



FLORIDA COUNCIL OF BROMELIAD SOCIETIES

Volume 41
Issue 2
May 2021





TABLE OF CONTENTS

Table of Contents.....	2
2021 FCBS Officers and Representatives, Committee Members, Florida BSI Officers.....	3
I Love bromeliad by Carol Wolfe, Editor.....	4
BSCF Orlando May 8-9, 2021 Show.....	7
David A. Fulkerson, BSI Judged Show	13
Roberto Burle-Marx by Herb Plever.....	14
Building a Greenhouse in the Suburb by Bryan Windham.....	17

PUBLICATION: This newsletter is published four times a year, February, May, August, and November, and is a publication of the Florida Council of Bromeliad Societies. Please submit your bromeliad related activities, articles, photographs, society shows, news and events of your society.

DEADLINES FOR ARTICLE SUBMISSIONS ARE:

January 15 for February issue

April 15th for May issue

July 15 for August issue

October 15th for November issue

COPYRIGHT: All materials contributed and published in this FCBS Newsletter are copyrighted and belong to the authors/photographers. The authors/photographer have given permission to use the materials and pictures in this publication for educational purposes. You may use any articles and/or pictures published in the FCBS Newsletter for educational purposes with the credit given to the authors and/or photographers. Commercial use of this material is prohibited but you may contact the authors/photographers directly for other permissions or material purchases.

FCBS TAX DEDUCTIBLE RECEIPTS: The Florida Council of Bromeliad Societies, Inc. is a 501(c)3 Non-Profit Corporation, incorporated in the State of Florida. Please make your contributions for 2020 tax deductible receipts by going to FCBS.org to make online contributions through PayPal or mail check or money order to FCBS Treasurer: Sudi Hipsley, 6616 Tusawilla Drive, Leesburg, FL 34748-9190. If you have questions regarding your contribution, please call Sudi at 352-504-6162.

FRONT COVER:

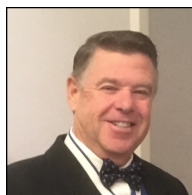
Vriesea 'Flame' by Georgia Orser
photo by Carol Wolfe



entered in the 2021 BSCF Show-



2020 FCBS OFFICERS & MEMBERS



Tom Ramiccio
2021 Chairman
Bromeliad Society of Palm
Beaches



Nick Bethmann
2021 Secretary
Bromeliad Society of Palm
Beaches



Richard Poole
Vice President
Florida West Coast
Bromeliad Society



Sudi Hipsley
2020 Treasurer
Seminole Bromeliad &
Tropical Plant Society

VOTING REPRESENTATIVES of the FCBS:

Bromeliad Guild of Tampa Bay
Tom Wolfe & Carol Wolfe

Bromeliad Society of Central Florida
Betsy McCrory &
Mike Saunders

Bromeliad Society of Palm Beaches
Tom Ramiccio &
Nick Bethmann

Bromeliad Society of South Florida
Michael Michalski &
Patty Gonzalez

Caloosahatchee Bromeliad Society
Vicky Chirnside

Florida East Coast Bromeliad Society
Calandra Thurrott &
Jack Dunlop

Florida West Coast Bromeliad Society
Susan Sousa &
Richard Poole

Gainesville Bromeliad Society
Sandy Burnett

Sarasota Bromeliad Society

**Seminole Bromeliad &
Tropical Plant Society**
Sudi Hipsley &
Greg Kolojeski

COMMITTEES MEMBERS:

*The following Committee Members and guests
have a standing invitation to FCBS Meetings as
Non-Voting Members unless serving in the dual
role of Member Society Representative.*

Al Muzzel Weevil Fund:
Tom Wolfe, Chairman
Richard Poole

FCBS Editorial Panel:
Carol Wolfe, Editor
Tom Wolfe, Assistant Editor
Calandra Thurrott, Copy Editor

FCBS Roster Maintenance: Susan Sousa

FCBS Webmaster: Michael Andreas
Webmaster@FCBS.org

Weevil Research:
Howard Frank, PH.D
Ron Cave, PH.D
SFBCP@savebromeliads.com

BSI Officers & Committee Members from Florida:

Gregory Kolojeski, Vice President
Barbara Partagas, Secretary

BSI Directors from Florida:

Bruce Holst; Rick Ryals; Alex Bello &
Alan Herndon



I love Bromeliads... By Carol Wolfe, Editor

Greetings Bromeliad folks!

