



Florida Council of Bromeliad Societies



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On the cover: *Tillandsia jalisco-monticola*, shown at Orlandiana, the 2012 World Bromeliad Conference, by Bullis Bromeliads. Photo © Carol Wolfe. For more pictures of bromeliads exhibited at Orlandiana, see page 7.

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Catching Up, Staying Even

Welcome to the first completely digital edition of the newsletter of the Florida Council of Bromeliad Societies. For the first time since the days of the Council's original publication Grande, the newsletter now features color photographs. Thanks to the electronic version of the newsletter, space is no longer a consideration. This issue is the equivalent of 60 pages in the old format.

Feel free to send articles, ideas for articles as well as photographs of your plants, your society's programs and events for inclusion in the newsletter.

The Florida Council of Bromeliad Societies also has a Facebook page where you are welcome to post your society's events, meetings, bromeliad questions and pictures.

<http://www.facebook.com/pages/Florida-Council-of-Bromeliad-Societies/313420628715363>

Joining the newsletter as the co-editor is Carol Wolfe of the Bromeliad Guild of Tampa Bay. Carol is a noted bromeliad photographer; it is her picture that is on the cover of this issue, and you will find even more of her work in the Bromeliad Gallery, a new feature open to all to submit photographs. Carol was the newsletter editor for eight years for the Bromeliad Guild. Husband Tom Wolfe is a well-known bromeliad grower who gives programs throughout the state, a past president of the BSI and of his own Guild. So Carol is no stranger to the bromeliad world, and the Council is lucky to have her on board!

Look for new features in this new format, including the aforementioned Bromeliad Gallery, Blast from the Past with articles from early FCBS newsletters, a complete listing of FCBS member societies and their websites, newsletters and contact information, and The Last Word, an occasional guest article.

Thank you very much to the following people for their contributions to this issue of the newsletter: Ron Cave, Teresa Cooper, Jose Donayre, Howard Frank, Larry Giroux, Colleen Hendrix, Kay Klugh, Alton Lee, Mike Michalski, Linda Sheetz, Harold Sisco, Jay Thurrott, and Carol Wolfe.

I hope you enjoy this expanded edition of the newsletter. Feel free to contact me at Karen@fcbs.org to contribute articles and or photographs or with comments on or suggestions for the new incarnation of the FCBS newsletter.

In Search of Shade

By Karen Andreas

While Floridians are blessed with some of the most ideal growing conditions in the country, the sun is not always the bromeliads' friend. Many bromeliads love the morning sun, even unfiltered; it is the blazing sun from the south and west that is the enemy.

Bromeliads grow well under trees, with sunlight filtering through canopy; a dense canopy can be



needed in western exposures. Even then, sometimes the canopy of a tree does not offer enough

protection. Shrubs and even the ubiquitous Philodendron selloum can provide adequate

cover. So plant trees! Plant plants! Easy, right? But what do you do in the meantime?



Back yard bromeliad growers are familiar with greenhouses. They can be as fancy or as basic as you like – and take up a fair amount of valuable room, especially on smaller urban lots. Shade houses fill up quickly, and then you are left with your dilemma unresolved. Shade! Where can I get shade?

place your bromeliads out of the splash zone – chlorine is not a friend. Bromeliad spines are also not friends to bare legs. Regardless, many a pool enclosure or lanai feature beautifully grown bromeliads.

If you are lucky enough to have a pool covered by a screened structure, it often can offer some respite from the sun's brutal rays. Be sure to

Shade cloth, PVC lattice, 4' x 4' cedar posts and chain link fence posts can come to your rescue.



PVC lattice is remarkably resilient in the landscape. You can build as small or as large a structure as you like. Use the cedar posts for the corners and top, and fasten the sheets of lattice to the wood. If you need even more shade, throw shade cloth over the top. The floor can be dirt or you can get concrete landscape squares or even pavers from Home Depot, Lowes or your local hardware/garden centers. You also can leave the top of the structure open if you need that shot of light at midday. Sheets of lattice can also bend – more on that in a minute.



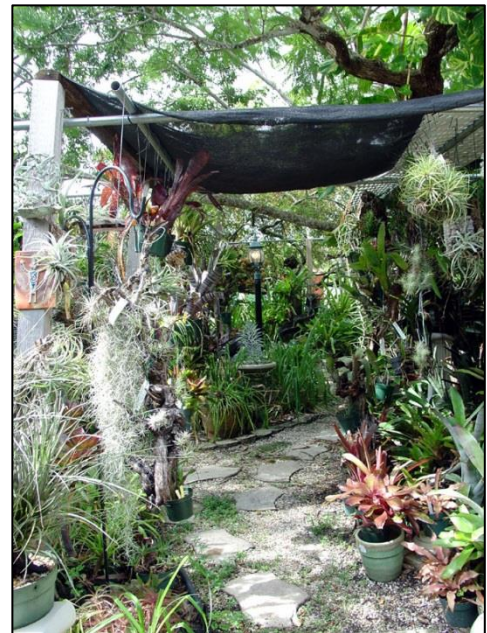
A top rail used for chain link fences has a couple of good

uses for bromeliad growers. It can provide more hanging space: attach it to cedar posts for overhead capacity. It also can be used, in conjunction with those posts, to provide shade over walkways, extend shade out from your shade house or along fences. Throw some shade cloth over top, hang a gazillion

bromeliads and no one will ever notice the metal.

