FLORIDA WEST COAST BROMELIAD SOCIETY

1954-2021

Celebrating over 67 Years in Bromeliads

November 2021 Newsletter

NEXT MEETING

Date & Time:	Tuesday, November 2, 2021; 7:30 pm
Location:	Good Samaritan Church 6085 Park Boulevard Pinellas Park, Florida 33781

The church's conditions for use of the meeting hall will remain the same until further notice and are as follows. We must limit the number of people, must wear masks regardless of vaccination status, and must sanitize the tables and chairs at the end of the meeting. We will also continue the policy of no shared refreshments but will have available some packaged snacks and individual bottles of water and soda.

NOVEMBER MEETING

November's program will be three-fold. First, we will review the history of the FWCBS in order to gather material for a future article for the BSI Journal to help celebrate the upcoming June 2022 World Bromeliad Conference. Second, we are creating a digital directory composed of pictures of members. Please bring one of your favorite plants for a photo of you with the plant. If you like, you can do a Show and Tell on why you like that plant. Third, we will be revisiting ideas for our upcoming World Bromeliad Conference display for June 2022. Dick Dailey will also share some ideas that he has formulated and hopefully we can get volunteers to start organizing and executing.

<u>2022 Officers and Trustees Election</u>

At the next meeting, we will be electing our officers and trustees for 2022. The slate of nominees is as follows.

President:	Phil Monnig
Vice President:	Richard Poole
Secretary:	Brian Corey
Treasurer:	Gary Lund
Trustee:	Monika Hale, to serve a three-year term, thru 2024
Trustee:	Sandy Holloway, to serve a two-year term, thru 2023, which will be the remaining two years of Phil Monnig's current trustee position

Others can also be nominated for one of these positions, if they would like. Note: If you wish to nominate someone other than yourself, the other person must be aware of and consent to the nomination.

LAST MEETING HIGHLIGHTS

OCTOBER PROGRAM

The speaker at our October meeting was **Bruce Holst**, Vice President for Botany at the Marie Selby Botanical Gardens in Sarasota, Florida. The topic of his talk was *Uncovering the Mysteries of Herbaria*. *The What, How, and Why of Herbaria—The Stories Specimens Tell!* Herbaria (singular: 'herbarium') are described variously as a systematically arranged collection of dried plants, a room or building of dried plants, and/or a box, cabinet, or other receptacle in which dried plants are kept. Bruce explained how plants are collected, prepared, and added to an herbarium, what a specimen can tell us, the importance of preserving collections into the future, and the size and depth of Selby's herbarium.

Herbaria are invaluable storehouses of preserved plant specimens that are used for scientific botanical studies. They yield information about not only the plants themselves, but also related subjects such as ecology, phenology, distribution, ethnobotany, and botanical history of the plants. They are useful as a teaching tool, in species identification, and for documentation of regional flora, taxonomic groups, ethnobotanical uses and the presence of a plant at a given time at a given location. They also aid in mapping the Earth's biodiversity.

According to Bruce, there are about 3,400 herbaria worldwide that collectively contain a total of almost 400 million plant specimens, and these collections continue to grow daily. The herbarium at Selby is among the top five herbaria in the U.S. in the number of their bromeliad and orchid specimens. Since it was established in 1973, Selby had added about 117,000 items to its herbarium with a focus on vascular epiphytic plants from the American tropics and subtropics. Selby has over 14,000 specimens of bromeliads, nearly 40,500 orchids, and nearly 10,000 gesneriads.

The development of the first herbarium is attributed to a 16th century Italian who pressed plants and then bound them in a book. Methods for preparing and preserving specimens improved by the 18th century when only one specimen was mounted per piece of paper and was then stored loosely in cabinets.

The process of building a herbarium starts with field collection of specimens, then pressing, drying, identifying, labeling, mounting, storing, and preserving them. Bruce walked through the steps of this process.

- **Field collection** is accomplished by whatever means necessary and available—by air, water, land, and everything in between. All parts of a plant are collected for accurate identification, and plants should be healthy, clean, and free of pests and disease. Duplicate samples should be collected at the same time in case one specimen is lost or damaged and to allow one of the duplicates to be sent to a botanical expert for identification. If possible, additional examples should be collected throughout the year, to represent

seasonal changes. Identification tags are attached to the plants as they are collected to aid in later identification. Detailed field notes such as date, collector(s), plant name, description, locality, coordinates, geography, and habitat are made, along with detailed photographs of all views of the plant, its various parts, and its habitat.