The Bromeliad Society of Central Florida in Orlando, Florida held it's annual Show & Sale on Friday and Saturday, May 8, 9, 2021. It was a beautiful location in the center of the Fashion Square Mall. Unfortunately the pandemic has taken it's toll on the Mall and there were only a few remaining stores open but the location of the show in the center of the mall with the water fountain, elevated stage, and natural lighting from the glass ceiling was a perfect place for the head table plants and awards.

BSCF President, Mike Saunders, and Vice President and Show Chairman, Marilyn Howser, and the membership are to be congratulated for such a beautiful show. It was great to be "back to normal" and see so many beautiful bromeliads!

We understand that Friday was almost a sell out of bromeliads! Thank you BSCF members for all your hard work!

In addition to the beautiful show, contributing to a perfect day was the low humidity we love in Florida. We could not publish pictures of all the entries in the Newsletter but we hope you enjoy the ones that we shared! Again, congratulations!

As we roam, for the second time, back to the 10th World Bromeliad Conference held in Tampa in 1992, we are featuring some pictures of the exhibits from Florida Bromeliad Societies and the tremendous job they did. We had exhibits from the Bromeliad Society of South Florida, Miami; Caloosahatchee Bromeliad Society, Fort Myers; Florida West Coast Bromeliad Society, St. Petersburg; Sarasota Bromeliad Society, Sarasota; Seminole Bromeliad Society, Sanford; and West Pasco Bromeliad Society, New Port Richey.

We had commercial exhibits from Bullis Bromeliads, Princeton; DeLeon Bromeliad World, Miami; De Roose Nursery, Belgium; Exotic Plants, Belgium; De Meyer De Rock, Belgium; Hill's Raingreen Tropicals, Lithia; Plants in Design, Miami; and Tropiflora Nursery in Sarasota. The bromeliad exhibits were show stoppers and you never tired of looking at them and seeing bromeliads you missed the last time you walked by the exhibit! We had sixteen commercial vendors selling everything from artwork to bromeliads.



*Top: Sales area for the BSCF Show & sale
Bottom: Elevated stage for Best of Show Bromeliads
Photos by Carol Wolfe*



We had every available space filled with seminars for a record fourteen speakers and a first time Worldwide Show and Tell hosted by Dr. Sam & Hattie Lou Smith. After all our spaces were full, Ulrich and Ursula Baensch asked for space to take preorders of their book, "Blooming Bromeliads." The best we could do was give them a table in a hallway near the coffee pots. They took the space and the preorders were sold for \$80 each and if you ordered five books, you saved \$10.00 on each book!. What a legend that book became and still in demand to the tune of \$300 to \$400 a copy or more!

Dave Fulkerson, a brilliant creative man as you can see from the "elephant stories" in the last edition, created twenty three 3'x4' butterflies for the conference and hung them in the showroom. Flo Plato and Susan Welborn, BGTB members, hand painted them.

Dave and his wife, Mary, moved to Tampa from Tulsa, Oklahoma. Dave was born in Oklahoma and attended college on a football scholarship. He used his creative talents for many years to stage the Miss Oklahoma Beauty Pageant. He was an amazing man and probably the most talented creative person that we have ever known.

Not only did David "WOW" us with his creative ability at the WBC but continued to create many future projects for the Bromeliad Guild of Tampa Bay that enhanced our shows, our Extravanzas, World Bromeliad Conferences, and the Florida State Fair.

Patty Rabin, June Oliverio Hill, Rita Guerette, Debbie Groves, Jack & Denyse Noyer made 96 gorgeous centerpieces for the banquet tables using Portea blooms from Maureen Frazel, bromeliad blooms from Herb & June Hill, Plants in Design, Grant Groves, and blooms from their own gardens.

Linda and Dennis Cathcart of Tropiflora donated 800 hand painted butterflies as favors on the Banquet tables. Attendees loved their butterflies as conference souvenirs.

Kitty Yeager, a well know Federation of Garden Clubs Judge, agreed to help judge the artistic arrangements. We were delighted to have her expertise judging the show.

After the last issue of the newsletter, I received an email from Margo Racca and she remembers Mary Jane Lincoln, who arranged our head table with the show plants, and how exhausted she was afterwards! She had good reason, as she did a fantastic job! She started, at a minimum, a year out and purchased all the show awards from a trading company where she had wholesale privileges and shipped them to Tampa. The gifts were fabulous and at such a reasonable price! In addition Mary Jane purchased black velvet and shipped it from Louisiana to the conference along with various sizes of risers to put under the velvet to elevate the winning bromeliads. This was the third world conference head table she arranged and her assistance was invaluable!

