

August 2009 BSSF Officers 2009

President VP:

Robert Meyer Pepe Donayre

Treasurer: Secretary:

Alan Herndon Barbara Partagas

DIRECTORS

Past Pres.: Sandy Roth

Directors:

Lori Weyrick '09 Peter Kouchalakos '09 Judy Pagliarulo '09-'10 Ofelia Sorzano '09-'10

Editor

Robert C Meyer Moyna Prince

Door Prize: Alan Herndon Education: Nat DeLeon Hospitality: Elaine Mills Library: Ofelia Sorzano Membership: Moyna Prince Member Plant Sales: Antonio

Arbelaez

Raffle: Peter & Clara Kouchalakos

Refreshments: Patty Gonzalez

What	Who
Sales Table	Magali Groves

AUGUST 4, 2009, 7:30 PM

SPEAKER: Magali Groves

RAFFLE TABLE: Michael Michalski

FOOD TABLE: Josefa Leone, Joy Parrish, Joy Von Wald, Patty Gonzalez, Sandy Lenhardt and Maureen

Adelman

Speaker for the Month: Magali Groves will be our speaker this month "Bromeliads of Peru." She has worked extensively with Grant Groves of Color Zone Tropicals, Inc. – a business that reaches new heights in



hybridizing and growing neoregelias of numerous color variations, including that to the left which is eponymously entitled "Magali Groves."

Inside:	
In Case You Missed It	2
Report and Selby's Latest Health 2-	3
President's Message (Field Trip) 3-	4
What's in Bloom 4-	5
Growing <i>Alcantarea imperialis</i> - 2 5-	
The Wilsons of Fantastic Gardens 6-	7
Recognizing Stress in Your Bromeliads 7-	8

In Case You Missed It by Robert Meyer

Dennis Cathcart came to our confines to show "parts" of his decades of travels to South of the Border – where the explorations abounded with natural hillsides, often cascading with bromeliad species, to which he and his informed guests took great delight, and occasional bounty.

Prefacing each segment with maps showing the terrain, and concomitantly discussing the weather (temperature, rain and seasons), Dennis informed the listeners about the variation of plants within seemingly short distances, often because of prescribed patterns or unique circumstances which can only be described as acts of God.

Amid the splendid photos are depictions of the younger, thinner and less bearded Paul Bunyan of bromeliads. Handsome in youth, his journeys then and now have now delivered innumerable plants to our yards and with his longtime partner in expedition travel (Wally Berg) their adventures are becoming legendary and perhaps will become embedded in bromeliad lore for decades or lengthier periods of time in bromeliad's finite world's future.

The growing popularity of his show is coupled with his plentiful delivery of Tillandsia plants – most unique to our eyes and depicting many of the species shown in the slide show.

At the end, we thanked him. And in our own biased opinion, all had to agree that the new projector recently obtained by the board made the pictures appear amazingly bright and vivid.

Report on Selby's Latest Health Guest Column

by Thomas Buchter

Due to recently publicity, some people may be asking, "What's going on at Marie Selby Botanical Gardens?" As the new CEO of the Gardens, it is my duty to answer that question.

I want to assure everyone that we will remain the botanical jewel you have grown to love in Sarasota County. We are eternally grateful for our passionate and faithful supporters. Our recent budget actions are designed to help us reach long-term financial strength. Simply put, we are in the same boat as businesses and organizations across the nation, trying to deal with a struggling economy. Both tourism and private contributions are down, so expenses exceed our income. Something had to be done.

Our staff and board spent months poring over every agonizing detail of our budget. During the process, we were determined to remain true to our mission and the legacy of Marie Selby, which is to further understand and appreciate plant life, with emphasis on epiphytes, and to provide enjoyment to all who visit the Gardens.

We have taken numerous steps to lower our operating costs, which should reduce debt and minimize the need for further staff cutbacks. We also reduced salary expenses for remaining staff and we are currently pursuing a Director of Development to increase income. This position will pay for itself through an aggressive fundraising effort.

The most painful decision was to cut two positions in the Orchid Identification Center, a popular function among volunteers and supporters. Fortunately, these same supporters and our staff are actively pursuing other means of support so we can hopefully restore the cuts. In the meantime, the Center for Tropical Plant Science and Conservation will continue to curate and improve all of its physical assets.