- **Pressing specimens**: Specimens should be pressed as quickly as possible after collection, while they are fresh. The plants are placed on blotting paper such as newspaper and then covered with two more sheets of the blotting paper and corrugated cardboard. These are then placed in a press made of hardboard or plywood boards cut to the same size as the drying paper. Pressure is applied evenly using heavy objects or straps to keep the press tight.
- **Drying specimens**: Plants in the press should be dried quickly to remove liquid from the plant to prevent mold and rot. The press is put in a warm, airy place until the specimens are completely dried out. Herbaria can dry specimens further using an electric dryer that holds the presses and provides steady heat between 95°F and 113°F. Bruce stated that while most epiphytes are easy to press and dry, bromeliads are not because they can have a lot of liquid in them.
- **Permits**: Permits, shipping, and paperwork for plants collected outside the United States will be the same as if shipping live plants. Most countries require a special plant collecting permit and an export permit, and the US requires an import permit.
- **Mounting** is the process of attaching a dried pressed plant and its label to a sheet of heavy paper. Herbarium staff use durable, archival materials that are free of acids and other compounds that may cause them or the specimen to degrade or discolor over time. These include 100% cotton paper, a combination of neutral-pH PVA adhesive and gummed linen hanging tape, and storage folders. The label should be placed on the bottom right-hand corner of the paper and should include the plant name, plant family, description, location, date, collector, and any other relevant details.
- **Accession** is the data entry performed for each specimen added to the herbarium collection. This includes the information from the field notes, labels and any photographs and drawings made of the plant.
- **Storage and conservation**: Dried plant material is frozen for at least 72 hours before entering the herbarium to kill insects in the specimens. The specimen can additionally be treated with an organic insecticide to control pests. The most common pest of the herbarium specimen is the biscuit beetle. The best conditions for storing mounted specimens include low temperature (50–65ºF), low humidity, low light, storage in folders in air-tight cabinets or cases, and infrequent handling. The Selby herbarium has about 150 cases that can each hold 500 to 1,000 specimens. **Type specimens** are herbarium specimens that represent the standard example of a specific plant and are important for taxonomic reference and species identification. Selby keeps their type specimens separate, in the Special Collections, where they are not handled a lot. Selby has over 4,700 type specimens, one of the highest percentages of any herbarium.
- **Exchange and Collaboration**: The Index Herbariorum is a directory of herbaria at 3,400 locations around the world where a total of almost 400 million botanical specimens are permanently stored. Through it, the public can access information about these collections and their specimens. The index is currently maintained by the New York Botanical Garden and is available online at this link-- http://sweetgum.nybg.org/science/ih/. This online index facilitates collaboration among herbaria, where they can borrow and exchange specimens.

Even though this digital information is a useful tool, there is still no substitute for the physical specimens, which will always be valuable.

This past summer Selby initiated Phase I of a Master Plan for expansion and improvement of its downtown campus that will increase space for plants and people and showcase their collections of bromeliads and orchids. This phase will include a new Welcome Center, a cutting-edge Plant Research Center with a state-of-the-art herbarium and laboratory, and a Research Library that will safeguard priceless, rare books and hand-colored botanical illustrations dating from the 18th century. The buildings will incorporate stormwater collection systems that are designed to clean and reuse more than a million gallons of water a year.

SHOW AND TELL

Monika Hale	*Guzmania sanguinea* (picture below)
Franne Matwijczyk	*Aechmea fulgens* *Ananas bracteata* *Portea alatisepala* (pictures below) x *Sincoregelia* 'Burgundy Hill' (*Neoregelia* 'Royal Burgundy' x *Sincorea navioides*)
Nicole Matwijczyk	*Aechmea* 'Shining Light' (*Aec. fulgens* var. discolor x *Aec*. *ramosa*; pictures below)
Kathy Risley	*Nidularium procerum* or *procerum* hybrid
Nancy Schmidt	*Wallisia cyanea* (formerly *Tillandsia cyanea*; picture below)

SHOW AND TELL PLANTS

Guzmania sanguinea

Portea alatisepala

Aechmea ‘Shining Light’ (*A. fulgens* var discolor x *A. ramosa*

Wallisia cyanea

THIS AND THAT

USF Fall Plant Festival

Members Marty Baxley and Jose Rosado (picture on the right) sold bromeliads on behalf of our society at the USF Fall Plant Festival the weekend of October 9 and 10. We thank our sellers and in particular Marty, who serves as our Sales Chairman, for maintaining our place at the USF sales. Below are some pictures Richard Poole took of our club’s sale plants.