For anyone that did not have the opportunity to know Mary Jane, she was a wonderful woman who served the BSI as Affiliate Society Newsletter and Liaison Chairperson. I believe she served in that job at least ten years or more in the 1980's and 90's and did a great job. She was also a Bromeliad Society International Master Judge and lived in Metairie, Louisiana for most of



Bottom right: Carol & Tom Wolfe in front of the elephant welcoming everyone to Saddlebrook for the 1992 WBC in safari outfits. The Bromeliad Society of South Florida sponsored the "Safari Outfit Contest" and awarded prizes! Photos by Dave Fulkerson



her life. Unfortunately, the internet was not being used as social media at that time and had it been, we would be able to read Mary Jane's Newsletters and see her handiwork!

Speaking of the head table, we had an unbelievable outpouring of Awards from BSI Societies from Miami to California. We had awards from individuals, awards given in memory from individuals and societies, awards given in honor of individuals and societies and we were awed at the generosity of the membership.

For the first and maybe last time, a "Tea Time" for the Honorary Trustees and Overseas Guests was held to give registrants an opportunity to visit with them. As Chairman, Tom wanted the foreign attendees to feel welcome as well as to give the BSI membership an opportunity to meet and honor them.

The BSI publishes a list of the present Honorary Trustees but as they pass away, their names are removed and replaced with new recipients. At the time of the conference, the BSI Honorary Trustees List was an incredible group of well known worldwide experts in bromeliads: Roberto Burle-Marx, Brazil; Olwen Ferris, Australia; Racine Foster, USA; Grace Goode, Australia; A. B. Graf, USA; Roberta A. Kautsky, Brazil; Marcel Lacoufle, France; Elmer J. Lorenz, USA; Harold Martin, New Zealand; William Morris, Australia; Werner Rauh, Germany; Robert Read, USA; Raulino Reitz, Brazil; Walter Richter, Germany and Lyman B. Smith, USA. I am not sure, but I don't think any of the above are alive today.

We were certainly surrounded with famous impressive people, people of greatness of accomplishments, knowledge, expertise, scientists, authors, artists, musicians, professors, landscapers, architects, hybridizers, people known around the world for their talents and many of us did not realize the full impact and opportunity afforded us to meet these people in person at the "Tea and Crumpets" event.

This lovely "Tea and Crumpets" was paid for by the West Pasco Bromeliad Society.

I will let Herb Plever tell you how we obtained a world renowned banquet speaker, Roberto Burle-Marx, in his article on page 14. Roberto Burle-Marx, Dr. Lyman Smith and Racine Foster (posthumously) were given special recognition at the banquet. Racine died in 1991, in the year prior to the conference and we were sad that she passed before the conference could honor her. The FWCBS in St. Petersburg purchased the beautiful plaques presented to them and made a substantial donation from their annual auction to help finance the conference.

As you can see from the magnitude of the conference, many people poured themselves into the work of serving others and worked hours, days, and weeks to make this the great conference it was. No one person, nor committee, not even one society, could have ever pulled off a successful conference like this. Many people that loved bromeliads and loved you, contributed their time, efforts, and money to make this conference successful but there is not enough room in the newsletter to tell all their stories.

The one person that worked the hardest, set the example, and never complained was Tom Wolfe, Chairman. He was a great leader in that he believed in matching the jobs with people's natural abilities, he assigned the work and trusted them to use their abilities and talents to fulfill their role. I often heard him saying to someone, "As far as I'm concerned, it's your baby, handle it the best way you know how and call me if you need help." He gave folks the freedom to do the job their way and inspired confidence in their ability to do it, and it worked!

The Tampa/Hillsborough Convention & Visitors Bureau honored Tom & Carol at a banquet with a plaque for the economic impact the conference had on the Tampa Bay area. After the conference, we received many beautiful cards and thank you letters and in the future we will turn them over to the BSI to be preserved in the archives.

We hope you have enjoyed another trip down memory lane about the wonderful people who loved and grew bromeliads!



