

FLORIDA WEST COAST BROMELIAD SOCIETY

1954-2015

Celebrating over 60 Years in Bromeliads



March 2015 Newsletter

NEXT MEETING

Date & Time:

Tuesday, March 3, 2015

Doors open at 7 pm; meeting starts at 7:30

Location:

Good Samaritan Church

6085 Park Boulevard

Pinellas Park, Florida 33781

Program

Preparing for the April USF Spring Plant Sale

The next meeting will be a workshop on how to prepare bromeliads for sale, specifically the upcoming University of South Florida Spring Plant Sale on April 11 and 12. Our society has long participated in this event with members selling their bromeliads at our sale booth. Now we want to encourage more members to be part of this event and this workshop can help you do that. Don't be shy about it. Most of us have extra plants/pups we do not have room for, and selling them would be a great way to help finance your bromeliad hobby (or 'addiction' for some of us!). You do not need a large quantity of plants or pups to participate in the sale. Say you have only 10 or so plants/pups to sell. You could be part of the 'small-quantity seller' group that has their plants at one table, sort of a 'cooperative' selling area for six to eight people.

At the workshop, experienced members will show how to remove pups from a mother plant, pot plants, make them presentable for sale, identify plants, and prepare plant labels. If you want to participate in the workshop, bring several plants with you to the meeting. The presenters will assess your plants for sale readiness and make recommendations on potting, cleaning, tagging, and presentation. Bring whatever supplies you would want to use, such as pots, soil, clippers, pebbles rocks, and plant name tags.

If you do not plan to sell at the USF spring sale, you would still want to participate in the workshop to learn how to get your plants ready for other sales including any future garage sale you may have. Not intent on selling? You might still want to participate in the workshop to learn information that has other applications such as preparing your bromeliads for donation to our Annual Bromeliad Auction this coming May. And then, if nothing else, you can learn how to achieve the best appearance for your plants in your garden or shade house, just for your personal satisfaction and enjoyment.

Plant Sales

All members are welcome to sell bromeliads at the meeting. Sellers are requested to donate at least one plant to the evening's raffle table.

LAST MEETING HIGHLIGHTS

Program

Dr. Teresa Cooper talked to us about *New Tactics for Saving Florida's Native Bromeliads*. Teresa is an entomologist who works at the University of Florida Indian River Research and Education Center in Ft. Pierce, Florida, where her primary project is the Mexican bromeliad weevil, an invasive bromeliad-eating weevil that is destroying native bromeliads in Florida. She received her Doctor of Philosophy in entomology from the University of Florida in 2009.



Much has been said and written about the Mexican weevil since it was first reported in 1989 in Dade County, Florida. It has been documented that the weevil immigrated to Florida from Mexico in a shipment of ornamental plants in the late 1980s. Currently the weevil can be found in most of the counties throughout the southern half of the state where some populations of native bromeliads have been decimated by the weevil. An estimated 99% of the population of native bromeliads formerly found in the Enchanted Forest Sanctuary in Titusville is now gone due to the weevil. Twelve of the 16 native bromeliad species in Florida have been particularly susceptible to attack by the weevil. *Tillandsia utriculata* has been the most impacted among native bromeliads and is becoming rare in its habitat. Non-native bromeliads have also been attacked by the weevil in some areas.

Bromeliads have an ecological importance in their habitat, and their loss has an impact to the environment in several ways. For example, their tanks collect and hold water in which diverse flora and fauna are known to live. Up to 19 different invertebrates have been found in bromeliad tanks.

Dr. Howard Frank along with Teresa and others initiated a classical biological control study that included a number of expeditions to Latin America to identify a control for the weevil. They found a parasitic fly native to Honduras that interrupts the weevil life cycle by eating the weevil larva, and in 1992 they began collecting numbers of these flies. After years of raising and testing fly colonies in a laboratory, the group obtained permission from the US Department of Agriculture to release the flies, which they initiated in 2007 in a controlled area of weevil-infected bromeliads. Post-release monitoring conducted by the group found poor recovery of the flies, i.e., they were not thriving. In addition, there appeared to be no beneficial impact on the bromeliad population. (Teresa did her 2009 doctoral thesis on the fly release program and results obtained.)

Teresa and others are now looking for other solutions to the weevil infestation in Florida with what she calls a 'bottom up' control, with two objectives. First, they would look at the nature of plants infected and varieties of those plants and second, they would conduct active conservation and augmentation programs, as follows.

1. *Til. utriculata* in Central America vs. *Til. utriculata* in Florida

Til. utriculata is native to Central America and coexists there with the Mexican bromeliad. It appears resistant to the weevil and shows no negative impact from its presence. This leads Teresa and her group to question whether *Til. utriculata* found in Latin America is the same form or species as *Til. utriculata* found in Florida. The researchers travelled to Belize where they collected whole plants for DNA testing to determine this. If the two forms are different, they could potentially hybridize them to make a resistant form. They also collected plant leaves to test for sugar content. It is thought that the sugar content in leaves of the Central American form is lower than the content found in the Florida form and results in a tougher, more fibrous leaf that is less nutritious to the weevil larvae.

2. Active Conservation and Augmentation

The second arm of the 'bottom up' control approach to addressing the loss of native bromeliads is to actively conserve *Til. utriculata* in Florida. This program will enlist parks, refuges, sanctuaries, and private landowners' help in promoting, maintaining, and protecting *Til. utriculata* populations on their lands. In February of this year Teresa and her group initiated this program in the Enchanted Forest Sanctuary in Titusville where they rescued seedlings and plants that had fallen from the tree canopy. Below in the "This and That" section is a report from Teresa on that work.