A word of caution here. If there is any canopy overhead, you are likely to have an accumulation of leaves in the shade cloth at some point. Be sure to leave yourself enough space to let you get to the top of the cloth and remove the leaves. Water seeping through leaves – especially oak leaves – may be acidic and not a comfort to your bromeliads.

In the winter time, you can also drape large pieces of freeze cloth over these structures when frost or freezes hit. Be sure to anchor the freeze cloth securely in the ground, otherwise any residual heat will be lost and the cloth will be ineffectual.



Sheets of PVC lattice are quite versatile. As well as being used for the sides and tops of structures (and providing more hanging space) the lattice can be curved over the metal fence posts; PVC pipe is used to keep the curve in place and extend cloth if needed.

Should you need even more protection, throw shade cloth over the curved PVC. You can use the shade cloth and remove it seasonally, depending on how much protection you need. You gain hanging capacity, sun protection, and great growing space on the ground below.



Bromeliad people tend to be innovative growers. Please share your ideas and pictures on how you have solved your sun issues. Email Karen@fcbs.org and share your solutions in future newsletters!

Article and all photographs ©Karen Andreas



Bromeliad Gallery

These bromeliads were displayed at Orlandiana, the 2012 World Bromeliad Conference in Orlando. All photographs are ©Carol Wolfe.

If you would like your pictures featured in the Bromeliad Gallery of this newsletter, send the picture(s) and names of the bromeliads to Karen@fcbs.org.



Cryptanthus microglazioui shown in a decorative container by Steve Hoppin.



Dyckia (('Arizona' x *choristaminea*) x 'Brittle Star') x 'Paylen', shown by Michael Kiehl.



Neoregeloa 'Devero' shown by Georgia Orser.



Orthophytum gurkenii, shown by Peter Kouchalacos.

Bromeliad Gallery



Cryptanthus 'Miami Heat', shown by Steve Hoppin.



Vriesea (hieroglyphica x fosteriana) x ('Nova' x platynema variegata), shown by David Fell.



Neoregelia "Mercury is in Love", shown by Jungle Gems.



Neoregelia 'Sibella', shown by Bullis Bromeliads.

Blast from the Past:

Given the cold weather we have all just experienced, look through this window in time: Carol Johnson reporting on the winter of 1981-1982 , published in Vol II, Issue 1 of the FCBS Newsletter

It Happened Again

By Carol Johnson

Some observations from throughout Florida as regards another cold winter and the way it affected bromeliad growers, commercial and hobby:

1. Worried about the tourist image, most weather forecasts and reported temperatures are misleading or overoptimistic. Weekend weather forecasts on TV are hard to come by since they would conflict with football broadcasts.
2. Florida bromeliad growers are becoming quite expert at protecting exposed plants. Again and again the reports state “plants were left in the ground, covered with leaves, pine needles, old blankets, drapes or bedspreads and suffered no damage”.
3. Plants fed with high nitrogen fertilizer and in strong growth were hit hardest by the cold.
4. Greenhouses covered with plastic become unbearably hot during the day, then cold at night. Temperatures may vary from 40 degrees (optimistically) to 100 degrees. Even with adequate ventilation and the tough nature of the plants, this is not the ideal environment, especially for vrieseas and guzmanias.

Damage reports by areas:

CENTRAL FLORIDA: Longwood-Sanford-Apopka-Orlando. Killing frosts on November 21 & 22 (earliest cold spell in 30 years). Sanford-Longwood lowest temperatures 28 degrees at 6 a.m. November 21. There were freezing temperatures again in December, but due to dry air and ground, there was little damage indoors or out. The week of January 10, 1982, 80 m.p.h. winds flattened greenhouses and/or destroyed greenhouse covers, followed by extreme cold - - lowest reported was 14 degrees, with below freezing for in excess of 12 hours. Aechmeas and streptocalyx (as usual) suffered the most. Even temperatures in the 40s bothers them.

TAMPA WEST COAST: A survey of the Tampa area reveals that growers whose plants fell prey to cold during previous cold years resolved this year not to be caught napping. The attitude “it can’t possibly happen again” has changed to “this year I will be ready for anything”.

Consequently, the bromeliads were given protection and suffered minor damage.

Further south of the Gulf areas the weather was much more severe. Farming areas of Naples, LaBell, Venice, commonly reported low temperatures of 10 degrees. Damage to all outdoor

plants was extensive. It is even doubtful if damaged bromeliads will produce pups. Those plants that were protected, however, came through okay.

GAINESVILLE, JACKSONVILLE, PANHANDLE. These folks just shrug and say they must always plan for cold, so what is 10 degrees more or less? There are some ingenious energy-saving greenhouse structures in the area which should make an interesting future article.