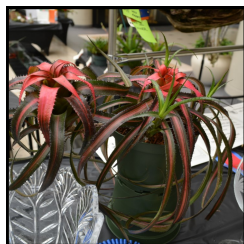
Bromeliad Society of Central Florida Orlando, FL May 8-9, 2021



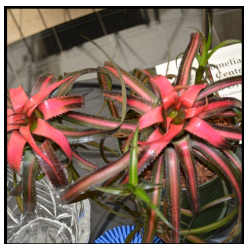
46th Annual Show & Sale — The Bromeliad Society of Central Florida; Morris Henry Hobbs Award: Billbergia 'Hallelujah' by John Boardman; Mulford Foster Award: Neoregelia gigas by John Boardman



Bromeliad Society of Central Florida Orlando, Florida, May 8-9, 2021



Neoregelia 'Stars and Stripes'
by John Boardman
Award of Cultural Excellence



Vriesea fenestralis
by Robin Norton
Best Novice entry



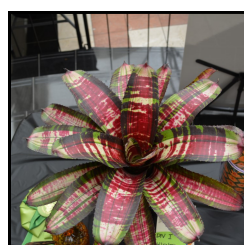
Vr. 'Frost Warning' hieroglyphicax
Fosteria by John Boardman
In Memory of Dean Fairchild



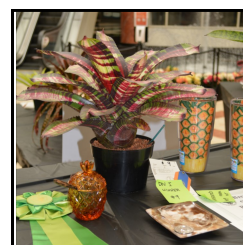
Till. durretii - by John Boardman
Best Species & Div. III-Sec A In memory Wally Berg



Neoregelia 'Wild Rabbit'
by John Boardman **Best Neoregelia - Best of Division Horticultural Displays**
In Memory of Audrey McCrory



Neoregelia 'Freak Out'
by John Boardman. **Best Variegated.**
In honor of Chester Skotak



Goudaea Ospinae var. gruberi
By John Boardman
Div. I Foliage



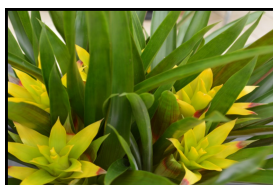
Goudaea Ospinae var. gruberi
By John Boardman
Div. II Blooming



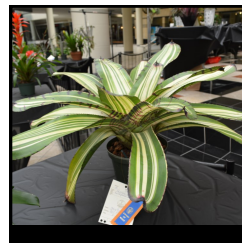
Decorative Containers - Black pot w/Neo. 'Rainbow'
by John Boardman



Decorative Container: Billbergia
by Telka diFate



Guzmania 'Fancy'
by Evan McCrory



Neoregelia Lollapalooza by John Boardman



Neoregelia King's Ransom by Evan McCrory



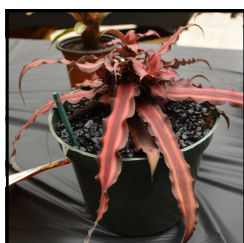
Bromeliad Society of Central Florida Orlando, Florida May 8-9, 2021



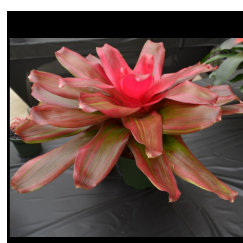
Sweepstakes winner: John Boardman, Werauhia Kuppenano



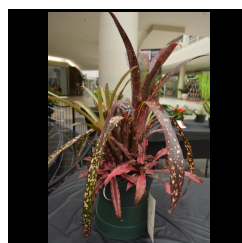
XQuesistrum 'Claudia' by Marilyn Howser



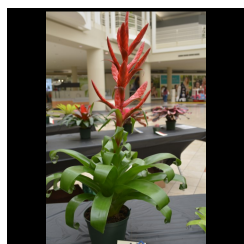
Cryptanthus Ruby" by Marilyn Howser



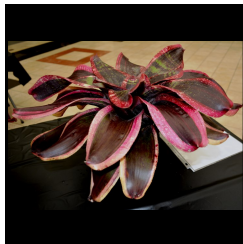
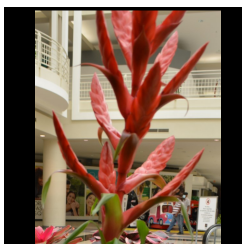
Neoregelia 'Loucana' by John Boardman



Bill. 'Teng Ee' & Crypt 'Ruby' by Marilyn Howser



Tillandsia Naomi by Georgia Orser



Neoregelia 'Newtranstar' by John Boardman

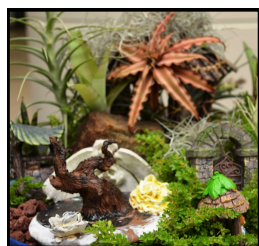


Guzmania 'Scarlet' by Evan McCrory



Fairy Garden, Artistic Arrangement by Telka diFate

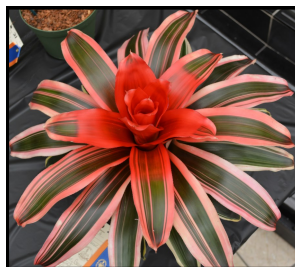
Materials include: Round base, ceramic trees, flowers, bird house, rocks, fairy people, and eight types of Tillandsias, Cryptanthus, Vriesea, & Neoregelias