In addition, the center will continue to build on the Gardens' 35 years of important botanical inventory, classification, and conservation projects. Immediately upon restoration of funding, the services that have been temporarily discontinued will resume. Several grant proposals have been submitted in the past six months or are being prepared for submission. The proposals aim to enhance research and collection activities at the Gardens, and if successful, will provide funding for the digitization of the Identification Center files, the construction of a basic plant molecular laboratory, a molecular-based study of gesneriads, three more years of funding for rare plant conservation work in Everglades National Park, and the implementation of a database and web portal for our collection information and images.

Significant annual funding from the Bromeliad Society International and The Gesneriad Society supports ongoing projects.

Plant Collections staff will continue to maintain and grow our herbarium and liquid-preserved collections, which form the backbone of botanical research at Selby Gardens. Our Plant Records staff will continue its work of documenting and tracking the living collection.

Field work will continue with rare plant conservation efforts in Everglades National Park and Miami-Dade County, and we will continue botanical inventories of Sarasota County's environmentally sensitive lands. We will continue to collaborate on several international inventory and classification projects, particularly in the Neotropics, and we will pursue new opportunities to help promote biodiversity conservation. The Bromeliad Identification Center will continue in its present format.

We are optimistic about the future. But during these difficult times, we will reach out to the community for both understanding and support. You can show that by visiting Selby Gardens, becoming a member, volunteering and making a contribution. We promise, in return, the continuation of programs in research, conservation, education and horticultural display, even while we take necessary steps toward sound financial footing.

T-Shirts Still For Sale

Sandy Roth has determined to take on another task – make t-shirts. Artwork is approved and she has contacted the proper printers to manufacture t-shirts for the masses. Announcements will be delivered at the meeting.

PRESIDENT'S MESSAGE (Trip Report) by Robert Meyer

Who would have said that facebook and social events would be the topic of discussion for this organization? But, this past week, the social scene of the society and the advent of facebook have delivered us to happier and more informed times.

This weekend of July 18, 2009 brought great joy to me as president of this organization. Over 30 brave souls came out in the hellacious heat to brave three ventures outside amid the scorching neverending refrain of Miami's summer heat.

And, no one complained. It was a marvelous event which made even the old ooh and ahh like toddlers. Starting with the immaculately kept confines of Doctor Jeffrey Block, the organization was able to have a private show of one of South Florida's most impressive bromeliad/palm/orchid gardens.

After that we ventured south to the Herndon nursery where pinks and roses contrasted against the various shades of green on long tables under differing amounts of shade provided by the numerous shade houses. Without falling to heat exhaustion, a majority was able to venture to the back – where Doc Alan Herndon experiments, and prepares the plants which Rhonda and her brother neatly show in the front houses. And, they sold numerous plants to all – at a price that even the slyest Armenian rug trader could not deliver to better bargain.

We ended the trip at Lori Weyrick's beneath shaded trees abutting a manmade water attraction of monumental scale which is adorned by numerous exotic palms shading ever brilliantly colored neoregelias below the mammoth canopy. With good food and drink provided by the efforts of the usual suspects (Roth, Pagliarulo and Weyrick), the people were able to rest their heated selves under the trees or tiki hut's thatch, and enjoy the occasional breezes provided that otherwise calm Saturday afternoon.

These events are part of the great direction for this society. And, upon completion of this even under one of the most grueling days of oppressive heat, and enjoying it from start to finish, this event makes me pleased to entertain many more such excursions in the future. Broward has asked that its territory be a point of interest. And as the wise man on top of the mountain said when presented with a most philosophical and thought-provoking question: "Why not?" And, so the plans go for the next event.

And, in the meantime, we will coordinate field trips to aid those who need the help the most and make the gardens of members or friends enriched by our endeavors and efforts.

If anyone is interested to *see* how much fun we had – go to the recently created facebook page (thanks to Jorge Rodriguez) where my wife Desiree downloaded more than 40 p i c t u r e s . http://www.facebook.com/home.php?filter=app_2309869772#/desiree.w.meyer?ref=mf or

http://www.facebook.com/home.php?filter=app_2309869772#/pages/Bromeliad-Society-of-South-Florida/84661684279?ref=mf



The crowd at Dr. Block's backyard with the blooming *Alcantarea imperialis* lifting to the skies (about 8 ft in height) in the background's middle.