SOUTHEAST. From Melbourne on south, the weather is always, shall we say, the least cold. However, some Miami and Homestead bromeliad growers provided protection this year for perhaps the first time in memory.

The weather pattern of the past decade seems to be changing the Florida winters. Cold seems to be drifting further into the Gulf before being turned back to the Northeast. Now, in the middle of February, with the azaleas, camellias, dogwood, plum and orchid trees in full bloom, it is difficult to remember the January cold. Be prepared, however, Mother Nature may have one last tooth to pull.



This is the original logo for the Florida Council of Bromeliad Societies.

Quesnelia for Your Landscape

By Karen Andreas

Quesnelia is a great bromeliad for the Florida landscape. Its various sizes, variation in inflorescences, and stoloniferous growth add interest to a collection even when the bromeliad is not in bloom. There are approximately 25 species in this genus; *Quesnelia* is definitely a bromeliad that deserves a closer look.

This genus was named for M. Quesnel, the French consul to French Guyana who first introduced this bromeliad to Europe. It is found in the central coastal regions of Brazil where it grows up to the ocean, on rocks, in pastureland and in coastal mountains. Coastal Quesnelias tend to be medium to large in size with brilliant pink inflorescences. Species that grow epiphytically (as air plants) in coastal mountains tend to be small, tubular species that often resemble Billbergias. The inflorescence is short-lived – about two weeks. While Quesnelia grows best in bright light to full sun, it can tolerate lower light conditions.

Generally members of this genus have spiny leaves, although the severity of those spines varies. Use spines to identify *Q. testudo*: the true *testudo* will have spines on its lower scape leaves (see picture). If those spines are not present, it is not *testudo*. It may be *Q. quesneliana*.



Q. testudo has spines on its lower scape leaves – see arrow in the picture on the right. Photos ©Michael Andreas



© Dorothy Berg

Photo © DorothyBerg

Give the larger varieties such as *Q. testudo* plenty of room. They grow vigorously and you will have a clump in no time. The smaller Quesnelia does quite well mounted, growing in baskets, or planted at a base of a tree, which it will climb.

Q. humilis is a smaller member of this genus (8-10 inches high). Its bright red inflorescence holds flowers

that Andrew Steens describes as “orange at the base, shading to bright red and then tipped with purple.” It is a vigorous grower, growing stoloniferously (the new pup is on a stem-like growth – or stolon).

Q. liboniana grows on trees and rocks. Its flowers are dramatic - navy blue and orange-red.



©KenMarks



©Michael Andreas

Q. marmorata pups with short stolons, making it ideal for mounting or cascading out of a pot. Its leaves are green with brown or deep maroon blotches. Victoria Padilla reported a fruity scent emanating from the center of the plant prior to it blooming.

Q. quesneliana grows mainly as a terrestrial bromeliad in sand by the edge of the ocean but is also found on trees in open pastureland. Grow in bright filtered light for compact growth. Williams reports that it is one of those bromeliads that needs to throw a couple of pups before it will bloom, so do not remove the pups right away.



©Herb Plever



©Jay Thurrott

Q. 'Tim Plowman' is a popular cultivar of *Q. marmorata*. It is known for its tall, upright leaves that curl at the top. Do not overwater this Quesnelia and make sure it is not in wet or soggy soil – its curls will straighten!

To see more pictures of Quesnelias, go to <http://fcbs.org>, then to the Photo Index.

Next time you meet a Quesnelia, take it home!

All pictures are from <http://fcbs.org>.

The Mexican Bromeliad Weevil



Backyard bromeliad collections that include both ornamental bromeliads and species (native and non-native) are at risk. The Mexican bromeliad weevil can move through a collection and be gone before its damage is found.

Photo ©Michael Andreas

In This Special Report:
Signs of the Mexican Bromeliad Weevil
My Personal Involvement with the Evil Weevil
Imidacloprid
Weevil Recently Found in Port Orange
Mexican Bromeliad Weevil Report
October – December 2013

Signs of the Mexican Bromeliad Weevil



Generally, bromeliads falling out of trees or pots or laying on the ground for no apparent reason are the first signs of weevil infestation.

Photos ©Michael Andreas



The center of an infested bromeliad will pull out easily. If the culprit is the Mexican bromeliad weevil, chew marks will be present at the base of the leaves. The absence of chew marks but presence of soft, mushy and/or brown material may indicate a fungus infection or other cultivation problem.

Photos ©Michael Andreas



Above left: the leaves are parted, looking for evidence of the weevil.

Above right, the cocoon is found

Photos ©Michael Andreas



Above left: Mexican Bromeliad Weevil larva.

Above, right: the Evil Weevil.

Photos ©Michael Andreas

My Personal Involvement with the Evil Weevil

By Dr. Larry Giroux

It is spring again and our thoughts go to our native bromeliads that grow in the trees in our back yards and in our parks throughout the Southern United States and the islands off our coasts. For the growers of any kind of bromeliads here in South Florida, the reality is that we have this “Evil Weevil,” now throughout much of Florida.