Guzmania 'Fancy' by Evan McCrory



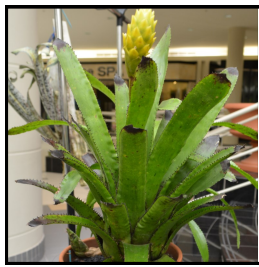
Cryptanthus 'Rick Richtmyer' by Marty Folk



Neo. DeLeon's Inferno by Georgia Orser



Ques. marmorata 'Tim Plowman' by Marty Folk



Ques. edmundoi by Marilyn Howser



Orthophytum gurkenii by Marilyn Howser



**“The
Kentucky Derby”**
A beautiful artis-
tic arrangement
by Teika diFate
in the BSCF
Show!



In addition to the
“Kentucky Derby
at Churchill
Downs”, you
could wear this
hat to any Camp
Town Races, or
the parade on
Fifth Avenue!



Put on your East-
er bonnet with all
the frills upon it
and you’ll be the
Grandest Lady in
the Easter pa-
rade!



The Kentucky Derby” A beautiful artistic arrangement by Telka diFate.
Materials: Dark brown clay head vase, Neoregelias, Tillandsias, Ananas and
Cryptanthus, Macaw bird feathers, Ginger plant flowers, leaves, and Lily plants.



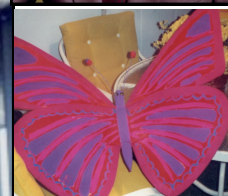
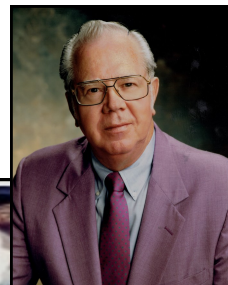


FLORIDA COUNCIL OF BROMELIAD SOCIETIES

Page
11

David A. Fulkerson & BSI Judged Show

David Fulkerson was in charge of special effects for the 1992 WBC in Tampa. These colorful lifelike butterflies (except for size) were designed, hand carved, assembled, painted and hung in the WBC judged show area by the Fulkerson family and BGTB members.





Above Exhibit: Herb & June Hill, Raingreen Tropical, Lithia, FL
Right: Exhibitor unknown (if you know, let us know!)



Exhibit by Sarasota Bromeliad Society



Exhibit by Seminole Bromeliad Society



Exhibit by Bromeliad Society of South Florida, waterfalls, animals, jungle calls, and beautiful bromeliads. Miami club hired a huge truck to bring the exhibit to the conference!



Photos By
Dave Fulkerson
and thanks to his
daughter, Debra,
for allowing us to
use them.



Top left: artistic arrangements
Top right: exhibitor unknown but beautiful display
Middle Left: Kay Miller, Tampa, Artistic arrangement
Bottom Left: Exhibitor Bill & Audrey McCrory





REMEMBERING ROBERTO BURLE MARX (1909-1994)

by Herb Plever

The stimulus for this article was a retrospective, month-long exhibition of the paintings and gardens of Roberto Burle-Marx at the Jewish Museum in New York. The Museum's brochure noted that Burle Marx "was one of the most influential landscape architects of the twentieth century, yet he is not a familiar figure outside of his native Brazil. He is best known for his iconic seaside pavements on Rio de Janeiro's Copacabana Beach, and for his abstract, geometric garden designs. But his work encompasses an enormous range of artistic forms and styles: Burle Marx was a painter and sculptor; a designer of textiles, jewelry, theater sets, and costumes; a ceramicist and stained-glass artist. He was an avid art collector, a talented baritone, a consummate cook, and a visionary self-taught botanist and ecologist. For him, all these endeavors were equally important, facets of one another." The Museum omitted one very important aspect of his work and interests: He was the first landscaper to use plants native to Brazil to populate his gardens. He acquired a coffee plantation in Sao Antonio de Bica on the outskirts of Sao Paulo and converted it to a large estate of many acres on which he created a beautiful, naturalistic landscape filled with plants he collected from the Brazilian rainforests, savannahs, rocks, seaside pavements on Rio de cliffs and mountains. Burle Marx grew and studied collected bromeliads, Philodendrons, ferns, water lilies, orchids and other tropical plants until he was an expert in their biology and horticulture. That estate was donated by Roberto to the Brazilian government and it became a protected national monument called Sitio Burle Marx with more than 3,500 species of plants. He amassed a very large collection of bromeliads, and became the dean of the great Brazilian bromeliad experts such as Roberto Menescal, Roberto Kautsky, Luiz Correia de Araujo Renato Bello, Elton M. C. Leme and Luiz Felipe Nevares de Carvalho (who recently died).

