel 1.6 miles on Stribling Shoals Rd. to reach **Marble Branch Trail.** After 1.2 miles, the pavement improves, and this will be you signal to watch for Marble Branch Trail on the LEFT another 0.4 miles ahead. It is immediately after 5 black mailboxes together, the first of which says REINKE/COLLIER on it.

6. Turn left onto **Marble Branch Trail**, a single track gravel road, right next to a cream colored house with a dirt yard 'graced' by several vehicles. Follow Marble Branch Trail for 0.6 miles to number 155. First, you will descend a long grade down hill through the forest. At the bottom of the hill, the road turns sharply right and follows Ramsey Creek up the valley. Continue past no. 130 and up through a small gap between two hills. Just through the gap and down a small grade will see our driveway on the left, marked by a blue and white '155' sign. You will glimpse the house (with a blue metal roof) on the other side of the creek.

7. Turn into the driveway and ford Ramsey Creek then come up to the house and greenhouse where there will be plenty of parking. The creek is normally only a few inches deep, so any vehicle can safely cross it.

OVERALL ROUTE MAP:



CRITICAL TURN IN WESTMINISTER, SC