These suckers can fly and be carried by Nature a distance, but they are moving too fast to be traveling on their own volition. We as bromeliad hobbyists are inadvertently transporting them in the plants we grow and sell and buy from friends and nurseries. It is noble that we raise and donate money for research to eradicate this pest, but we must realize our own collections are still a source and mode of distribution of the weevil here in Florida and to anywhere else we take our plants. For those of you who live elsewhere, you buy plants from Florida by mail and on vacations. It is very unlikely that you could buy an infested *Cryptanthus* and not notice the weevil damage, but most all of us buy other plants or introduce other bromeliads taken from possible involved areas into our collections. The weevil may not tolerate the colder weather in your yard, but for sure it will “winter” very nicely in your greenhouses kept at 45-50 degrees. So this article is also for you.

What can we do to help our hobby to overcome this calamity? First check both your outdoor and patio plants and especially any plants you bring home for the telltale signs of infection by the weevil. Look for holes at the base of your plants. These can be present on the outside leaves or hidden by the outside leaves and in the second or third rows of the leaves. The adult weevil chews a hole through the soft leaves to the growing meristem of the plant. This is why the native bromeliads most susceptible are the larger bromeliads like *Tillandsia utriculata*, *T. paucifolia* and *T. fasciculata*, which have a thicker stem. In our collections nearly any juicy leafed plant could be targeted. I have seen Aechmeas, Neoregelias, Vrieseas and more recently *Cryptanthus* eaten away by the weevil.



Cryptanthus from the shadehouse of Bob Stickney six months after weevil infestation. Photo © Bob Stickney

An egg is laid and, when the larvae hatch, they tunnel into the stem; the larvae eat and destroy the meristem, the actively growing portion of the bromeliad. These adult plants never have a chance to produce a flowering inflorescence, and there are no seeds to populate the very specific niche in the environment of Florida. Remember it has taken hundreds of thousands of years of evolution for these specific species of plants to adapt to the particular climatic conditions of Florida. Also as a result of the burrowing of the larvae, the newer central leaves stop developing, and the plant will disintegrate leaving a pile of leaves on the ground beneath the tree or on your bench. Most of the plants attacked by the weevil in our collections will eventually give pups, but that isn't always the case with *Cryptanthus*.

We still have chemical products, which are effective against the weevil. Albeit these are dangerous chemicals, which can affect other insects and even cause harm to our pets and ourselves, if you use common sense and the recommended precautions, we can at least control this “Evil” pest in our own gardens.



Left: an adult *Cryptanthus warren-loosei* with pups that have developed normally from the base.
Right: Damaged *C. bivittatus* with several pups appearing months after damage from the weevil.

Photos © Bob Stickney

Dursban* and Sevin are the most commonly recommended pesticides for use on ornamentals such as bromeliads for leaf miners and weevils. (I should mention here that Sevin is especially toxic to bees. Bees are one of our beneficial insects, so please remember this when using this product.) I use 2-3 teaspoons of Sevin per gallon of water (I often add a systemic to the solution to kill and prevent scale, but that is another topic). I make up 4-5 gallons of the diluted solution in a big 5 gallon paint bucket and dip all bromeliads I bring home from sales, friends’ yards, raffles or nurseries. If you have only small plants to dip, one gallon is adequate. In most cases I plan on repotting the plant into my own mix, so I take the bare root plant or take the plant out of its current container and dip the plant several times into the bucket of Sevin. I try to get the chemical between the leaves. Then I let the excess liquid drain back into the bucket and lay the plant in a dry shady area to dry before potting or mounting. Again I use all necessary precautions to avoid the chemical, even in diluted form, contacting my body. I wear long rubber gloves and don’t let the liquid get between the gloves and my hands. If there is a chance that the gloves have small holes, I use latex gloves under them. I wear glasses to avoid splashes to my eyes. If you can smell the Sevin, then it’s getting into your nose and throat, so I wear a paper mask. If your clothes are getting wet then the chemical is in contact with your skin, so I wear a plastic apron.

When I finish, I wash up well ASAP to rinse any residual off my arms and legs. You can buy any of these recommended aids for dipping your plants at “Dollar Stores”. Remember if it’s toxic to you it is also toxic to your pets, so I keep them away from the chemicals when they are used. When I dispose of the excess, I don’t pour it down the sink. I gently pour it around my plants, away from areas of run-off. I save some in spray bottles for later use on some of the other

outside plants already in the ground or in the trees (I don't spray on a windy day or let the spray come back onto my face or arms). Read the instructions on the bottle before using any chemicals.

In spite of the fact that a natural predator has been identified, widespread release is still not possible. We all need to be more diligent when we introduce plants to our gardens and greenhouses. Think of it as a personal donation to the well-being of Florida's irreplaceable bromeliads and to our hobby.

*Since this article was written, Dursban has been taken off the market.

Dr. Larry Giroux is the editor of the Cryptanthus Society Journal, is former Cryptanthus Society President, a long time Cryptanthus grower and hybridizer in North Fort Myers, Florida. He is active in the Caloosahatchee Bromeliad Society and is the long-time editor of its newsletter, The Meristem. Dr. Larry reports that he has lost 500 Cryptanthus to the Evil Weevil. This article was originally published in the Cryptanthus Society Journal in 2004 and is used by kind permission of its author.