NOTE: Our October 2014 newsletter had an article by Jay Thurrott (Florida East Coast Bromeliad Society) with guidelines for detecting the presence of the Mexican bromeliad weevil in bromeliads. You can find additional information about the weevil on the Florida Council of Bromeliad Societies website fcbs.org, under "Weevil Information".

Show and Tell

Confirmed by Helga Tarver

- Alton Lee *Guzmania musaica* (picture below)
Neoregelia 'Ardie' (picture below); unregistered Chester Skotak hybrid, named for Ardie Reilly, a member of the Chicago Bromeliad Society
- Franne Matwijczyk *Aechmea victoriana* var. *discolor*
Neoregelia olens x *compacta*
- Linda Sheetz *Aechmea disticantha* var. *schlumbergeri* x (*Aec. caudata* 'Melanocrater?'), (picture below), unregistered Grant Groves hybrid that he refers to as 'Captain Mike' for Mike Michalski, South Florida Bromeliad Society
- Susan Sousa *Neoregelia* 'Hannibal Lector' x (*Neo. Norman Bates?*), (picture below)
Neoregelia, unknown species or hybrid
Canistrum, unknown species or hybrid
- Janet Stoffels *Aec. gamosepala*

Show and Tell plants



Guzmania musaica



Neoregelia 'Ardie'



Aechmea disticantha var. *schlumbergeri*



Neoregelia 'Hannibal Lector' x (*Neo. Norman Bates?*)

THIS AND THAT

Bromeliad Gardens in the Enchanted Forest Sanctuary

By Teresa M. Cooper PhD, University of Florida

Indian River Research and Education Center, 2199 South Rock Road, Ft. Pierce, Florida 34945

The Enchanted Forest Sanctuary is a small sanctuary located in Titusville, Florida, on the corner of US 1 and Columbia Avenue. The sanctuary once supported a very large *Tillandsia utriculata* population. Unfortunately, the invasive bromeliad-eating weevil, the Mexican bromeliad weevil, arrived in the sanctuary sometime between August 2003 and August 2006. Since, then, the weevil has caused serious damage to the forest's *T. utriculata*, reducing a once abundant population to a much reduced, sparse population. In an effort to repopulate the forest with *T. utriculata*, we have been creating small, concentrated bromeliad gardens in the forest that will be monitored and protected from the weevil. On 11 February 2015, Donna Day and Ernie Winn from the Carlton Reserve, on the West Coast of Florida, where the weevil is also attacking *T. utriculata*, as well as Martha Pessaro, a Naturalist from the Brevard County Environmentally Endangered Lands Program, and Armand De Filippo, from the Sea Rocket Chapter of the Florida Native Plant Society, joined me at the Enchanted Forest (Figure 1 to the right) and helped me create a new garden.



Figure 1: Donna Day, Ernie Winn, and Armand De Filippo preparing the new garden site in the Enchanted Forest.

Bromeliad seeds are wind-borne and when they land on a branch, they take purchase and germinate. Those bromeliads that germinate and grow on small branches often fall out of the canopy within the first few years of their lives because the branches are too small to persist for the lifetime of the bromeliad, or the bromeliad grows too big and the branch can no longer support the plant. The branches break and the bromeliads fall to the forest floor, and if they remain on the ground, they are very likely to die, usually from rot. Donna, Ernie, Martha, Armand, and I rescued these plants from the forest floor (Figures 2 and 3 below).



Figure 2: *Tillandsia utriculata* bromeliads were collected in a basket and taken to the new garden.

Figure 3: Armand De Filippo examining a bromeliad to make sure it is not infested with the weevil.



If the bromeliads were large enough – with leaves at least 6” long and starting to broaden at the base – we reattached the bromeliads to tree trunks using a bit of burlap and a few staples (Figures 4 and 5 below).



Figure 4: Donna Day attaching rescued *T. utriculata* to the trunk of a tree



Figure 5: *Tillandsia utriculata* bromeliads attached to a tree.

In time, the plants will grow, and their roots will attach to the tree. If the plants were very small, we put them in 1' x 1' cedar boxes with a mesh bottom so rain water will drain through, and we hung the boxes up (Figure 6 below). When the seedlings grow larger, we will attach the plants to trees. We had a pleasant day, and a new garden was started in the forest.

Figure 6: Small *T. utriculata* plants in nursery boxes.



New Member

Please welcome our newest member Maridell Hahn who joined our society in February.

Blooming this Month



Guzmania 'Autumn Rush'



Vriesea 'Robin'



Vriesea 'Rosita'



Billbergia wendii

UPCOMING EVENTS, 2015

March 14-15, Leu Gardens Spring Plant Sale

Harry P. Leu Gardens, Orlando, FL (<http://www.leugardens.org>)

March 27-29, Tropiflora Spring Festival

Tropiflora Nursery, 3530 Tallavast Road, Sarasota, 941-351-2267 (tropiflora.com)

March 28-29, GreenFest Plant Sale

University of Tampa, Tampa, FL (friendsofplantpark.com/greenfest)

April 11-12, USF Botanical Gardens Spring Plant Sale

University of South Florida, Tampa, FL (cas.usf.edu/garden)

April 16-19, Bromsmatta, 18th Australasian Bromeliad Conference

Parramatta, Australia, hosted by the Bromeliad Society of Australia (www.bromeliad.org.au)

April 25-26, Green Thumb Festival

Walter Fuller Park, St. Petersburg, FL (stpeteparksrec.org/greenthumb)

August 15-16, Seminole Bromeliad and Tropical Plant Society Sale

The Garden Club of Sanford, Sanford, FL (Ben Klugh at Klughka@yahoo.com)

September 26, Bromeliad Extravaganza, Bromeliads in the Magic City

Hosted by the Bromeliad Society of South FL (<http://www.bssf-miami.org>)

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