Brom growers will recognize Roberto's name because *burle-marxii* is the name of a species in 10 genera: *Aechmea*, *Dyckia*, *Alcantarea*, *Cryptanthus*, *Neoregelia*, *Hohenbergia*, *Neoglaziovia*, *Pitcairnia*, *Orthophytum* and *Tillandsia*. Early in 1990 a friend, who had just visited Burle Marx, reported that he was in poor health and seemed to be getting weaker. I was concerned because I had always wanted to get the BSI to honor Roberto at a World Conference.

At the conclusion of the 1990 WBC in Houston it was announced that 1992 conference would be hosted by the Bromeliad Society of Tampa Bay. I collared Tom Wolfe, then President of that society, and asked him to consider inviting Burle Marx as keynote speaker of the conference. Tom said he would be happy to propose it to his Board if I could get Burle Marx to come.

I called Roberto in Brazil and invited him to come to Tampa Bay in 1992. He said he was honored but would have to decline because his doctor had ordered him to cut down on traveling. He admitted that he had to travel to New York in the fall of 1991 to install a large cultural exhibition of his work at the Museum of Modern Art, but that was because he had made a firm commitment to the Museum the year before. I asked him to hold his decision for a few weeks to see if he was feeling better. I called him back in two weeks and talked to him at length about



the significance of his speaking at a World Bromeliad Conference and how much it would mean to bromeliad growers. Although he was unwilling to say yes, I could see he was wavering. So I called Elton Leme in Brazil and asked him to visit Burle Marx and try to persuade him to come. A short time later, Elton advised me that Roberto had agreed to accept our invitation, provided that we would pay for the expenses of travel and hotel for both and him and his health aide.

Tom Wolfe and the Tampa Bay board (BGTB) agreed to do so. The Tampa Conference was a great success, and the BGTB and the BSI can be proud that we were able to honor a great man during his lifetime. Burle Marx died two years later in 1994.

Coincidentally, the erudite Floridian Jose ("Pepe") Donayre and I both saw the Burle Marx exhibition at the Museum of Modern Art in New York called "The Unnatural Art of the Garden." Among the art works, Roberto had supervised the installation of a very tall, abstract display of more than 100 bromeliads. Pepe was working at the United Nations at the time and says that when he saw that display he was turned on to bromeliads and became a grower and bromelophile.

In a career that spanned almost 60 years, Roberto Burle Marx created nearly 3000 landscape gardens and terrace and roof top gardens for public and commercial buildings, parks and private homes in 20 countries around the world. Those of you who watched the Brazilian cultural exhibition at the Olympic Games in Rio, know that Burle Marx is honored as one of three great heroes of Brazil, not only for his artistic contributions but also for his lifelong work to prevent the destruction of the rainforests. In addition to creating thousands of paintings and sculpture, Roberto Burle Marx designed walkways and garden plots to beautify the avenues of many cities of Brazil and other countries.

The most famous of these is the Copacabana Promenade - three miles of three different mosaic tile walks on Atlantic Avenue along Copacabana Beach in Rio de Janeiro. Roberto is celebrated in Miami, Florida for his tile design on ten blocks of walkways on Biscayne Boulevard. To mark the 25th anniversary of Burle Marx's design of this Miami streetscape, the Consulate General of Brazil, and Passport Miami, sponsored a celebratory reception in Downtown Miami where a plaque was unveiled to permanently commemorate his achievement. He also excelled in the visual arts, transferring some of his major design works to colorful paintings and tapestries as he developed his signature gardens of bold curved forms mixing plants and local materials.

To accompany Burle Marx's exhibition at the New York Museum of Modern Art in 1991, William Howard Adams published a booklet with 90 photos in which he recognized "Burle Marx's affinity for the sensibilities of such 20th-century artists as Calder, Léger, Miro, and Picasso, and his unique ability to apply their vocabularies in eloquent compositions of earth and plant." Adams described the evolution of Burle Marx's art, his close collaborative relationships with such architects as Le Corbusier, Oscar Niemeyer, Lucio Costa, and Rino Levi, and his long-standing efforts to save the Brazilian rain forests."