Imidacloprid

Another Entry in the Arsenal against the Weevil

Among bromeliad growers that have successfully fought this weevil, the chemical of choice is imidacloprid, made by Bayer and often called Merit; it is found in Gardener's Advantage, which you can find at garden centers as a spray. It is a systemic chemical, which means that it will last for several months in the bromeliad leaves. The larvae will ingest imidacloprid as it eats the bromeliad leaves and will die. Imidacloprid is not harmful to birds or animals. There is no point in treating your entire collection if you do not currently have a problem. Treat only new plants coming into your collection or only if you have a confirmed infestation. Imidacloprid is also effective on scale.

Weevil Recently Found in Port Orange

By Jay Thurrott

Port Orange, in Volusia County, seems to be at or near the northern extent of the range where *Tillandsia utriculata* naturally occurs. Several freezes in the 1970s and 1980 severely damaged or killed citrus trees, mangroves and tropical vegetation throughout the area, including this largest of the native Florida bromeliads. It has only been in the past ten years that populations of *Tillandsia utriculata* have been spotted in relatively isolated communities in the area, but along with the good news of their reoccurrence comes the concern that the Mexican weevil (*Metamasius calazone*, aka the "evil weevil") may find these bromeliad communities and devastate them.

I had observed one such isolated group of *utriculatas* in a cluster of large oak trees near the Florida East Coast Railroad line and a local thoroughfare for nearly two years now. In that time I've noted many healthy small and medium sized seedlings on the ground following wind and rainstorms-still attached to small twigs and branches. Occasionally I've also seen larger, detached plants that seemed to have been chewed off at the base. A recent inspection of one of those fallen plants revealed a fibrous cocoon, suggesting the possible presence of a weevil. Was it one of the native weevils or the invader - the Mexican weevil? The cocoon had already hatched, so it was impossible to make a positive identification of its occupant.

The following week however, I found two fallen *T. utriculatas* in a residential neighborhood several blocks from the first site. One of those held an intact cocoon. Dr. Theresa Cooper, a researcher with the University of Florida and specialist in the Mexican weevil, was contacted and I was given directions on how to care for the cocoon until its occupant emerged. She noted that an adult weevil should take about 12 days to leave from its pupal form and at that point a better identification could be made. Ten days later a weevil emerged from the cocoon and pictures sent to Dr. Cooper confirmed that this was indeed a Mexican weevil.



Weevil that emerged from cocoon collected in fallen *T. utriculata* in Port Orange.

Photo © Jay Thurrot

In all likelihood some of the fallen plants that were noted two years ago had also been attacked by the weevil. In that time, however, there has not been any evidence of the sort of massive infestation and subsequent destruction of *utriculatas* seen elsewhere in the state. *Utriculatas* in the Port Orange area where the weevil has now been confirmed to exist continue to mature, bloom and disperse seeds which appear to be germinating. Seedlings are growing and subsequently expanding the relatively small habitat where these plants are found. Has a balance been struck between a healthy population of native bromeliads and a small colony of weevils...or is this just the “calm before the storm”?

Jay Thurrott is president of the Bromeliad Society International, a past chairman of the Florida Council of Bromeliad Societies, past president of and editor for Florida East Coast Bromeliad Society, and a BSI judge.

Mexican Bromeliad Weevil Report

October – December 2013

Teresa M. Cooper¹, Ronald D. Cave¹, and J. Howard Frank²

¹Indian River Research & Education Center, UF, Ft. Pierce, FL

²Entomology & Nematology Department, UF, Gainesville, FL

In an effort to revitalize our diminishing *Lixadmontia franki* fly colony, we arranged to receive shipments of potentially parasitized weevil larvae (*Metamasius quadrilineatus*) and fly pupae from Honduras. We received four shipments which arrived on 17 October, 1 November, 23 November, and 13 December 2013. We collected the fly pupae that came with the shipment as well as the pupae that emerged from the weevil larvae after the shipment was received.

The fly pupae were kept in Petri dishes with moist paper towels. When adult flies emerged from the pupae, they were added to the fly colony. A total of 1,438 weevil larvae and 72 fly pupae were received in the shipments. From the weevil larvae, 76 more fly pupae were collected. The percentage of weevil larvae that were parasitized was 5%. Percent adult fly emergence was 46%. Weevil parasitism and adult fly emergence were low (compared to weevil parasitism of 8-59% (average = 20%) and adult fly emergence of 38-100% (average = 77%) in shipments during fall 2012). Seven fly pupae remain from which adults may emerge. Figure 1 shows the number of fly pupae collected and the number of adult flies that emerged from 17 October 2013 to 8 January 2014. The highest number of adult flies to emerge on a single day was 11. Usually only one or a few flies emerged in a day, and there were several days when no adult flies emerged. These results are not promising.