JOIN the BSSF:

Friends or Family contact Moyna Prince at 305-251-5289

Download application sheet at:

http://www.bssf-miami.org/membership.

What's in Bloom - July 2009

by Alan Herndon

The Spring bloom flush has come to an end. Many fewer species are blooming now than last month. This is not to say that flowering activity has ceased. During July, several species of the *Gravisia* and *Platyachmea* groups of *Aechmea* began to bloom for the first time this year, with even more species ready to flower in the coming month. *Aechmea chantinii* (in the *Platyachmea* group) has clearly passed the major flush of spring bloom, although there are still a significant

numbers of plants coming into bloom.

Aechmea 'Little Harv' has just completed its second major bloom flush of the year. The plants blooming for the past two months have been pups from the plants that bloomed about 4 months earlier. Of course, there always seem to be a few scattered plants in bloom.

I undoubtedly missed many blooming *Cryptanthus* species because they have short blooming periods and are not in an area I pass by frequently. I would also have a longer list of blooming plants if I had a larger collection of *Tillandsia* species. Still, there is no doubt about the precipitous decline in numbers of blooming *Neoregelia* and *Vriesea* species. We can look forward to even fewer *Neoregelia* species blooming in the coming months. The list going forward will mainly contain small species (such as members of the *Neoregelia ampullacea* group) where the offsets reach blooming size within a few months.

Aechmea (angustifolia, aquilega, blanchetiana, brueggeri, chantinii, contracta, dactylina,, eurycorymbus, haltoni, Little Harv, miniata (discolor), moorei, mulfordii (red leaf form), nallyi, retusa, rubens, servitensis, tillandsioides, werdermannii, wittmackiana)

Alcantarea (imperialis, glaziouana, **nahoumii**, odorata)

Araeococcus flagelliformis

Billbergia (amoena carneum, kuhlmannii)

Canistropsis (billbergioides, burchellii)

Canistrum (alagoanum, fosterianum, **seidelianum**) Cryptanthus warren-loosei

Edmundoa ambigua

Guzmania (lingulata, minor 'Orange Crush') Hohenbergia (andina, undulatifolia, utriculosa, vestita)

Neoregelia (Annick, Bob Work, Bossa Nova, carolinae (several clones), carcharodon 'Silver', cathcartii, correia-araujoi, Devine Brown, eleutheropetala bicolor, Emerald City, Fireball, Fosperior Perfection, guttata, macwilliamsii, marmorata, Morado, myrmecophila, olens (fluminensis of trade), pendula brevifolia, rosea. Sheba, spectabilis, Tossed Salad, Ultima)

Nidularium (angustibracteatum, campos-portoi var. robusta, catarinensis, innocentii,

krisgreeniae, longiflorum (green), rutilans, viridipetalum)

Orthophytum (alvimii, compactum, disjuncta, duartei, grossiorum, harleyi, hatschbachii, lemei, lymaniana)

Pitcairnia (**imbricata**, integrifolia, undulata, xanthocalyx)

Portea (petropolitana extensa)

Quesnelia (testudo)

Tillandsia (albida, jalisco-monticola, **limae**, **mallemontii**, **occulta**)

Vriesea (duvaliana, incurvata, inflata (red), inflata (yellow), rodigasiana)

Growing *Alcantarea imperialis* - 2 by Alan Herndon

Alcantarea imperialis would make an excellent show plant except for the problem of cleaning the plant for the show and moving it to the show location. A blooming size plant is heavy enough that very few individuals could move it without help under any circumstances. Add to that the necessity of handling the plant extremely carefully to avoid damaging leaves. For instance, you need to tip the plant over to drain the water from the leaves (the weight problem is partly helped by this maneuver



Photo by Peter Franklin as shown on web site of FCBS

since a large plant will hold several gallons of water at 8 pounds per gallon), but you have to do this holding only the pot or the base of the plant since you run the risk of tearing or splitting leaves if you grab them to improve your leverage. Of course, if you drop the plant while trying to empty the water, you guaranteed to crease

and/or split several leaves. The problem is only exacerbated if you are dealing with a blooming plant. The tall (and massive) inflorescence, aside from hurting your leverage considerably, is easily damaged.