Brasilia, in central Brazil, has been its capital since 1960. It is a very modern city that arose from a desert area where there had been no structures. Brazilian architects, especially the great Oscar Niemeyer created a city of futuristic public and commercial buildings and private homes all surrounded by landscape gardens and terrace and roof gardens designed by Roberto Burle Marx. Among these are the Itamaraty Palace with the offices of the Ministry of Foreign Affairs, and buildings for the Ministry of the Army, Ministry of Education & Health, Ministry of Justice, the National Congress of Brazil (Senate and Chamber of Deputies) and the Claudio Santoro National Theater. Of course there are many hundreds of Burle Marx designed landscape gardens and terrace and roof gardens in Rio de Janeiro, Sao Paulo, Petropolis and other Brazilian cities. In the conservatory of the famed Longwood Gardens in Kennet Square, PA, Burle Marx created a permanent bromeliad display with sprays of water cascading into clear pools. The bromeliads are mounted on the vertical rock walls of the greenhouse. Roberto used hundreds of plants, 35 tons of rock and 3,000 feet of heating cable to create today's Cascade Garden. Burle Marx designed some breath taking gardens for the private estates of wealthy clients. For me the most spectacular garden was one Roberto designed for Odette Montiero. It was later redesigned by Burle Marx for a new owner of the property. For about 100 years following 1830, the "Coffee Barons" in Imperial Brazil, made huge fortunes growing and selling coffee ("Black Gold") in the Paraiba Valley of eastern Sao Paulo. One of them owned the Vargem Grande Coffee Farm in Arieas; by one of his descendants undertook to convert that huge coffee plantation into an estate. He hired Burle Marx and his associates to landscape the different gardens. It was so huge a project it took Roberto 10 years to complete it, and of course he used lots of bromeliads.

The Cavenelas Residence in an estate near Petropolis had been demolished in the 19th century. When it was purchased by Gilberto Strunk, he hired the architect Oscar Niemeyer to rebuild the Residence and Roberto Burle Marx to landscape the estate grounds with gardens. The team of Niemeyer and Burle Marx were the choice for many famous government, commercial and private buildings. Roberto Burle Marx died on June 4, 1994 at the age of 84 years in a farmhouse in Bara de Guarativa.

It is important that from time to time we acquaint new members and remind ourselves of the illustrious contributions this great artist and humanist made to our world.

Editor's Note: So now you know how the 1992 WBC was able to get a world renowned speaker for our banquet!



Roberto Burle-Marx

Building a Greenhouse in the Suburbs

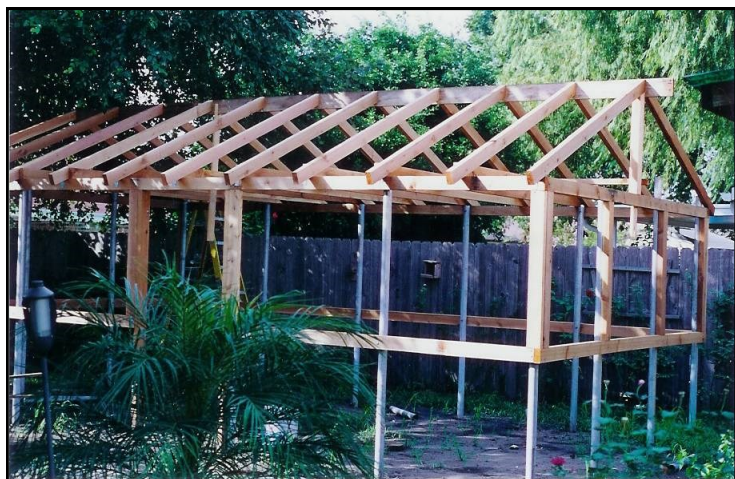
By Bryan Windham

Building a greenhouse in the suburbs is a lot different than most greenhouses in the country. You may have several acres to work with and have room for a commercial type greenhouse. Those types are not really suited for the city. This is the way I built my greenhouse. I started out measuring the yard and deciding how big I wanted to build, (and how much room my wife would let me take for my project).