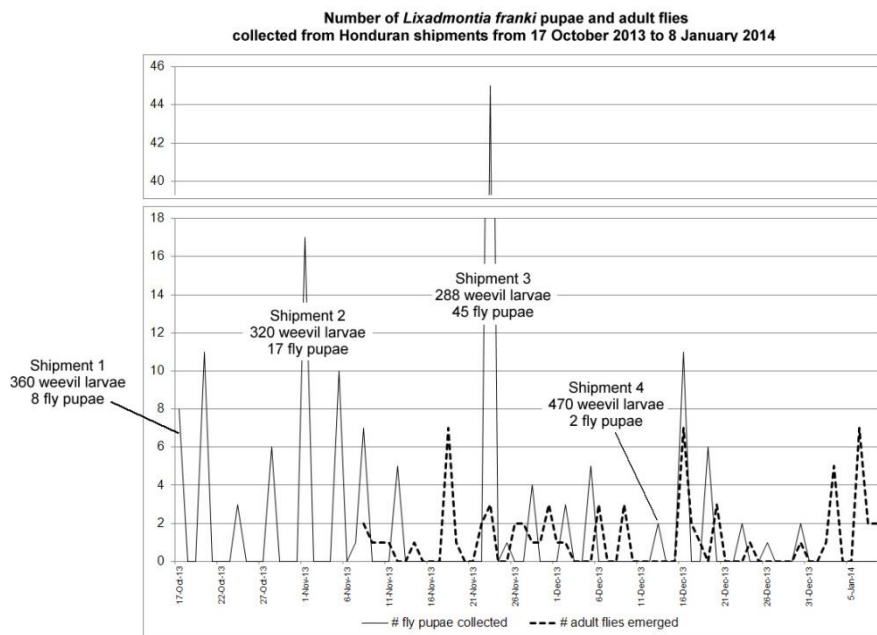


Figure 1. From the shipments received from Honduras, the number of *Lixadmontia franki* fly pupae collected and the number of adult flies that emerged from 17 October 2013 to 8 January 2014.

We have been unable to continue the research on the fly's response to host weevil and bromeliad odors because of the low number of flies available.

The research to test host bromeliad effect on the growth and development and reproductive behavior of the Mexican bromeliad weevil continues. We have been using whole plants in our experiments. Bromeliads being tested are forms of *Tillandsia utriculata* from Florida and from Central America, as well as *Tillandsia fasciculata*, *Guzmania monostachia*, and pineapple. Data collection is still in progress.

We have also been collecting tissue samples from *Tillandsia utriculata* plants from Florida and from Central America, to be genetically tested to determine if these two forms of *T. utriculata* are the same species. Several samples from Florida have been collected. Only a few samples from Central American *T. utriculata* have been obtained, but more should be received near the end of January 2014.

The Mexican bromeliad weevil was found infesting *Tillandsia utriculata* growing in Port Orange, Florida, by Jay Thurrott. This event has been posted on the History of *Metamasius callizona* in Florida web page at: <http://entnemdept.ufl.edu/frank/bromeliadbiota/wvbrom6.htm>:

November 2013. On 14 November 2013, Jay and Calandra Thurrott and Teresa Cooper visited two weevil-infested *Tillandsia utriculata* populations in Port Orange, Florida (Volusia County). The first site was at Dunlawton Avenue N29° 8' 20.83", W80° 59' 45.93" and the second site was along the south side of Canal View Blvd. between Raymond Dr. and Jackson Street, N29° 8' 15.23", W81° 0' 26.71". Both sites had bromeliads with weevil damage and, in some of the plants, empty pupal chambers. Jay Thurrott had collected a weevil pupa from the first site on 22 October that he kept and from which later emerged an adult *Metamasius callizona*.

Publications:

Cooper TM, Frank JH, Cave RD. 2014. Loss of phytotelmata due to an invasive bromeliad-eating weevil and its potential effects on faunal diversity and biogeochemical cycles. *Acta Oecologica* 54: 51-56.

Mexican Bromeliad Weevil Report Archive

An archive of the Mexican Bromeliad Weevil reports, chronicling the research by the authors can be found on the website of the Florida Council of Bromeliad Societies at <http://fcbs.org/weevil/weevil-reports.htm>

The Last Word

Being an occasional feature offering thoughts about Our Bromeliad World

The Bromeliad World: Diversity and Tolerance of Many Tastes

By H. Alton Lee

When bromeliad lovers get together, the obvious, common, initial bond of friendship is proved by the plants. The discovery of other, similar interest is always a nice bonus.

Nevertheless, too many of us may forget that people can be intersected in bromeliads in different ways with varying intensities. That all bromeliad groups and societies do not seem to understand this truth frequently leads to waning interests and declining memberships.

Consider the following examples of the diversity of interest in these fascinating plants.

Some members' greatest interest is in acquiring new plants. Some collectors want everything available; others are long past this stage of contagion, and some may never have been in it because of financial or space limitations or for other reasons.

There are members with very limited space and funds who may find their greatest fulfillment with the bromeliads simply by being with other collectors and seeing and sharing their collections, even if it is only vicariously.

There are bromeliad lovers who yearn to see the collections of others and compare them with their own; and there are members who prefer their own gardens, special plants and their own privacy.