The tendency of this species to run along the ground can also pose some problems. If you are contemplating digging a plant out of the ground and putting it in a pot for the show, you will almost certainly be faced with the need to cut the horizontal stem. You will have to cut the stem short enough so it is possible to center the plant in an appropriately

sized pot. Unfortunately, judging standards for bromeliads favor small pots, so much of the stem may be lost..

Once you have the logistics conquered (possibly through an army of helpers; possibly through use of heavy machinery), you need to spend time cleaning out the leaf axils of your plant. Given the size and longevity of the leaves, you are likely to have a considerable growth of algae in the leaf axils. Liberal application of water to the tilted plant will flush out loose algae and detritus. For a thorough cleaning, you will need to remove the remaining algae by wiping down the accessible portions of the leaf in each axil.

Next, you have to trim the dead leaves and leaf tips. Because *Alcantarea imperialis* has a large number of leaves on a blooming-size plant, it will also have a large number of (lower) leaves that are in various stages of decline. Typically, any given leaf dies back from the tip over a long period of time. Even after the leaf blade has turned completely grey, the associated leaf sheath may remain alive for many months. You should completely remove leaves that are completely dead, but you want to trim, rather than remove, leaves that have any live connection between the leaf base and the stem. The biggest problem is posed when you try to decide how to trim leaves where the blade is only partly dead. In a large plant, the lowermost leaves are the longest, so leaving the 'stumps' of the partially dead leaf blades is not true to the character of the plant. On the other hand, you will lose a lot of valuable photosynthetic surface if you trim all partially dead leaves down to the sheaths. You will need to consult experienced BSI judges for guidance.

A preferred direction of growth is usually

Photo by Shirley Grills-Konefal as shown on FCBS web site

established quite early for an individual plant. In fact, one of the greatest problems encountered when growing the plants in pots is that many plants start growing toward one side even in 5 inch pots. Even if you recenter the plant when moving it up to a larger size pot, it can end up at the side of the new pot within a year or so. You can determine the preferred direction of

growth by looking at the base of the plant. The lowest parts of the stem will be leaning in the preferred direction. Or, you can just observe what side of the pot the plant is nearest.

The tendency of this species to run along the ground can also pose some problems

There is considerable variation from plant to plant in the rate of horizontal growth (even within vegetatively propagated cohorts). You can spot the plants with a greater rate of horizontal growth at an early stage. It is reasonable to assume that plants are reasonably well centered when stepped up to a larger pot, so within a group of approximately equal age, the plants closest to the edge of the pots are the ones growing to the side most rapidly. If your intention is to grow the plants in pots, it will be useful to select plants with less horizontal growth. If the plants are designated for the landscape, the rate of horizontal growth is of less importance. However, rather than trying to change the direction of plant growth at a later stage, you might want to orient the plant(s) initially so any future horizontal growth will maintain or even enhance the overall landscape appearance.

In any given year an Alcantarea imperialis with a rapid rate of horizontal growth does not move much, but between planting and blooming (remember, this may easily be a period exceeding 10 years) it may move 10 feet or more from where it was originally placed. This should not be a problem if the plant is placed in an open area. You can even take advantage of this habit in your landscape. The plants will climb slopes as well as they creep along flat ground, so you can place rocks or berms in your landscape for the plants to grow up. This will keep the plant closer to the original planting spot as well as make the plant even more imposing

The Wilsons of Fantastic Gardens by Alan Herndon

Fantastic Gardens, at 9550 SW 67Ave, was the premier tropical plant nursery in the Miami region from the late 1940's to the 1980's. The nursery and plant collections were developed by Robert Gardner (Bob) and Catherine Wilson

Bob Wilson moved to southern Florida, from Waltham, Massachusetts, in the 1930's. He married Catherine in 1935 and they founded Fantastic Gardens the following year. During the early years, Bob helped support the

nursery through landscaping jobs, as superintendent of the Dade County Parks Department nursery, and as superintendent of the Dade County Parks-maintained areas of the still young Fairchild Tropical Garden. He and Catherine supervised plantings in Fairchild outside the Palmetum. They maintained a card file and mapping system for the new plantings.