Jose Rosado

***Tillandsia mallemontii* Cluster**

Below are pictures from August 2018 of a cluster of *Tillandsia mallemontii* that I originally acquired as a small cluster of a few plants in 2010. This *Tillandsia* grows in colonies of up to several dozen plants and has fragrant, purple flowers. It can be mounted but I chose to suspend it from a piece of monofilament line. It grows in bright shade with good air circulation.


Tillandsia mallemontii, August 2018

It turns out, though, that over time the stems can rot and the cluster can fall apart, which is what this cluster did a few months ago. Below on the left are pictures of the old stems and approximately 25 individual plants that made up the original cluster. I discarded the old stems and set about reconstructing a cluster using the now-separated individual plants. Their stems were too short to assemble them all onto one group, so I made two groups of about 12 plants in each, tying the stems together and hanging the bunch from monofilament line. The finished products are pictured below on the right. Now they just need time to develop longer stems so they can hang more freely and form a more pleasant, organized looking ball.


Old Stems Individual plants

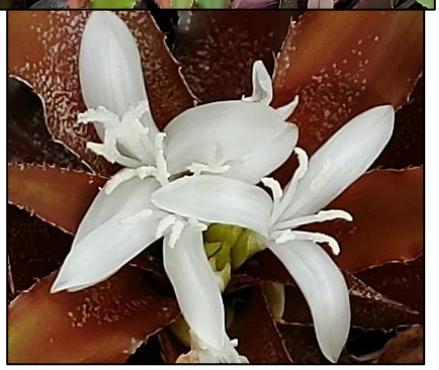

Two new clusters

IN THE GARDEN

Barb Gardner

Cryptanthus ‘Menescal’

Aechmea dichlamydea var *trinitensis*



Cryptanthus ‘Cascade’

Gary Lund

Hechtia species

BROMELIAD AND OTHER PLANT EVENTS, 2021-2022

2021

October 8-November 28, 2021, The Orchid Show 2021: *Aerialists from the Tree Top to the Big Top!* Marie Selby Botanical Gardens, Sarasota, FL
(https://selby.org/dsc/dsc-exhibitions/the-orchid-show/)

October 29-30, 2021, Tropiflora Scary-Good Halloween Plant Sale
Tropiflora Nursery, 3530 Tallavast Road, Sarasota (https://tropiflora.com/pages/events)

November 20-21, 2021, Edison/Ford Winter Estates Fall Plant Festival
2350 McGregor Blvd., Fort Myers, FL
(https://www.edisonfordwinterestates.org/events/garden-festival/)

December 4-5, 2021, Caloosahatchee Bromeliad Society Sale
Edison/Ford Winter Estates, 2350 McGregor Blvd., Fort Myers, FL
Sat. 9 am - 4 pm; Sun. 10 am - 3pm
(https://downtownfortmyers.com/event/bromeliad-plant-sale/all/)

2022

February 12-13, Edison/Ford Winter Estates Winter Plant Festival
2350 McGregor Blvd., Fort Myers, FL
(https://www.edisonfordwinterestates.org/events/garden-festival-2/)

April 23-24, 2022, Seminole Bromeliad and Tropical Plant Society Annual Spring Plant Sale
Sanford Garden Club, 200 Fairmont Dr., Sanford, FL 32773, 9-4 each day
(https://www.sanfordgardenclub.com/sbtps)

June 7-11, 2022, 24th World Bromeliad Conference, *The Big Show*, Sarasota, FL
Celebrate BSI's 70th anniversary, Hyatt Regency Hotel, Sarasota
(https://www.bsi.org/new/conference-corner/)

2021 FWCBS BOARD OF DIRECTORS

President	Kathy Risley, karisley@gmail.com; linocut1@tamabay.rr.com
Vice President	Richard Poole, rapoole4469@yahoo.com
Secretary	Brian Corey, bcorey2@tampabay.rr.com
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Immediate-Past President	Barb Gardner, ooolayz06@gmail.com
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