Some people want to know everything possible about each plant in the bromeliad world, both species and hybrids; and there are probably a few who would even buy film showing the actual mating which creates each new hybrid, or who would even be interested in collecting pollinating brushes. Then there are others who buy a plant simply because it is attractive and different from others that they know. Nomenclature, genetic history and whether or not it is a hybrid are of minor importance to them.



Some bromeliad members enjoy the thrill of stomping through shrinking primeval jungles to snatch a given plant from its native environment. There are others who prefer the rigors of UPS and the agony of the post office for their collecting. Others dare to brave the mayhem-ridden highways to see, select, and buy their plants. A few probably use all these methods for enhancing their collections.

Heresy though it may seem, some members actually appreciate other plants besides bromeliads.

They will surreptitiously find room for aroids, orchids, gingers, or even lowly African violets and appreciate them just as much as *Guzmania orangeade* in all of its glory. Some members want to read every word that appears in print about bromeliads, collect every book, whatever the language, and see every art representation. There is a further division of interest here between the lay and the technical reader. There are others who find little to interest them in the bromeliad literature.

Some members feel that the zenith of bromeliad satisfaction is to grow plants to perfection, according to a given group of judges, and to win colored ribbons and mock-silver. To others, this enterprise is essentially meaningless. While they may view shows as important, useful and nice, and while they may willingly work at setting them up and selling their own or other people's plants, not even more suitable prizes such as bromeliad-related objects or rare bromeliads themselves would induce them to enter plants. It isn't their "thing."

Some live to sell their plants at shows or meetings; others prefer to trade or give away their surplus.

Some are not satisfied unless they can grow each plant to perfection and "show quality." Others grow bromeliads only because they look good in landscape. Still other bromeliad growers labor with their plants only for the personal satisfaction they bring; they could care less what a judge or neighbor thinks of their efforts.

Some members want regular, meaty, thought-provoking programs as the bromeliad meetings with local and regional experts on hand. Others are just as satisfied with a show-and-tell approach provided by local members; and there are a few who are as interested in the socializing and visits with friends as they are in the bromeliads.

Some members are fascinated with political structures and the machination of bureaucracies. Others worry that when too much time is spent haggling over by-laws and show dates to the exclusion of attention to the plants, much members' interest will wither and attendance will decay.

So what it finally comes down to is an enormous diversity of interests and the need for tolerance of a variety of tastes as well as some effort to meet many needs. The situation presents an enormous challenge for the leadership as it struggles to avoid over-emphasizing any one aspect of the bromeliad world or excluding any one particular interest.

Although no reasonable person can deny the importance of active participation by large groups of members, if a society, local or national, is to function and provide the splendid rallying focus which shows and sales can offer, it is also very important to remember that not every person can contribute to every aspect of a society and in exactly the same way or same extent; and not even every person necessarily chooses to do so.

Thoughtful, creative leadership, however, can deal with the uniqueness of individuals and their different interests. Bromeliads attract many people of different tastes and abilities, so let us have



good, strong organizations, but let us not have mindless regimentation with an over-abundance of cumbersome and tedious rules which ultimately alienate the majority and diminish the growing interest in these fascinating and rewarding plants.

This article is reprinted from the Bromeliad Guild of Tampa Bay Newsletter, June 1994, by kind permission of the author

Alton Lee has enjoyed a lifelong passion for plants, of which bromeliads have been an important part. He is a former president of Florida West Coast Bromeliad Society, served the Bromeliad Guild of Tampa Bay, and was recruited by bromeliad legend Victoria Padilla to contribute to the Bromeliad Society International Journal, which Alton has done for years. He also was a contributor to the Council's very first publication, Grande. He lives in Gulfport, surrounded by an obscenely huge number of bromeliads and many other tropical and continues his lifelong obsession with plants.

Who's sleeping on your inflorescences at night?



Dragonfly on a Tillandsia flexuosa.

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Florida Council of Bromeliad Societies

Member Societies

Many of the members of the Council have their own websites and their newsletters are available on line. Find out what is happening and get more information about bromeliad cultivation by checking out these websites and newsletters.

Bromeliad Guild of Tampa Bay

<http://www.bromeliadguildoftampabay.org/>

Bromeliad Society of Broward County

<http://www.bromeliadsocietybc.com/>

Bromeliad Society of Central Florida

Does not have a website but does have an open page on Facebook.
Past newsletters are available at <http://fcbs.org> – Member Societies

Bromeliad Society of South Florida

<http://www.bssf-miami.org/>

Caloosahatchee Bromeliad Society

Past newsletters are available at <http://fcbs.org> – Member Societies

Florida East Coast Bromeliad Society

Newsletters are available at <http://fcbs.org> – Member Societies

Florida West Coast Bromeliad Society

<http://floridabromeliads.org/>

Gainesville Bromeliad Society

<http://www.gainesvillebromeliadsociety.org>

Newsletters are available at <http://fcbs.org> – Member Societies

Sarasota Bromeliad Society

<http://sarasotabromeliadsociety.org/index.php>

Seminole Bromeliad and Tropical Plant Society

Contact and meeting information available at <http://fcbs.org> – Member Societies

2014 Calendar of Events

February 9 – 19

Bromeliad Guild of Tampa Bay

Florida State Fair

Near Interstate 75 and Interstate 4, off US Highway 301

A booth is being designed by the society, in competition for the blue ribbon. Throughout the fair, BGTB members will be at their booth.