In its earliest incarnation, Fantastic Gardens specialized in cut flowers and succulents. By 1940, a few tropical plants were added. The tropical plants, especially aroids, bromeliads, gesneriads (pronounced either "guess-NARE-ee-ad" or "jez-NARE-ee-ad") and orchids, soon came to dominant the collections, and made Fantastic Gardens famous.

During World War II, the Wilsons spent 2 years in Haiti researching ways to grow *Cryptostegia* (a potential alternative source of rubber) efficiently. First hand experience further enhanced their interest in tropical plants. On returning to their long-neglected nursery, they were thrilled by the stubborn persistence of most bromeliads in their collection (a group that had previously been of secondary interest), and began to concentrate more effort on plants from that family.

During several collecting trips in the tropics, unfamiliar species were brought back to test in cultivation. One of these species collected in



Photo by Michael Andreas as found on FCBS web site.

Brazil was described as *Neoregelia wilsoniana* (photo on left). A second species, also collected in Brazil, was described as *Orthophytum vagans*. Both new species were described by Mulford Foster in the Bulletin of the Bromeliad Society during 1960. Both

species are still in cultivation (it is mostly the albomarginate cultivar of *Orthophytum vagans* that is grown), although, they are grown mostly as novelty plants.

Their interest in bromeliads led to becoming charter members of the Bromeliad Society of South Florida, and, even more importantly, publication of Bromeliads in Cultivation (Hurricane House Publishers, Coconut Grove, FL. 1963). It appears to be the first book in English written for the general hobbyist, and was explicitly intended to spark interest in bromeliads among the plant-growing public. Jack Kramer claims the same distinction for his book Bromeliads - The colorful house plants, but this work was evidently first published in 1965. Of course, both were proceeded

by Bromeliads - A cultural manual, published by the Bromeliad Society Inc. in 1953. Distribution of the cultural manual, however, was largely limited to members of the Bromeliad Society, whereas Bromeliads in Cultivation was marketed to the general public.

Bromeliads in Cultivation contains basic cultural information and a series of still useful lists grouping bromeliad species by various cultural and esthetic criterea (including sun tolerance and plant shape). Only the first volume of a projected multi-volume set was completed, so the descriptions only included species (and a few hybrids) in genera from Abromeitiellia (now considered to be part of Deuterocohnia) through Dyckia. Fortunately, this covered the horticulturally important genera Aechmea, Billbergia and Cryptanthus. The book contained several colored plates illustrating different species and hybrids. A line drawing illustrating a typical species was also placed at the beginning of the treatment for each genus.

Though long out of print, this book can still be read with profit.

They had dreams of developing a tropical garden that could help preserve the horticulturally desirable plants of the American tropics and help introduce these plants to horticulture

The Wilsons were not content with southern Florida and Fantastic Gardens. They had dreams of developing a tropical garden that could help preserve the horticulturally desirable plants of the American tropics and help introduce these plants to horticulture. In 1963, they sold Fantastic Gardens to Wyly Billings, and began the move to Las Cruces near San Vito de Java, Costa Rica. This early departure from the Miami area reduced the direct influence of the Wilsons on the development of BSSF, but their book continued to be a bible for new growers.

Consistent with their intentions, they also continued to introduce new bromeliad species into cultivation. For instance, Eloise Beach remembers receiving her first plants of *Aechmea brevicollis* as seedlings through the mail from the Wilsons in the mid 1970's. She

then distributed plants to the active bromeliad societies in Florida.

The Wilsons also began an association with the Organization for Tropical Studies (OTS) during the latter half of the 1960's. Groups of students from American universities were thereafter frequent visitors to Las Cruces. In 1973, the Wilsons transferred their beloved property to OTS to ensure the continuation of the educational program. They were allowed to remain in their home until their deaths, enjoying the tropics they so loved..

Directory Corrections

Barker, Kenneth & Mary, 10515 SW 127 Place, Miami, 33186 305-385-4754

Barrus, Carol , 11550 SW 80 Road , Pinecrest , 33156-4405 305-232-0979 KACQB@aol.com

L Bauer, Carl & Margie, 10700 SW 62 Avenue, Pinecrest, 33156-4021 305-661-5881 bauer1786@bellsouth.net

Recognizing stress in your bromeliads by Alan Herndon

Now that you have your future show winners picked out, it is time to settle into a routine of weekly inspection. If you are already familiar with the individual plants, your weekly inspection can be brief until you spot a problem. You are looking for unexpected changes in the plants. Any plant showing such a change requires more detailed examination.