Once I decided how big it was going to be, I drew it out on paper and started making a material list. I started calling the supply houses to get prices on materials, which will also help you to decide how big you can afford. I built my greenhouse 20 ft. x 12 ft. with 7 ft. walls and the peak of the roof at ten feet I laid out the area with a string line and started setting the post. I used 2" galvanized post every 4 ft. apart making sure to lay out for the door opening. I set the post in concrete and back filled with dirt and checked each post to make sure they were level. I let the post set up over night.



The next day I started on the framing, using all 2 x 4 cedar lumber. Treated lumber is toxic for Bromeliads and should never be used over plants. I used the 2 x 4 cedar and ran three bands around the greenhouse. The first band I ran was at the top of the 7 foot mark. The bottom band at the ground level I used treated lumber because it was below the plants. The third band I ran was at the 36" mark from the floor. I drilled through each 2 x 4 and through each post then bolting the 2 x 4 to the post with galvanized carriage bolts nuts and washers. At that point I framed in between the post for the siding and the windows. I used a hardy board siding which has a concrete



base siding. The one I used had a wood grain finish that is rot resistant and will last a long time. When painted it looks just like wood siding. I ran the siding from the ground to the 36" mark. It also helps hide anything you put under the benches.

After the siding was put on I started with the roof. I cut the rafters on the proper pitch needed. I nailed each rafter to the top band and to the ridge board. I installed storm straps to the rafters for more strength.



The next step was to put the roof supports on. First I ran 1 x 4 cedar boards the length of the roof crossing the rafters and securing them with screws. I ran three rows of 1 x 4 on each side of the roof, close to the peak, then one 3 foot down and a third one 2 inches from the bottom. On top of the 1 x 4's I screwed down a wooden corrugated strip the same shape as the panels. This is for support and it seals off outside air and insects. I then started installing the panels. I used a corrugated polycarbonate panel from Home Depot. It is much stronger than fiberglass and it lasts longer. I used the clear panel that looks like glass. It blocks out 99% U V rays. It comes in 12 ft. and 8 ft. panels 2 ft. wide. I predrilled each screw hole with a 1/8" bit, then using 2" screws designed for the panels which comes with a rubber washer on each screw. I did the same with the walls using an 8 ft. sheet and cutting it in half. I let the panel overlap the hardy board siding by one inch.



The next step was to put a ridge cap on the peak of the roof, using the same screws and method for the panels. I installed the door, windows and exhaust system. For the exhaust system I used a 20" fan from Grainger with a 20" shutter which closes off when the fan shuts down. I installed the fan on the 12' side and installed an electric damper at the opposite end for the inlet air. I mounted a ther-

mostat inside the greenhouse that controls the damper and the fan to come on at 85 degrees and has a 6 degree differential.

I go in the greenhouse at night time a lot so I installed four weather proof fluorescent fixtures on the ceiling and wired it to a switch on my patio. I used a ground fault circuit for all of the power feeding the greenhouse. The trick to growing healthy Bromeliads is air movement. I mounted a circulating fan high up in the greenhouse pulling the hot air from the peak and blowing it down to balance the temperature throughout the greenhouse. This fan runs 365 days out of the year. I hardly ever have a scale problem moving that much air.

I built my benches from cypress lumber I got from an old orchid greenhouse that was being torn down. I built them 36" off the floor, right at the height of the siding. I covered the floor with weed blocker and covered with limestone. I used square stepping stones between the benches for the walk way.

No matter how big you build your greenhouse it will never be big enough. My suggestion is to be selective on what you grow and that will at least give you time to decide how much you can



I built my greenhouse 20 ft. x 12 ft. with 7 ft. walls

add on to handle the next batch of plants that you just have to have. I know because I already added on to the side and back of mine. From April to October I use 46% shade cloth on the main part of the greenhouse. On the addition which is just a roof with the clear polycarbonate panels on it. I left off the shade cloth to see how much light I could get away with without burning. Most of the Neoregelias and other genera did really well with just a few bleaching out. This year I will add a piece of 30% shade cloth to the overhang because I am running out of room in the main greenhouse and I will have to bring some of my other plants out there.

I built my greenhouse four years ago and it survived hurricane Katrina with the only damage to it was one panel ripped off, which was a blessing in disguise. It came off the roof and not having power for two weeks and no water it allowed the heat to escape and I think that was what helped save my plants. The reason I installed windows was in case you loose power or your fan motor goes bad, you have a way of ventilating the greenhouse if you are home. The only thing that I might change is if I would build another greenhouse I would go higher so you can hang more plants and of course I would build it a little bit bigger!!!

*Reprinted From the River Ridge Bromeliad Society Newsletter
February 2007
Metairie Louisiana*