March 1-2

Bromeliad Society of South Florida Show and Sale

Fairchild Gardens

March 22-23 Garden Fest

Bromeliad Society of Broward County

Volunteer Park 2040 North Dixie Highway Plantation

Saturday 9-5, Sunday 9-4

www.bromeliadsocietybc.com

April 12

Florida Council of Bromeliad Societies' Quarterly Meeting

Bromeliad Society of Central Florida, host

April 26-27

Seminole Bromeliad and Tropical Plant Society Sale

The Garden Club of Sanford (on 17-92, one block south of Lake Mary Blvd)

9:00 - 4:00

In air-conditioned building. Huge selection of bromeliads in many genera, orchids, aroids, gingers, other tropical plants, gift baskets, hand crafted slat baskets in several sizes. Members will be available to answer your questions.

May 9-11

Bromeliad Society of Central Florida

Annual Mothers Day Show and Sale

Orlando Fashion Square Mall

July 12

Florida Council of Bromeliad Societies' Quarterly Meeting

Florida East Coast Bromeliad Society, host

August 16-17

Seminole Bromeliad and Tropical Plant Society Sale

The Garden Club of Sanford (on 17-92, one block south of Lake Mary Blvd)

9:00 - 4:00

In air-conditioned building. Huge selection of bromeliads in many genera, orchids, aroids, ginger, other tropical plants, gift baskets, hand crafted slat baskets in several sizes. Members will be available to answer your questions.

October 11

Florida Council of Bromeliad Societies' Quarterly Meeting

Florida West Coast Bromeliad Society, host

Speakers List

Bromeliad Guild of Tampa Bay

Ray Lemieux – Hybridizing of Terrestrial Bromeliads

Alton Lee – Nidulariums

Dave Johnston - Vrieseas

Seminole Bromeliad and Tropical Plant Society

Jim Ford – Edibles in the Landscape; Kay Klugh reports that “Jim has been growing plants in Florida for more than 30 years and harvests more than 40 different varieties of tropical fruits and perennial vegetables. The program focused on trees, shrubs and herbaceous perennials that produce food and thrive in Central Florida.”

Phil Elting – The Three Ps of Bromeliads: Potting, Placement and Propagation. Mr. Elting's nursery specializes in Vrieseas and tissue culture. He has 40,000 square feet of greenhouses and 10,000 square feet of shade house space.

Bromeliad Society of South Florida

Alan Herndon, Barbara Partagas, Mike Michalski - Getting your plants ready for show.

Bromeliad Society of Broward County

Jesse and Dee Vance, owners of Nature Relics – Old Growth Cypress Wood. They brought for sale magnificent pieces of driftwood at rather moderate prices. They explore a particular cove in a swamp in the Florida panhandle where such driftwood abounds and where there is a 2000 year old cypress tree. This was a three part presentation with Jesse first playing “swamp songs” with his own guitar and a slide show with scenes of the swamp described by Vance plus the sale.

Meeting Places Survey

Some of our societies recently have been forced to change meeting locations due to increased rents and charges or facilities changing the uses of meeting space. Florida West Coast Bromeliad Society is no exception. Recently, FWC newsletter editor Linda Sheetz conducted a survey of bromeliad societies' meeting arrangements. The results are below.

SOCIETY	PLACE	RENT	CLEAN UP
Bromeliad Guild of Tampa Bay	Church	Yes	Church sets up tables & room for the club and vacuums.
Bromeliad Society of Broward County	Deicke Auditorium (city facility)	Yes	Facility sets up the room for the club and cleans floors and kitchen.
Bromeliad Society of Central Florida	Church	Yes	Club does clean up
Bromeliad Society of South Florida	Fairchild Gardens	Yes	Facility provides cleaning.
Caloosahatchee Bromeliad Society	Church	Yes	Church does vacuuming.
Florida East Coast Bromeliad Society	Community Club House	No	Club does clean up.
Gainesville Bromeliad Society	University of Florida building	No	Facility provides cleaning.
Sarasota Bromeliad Society	Marie Selby Gardens	Yes	Club does clean up.
Seminole Bromeliad & Tropical Plant Society	Sanford Garden Club	No	Facility contracts someone to clean up.

Should you want more information, contact the Florida Council of Bromeliad Society representatives. Full contact information is listed on the next page.

2014 FCBS Officers and Representatives

Officers

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Vice Chairman: Kay Klugh

Secretary: Vicki Chirnside
Treasurer: Sudi Hipsley

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**Thank you, Caloosahatchee Bromeliad Society
for hosting the January Quarterly Meeting of the
Florida Council of Bromeliad Societies**

**Next Florida Council of Bromeliad Societies Quarterly Meeting
April 12, 2014
Bromeliad Society of Central Florida, host society**

**Next Florida Council of Bromeliad Societies Newsletter
May 2014**