Any number of different factors can stress your plants, but the earliest signs of stress almost always involve a change in leaf color. The color change may occur over the entire leaf, or be restricted to parts of the leaf. The color in stressed plants is always lighter (at least initially). In the early stages, the color change is very slight. You need to recognize the changes as early as possible so you can take corrective action. Left untreated, the stress will quickly lead to irreversible changes in leaf color or distortion of leaf shape.

Temperatures that are too high usually cause a bleaching of the leaf colors in a plant. If the leaf is normally green, it becomes much more yellow. If the leaf is normally red, it becomes a much lighter red. High temperature stress is usually the result of

a combination of high air temperature, insufficient water and insufficient shade.

As soon as you see any bleaching of leaf color, you need to determine the probable proximate cause. Is there water in the cups of the plants? Is the soil mix completely dried out? Has a seasonal change in sun position allowed direct sunlight to reach your plant during some part of the day? If the plants are dry, you will need to increase watering frequency. If the cups have plenty of water, but the soil is dry, you will probably have to modify the way you water. Make sure the soil mix is thoroughly soaked each time you water (if you are not using a well-drained mix, you will soon have many more problems). If water does not seem to be a problem, you should try moving the plant to a shadier spot. If you detect this form of stress early and correct the growing conditions appropriately, the plant will usually recover fully.

As soon as you see any bleaching of leaf color, you need to determine the probable proximate cause.

The most likely time for high temperature stress is during the last few weeks of the dry period (generally May). We normally also have a short dry spell (1 ½-3 weeks in length) during the middle of our wet season. This usually occurs during July or August, and we seem to have just passed through this years installment. During these periods, air temperature is not moderated by cool air brought down during rains, and plants can dry out very quickly. Be especially careful to keep watch on the moisture levels in your soil at these times.

Low temperatures can also cause problems for your bromeliads. I know this seems a ridiculous concept when winter is such a distant and fading memory, but we may have occasion to worry about cold before the next show. There are two distinct problems associated with cold weather. First, cold-sensitive plants such as *Aechmea fulgens* start to suffer damage when the air temperature falls below 45F. The damage shows up as small discolored spots on the leaves (particularly the surfaces most exposed to the night sky). More generally, cooler air is often associated with dry air, and a cool, dry wind

can suck the moisture out of a susceptible leaf. Damage in these cases, is mostly confined to the edges of the leaves, and most extensive on plants more exposed to the wind. Albomarginate plants are particularly susceptible to damage from dry winds. Unfortunately, the damage caused by both conditions seems to be irreversible by the time it is seen.

Too much water can also damage your plants. Here the problem usually arises when organic detritus retained in the leaf axil remains wet due to frequent rains (unless you water daily, you are unlikely to be the direct cause of this problem), and a fungus infects the leaf near the base. Once you see the leaf starting to change color, it is too late to save, but you can minimize the spread of the infection to other leaves by draining the water from the rosette, pouring some Hydrogen peroxide into the leaf axils around the infected area, pouring this off and giving the plant an opportunity to dry. You will probably want to put a small amount of water in the center of the cup to protect the newly forming leaves from excessive drying.

Even insect infestations are often first evident through color changes. Scale insects are often inconspicuously restricted to the lower surface of the leaf, but the damage caused by their feeding usually results in a small yellowish dot on the upper surface of the leaf opposite each insect. When you see these dots, it is time for a close inspection of the leaves (especially the bases of the leaves) on the plant. The scale may be killed chemically or scraped off mechanically.

You should have plenty of opportunity to study the signs of stress in your plants this year. We are experiencing more heat-related stress than I have every seen. Plants that we normally recommend for full-sun use (such as *Androlepis skinneri* and *Neoregelia* 'Super Fireball') are bleaching under 30% shade. Also, before the recent dry spell, we had a very wet period where plants hardly had any opportunity to dry out between rains. The take home message is simple: Mother Nature still holds the cards. All we can do is adapt to whatever conditions She deigns to provide. The first step is watching your plants with care.

JOIN the BSSF:

Friends or Family Contact Moyna Prince at 305-251-5289