

## **BROMELIAD SOCIETY OF GREATER CHICAGO**

# THE BSGC NEWS

July, 2014

President Vice President Treasurer Secretary Newsletter Editor Lori Weigerding Martha Goode Paula Derning OPEN Steve Goode (630) 978-7340 (815) 459-1623 (847) 295-2559

stevegoode1@ameritech.net

WEB SITE Webmaster http://bromeliad-chicago.org Lori Weigerding

The June 8<sup>th</sup> meeting was mostly concerned with our final planning for the July 19<sup>th</sup> and 20<sup>th</sup> Show. We voted to order \$1,000.00 worth of plants for the Show. Lori will put in the order to Russell's.

July 13	2pm meeting in Annex
July 18	Set up of combined Show of the Cactus and Bromeliad Clubs
July 19	Show from 10 am - 4:30 pm
July 19	After Show-Dinner at Hackney's 1514 E. Lake Ave, Glenview
July 20	Show from 10 am- 4:30 pm then Clean Up

### President's Column

Well it was real nice to see everyone at our last meeting! The rain held off and it was actually very cool by the Gardens. Thanx to Martha we had a wonderful raffle. Del and Priscilla volunteered to glue the tillandsias that Martha ordered onto some pieces that we had and then we had a raffle. We look forward to seeing what Paula puts into her shoe. (One of the Raffle Prizes) For those of us that were there we signed up for the show. We also decided that we would spend \$1,000 on plants this year. I will be contacting them shortly to give them an idea what we want and how much we want to spend. Look forward to seeing you at the next meeting.

We were sad to find out that Marjorie has been diagnosed with cancer and is currently under treatment. Please keep her in your thoughts and prayers.

Lori Weigerding

The tillandsia order from Michael's was raffled off. We hope everyone has good luck growing them. Anne was unable to make the meeting because of illness so maybe she will be able to show us at the July 13<sup>th</sup> meeting the ways she has thought up to display her tillandsias. Martha and Steve will show us pictures from their visit to the Crystal Bridge Conservatory in Oklahoma City. There will be a raffle of some plants.

We discussed how our plants did over the winter. Martha brought in an example of what not to do. The lady who watered while she was away over the winter cut off the mother plant that was dying out before the pup was large enough to be taken off. The pup gets nourishment from the mother so be sure to leave the pup attached and don't cut the mother back until the pup is 1/3 to  $\frac{1}{2}$  the size of the mother.



www.fcbs.org

Paula told us that she had flowers on a plant she had gotten from the 2004 BSI Chicago Conference. We have to remember that we need patience for many of our plant's flowers. She has four or five pups from it. She now has a long haired cat which likes to go up to the hechtia in the window. So now the hechtia has long cat hairs on it. Priscilla found that she needs to hang her tillandsias up where the cats can't reach them. Her Tillandsia caput medusae flowered.

She found it does best when grown sideways. Larry said he tried rooting a cryptanthus but it didn't take at first so he used rootone. Del had one of his bromeliads flower. He wasn't sure what it was but he got 4 or 5 pups.

We discussed what restaurant to go to after the Saturday's Show. We picked Hackney's on Lake at 1514 E. Lake Ave, Glenview, IL The phone number is 847-724-7171. The Club will foot the bill. All members are invited.

We have some sad news. Marjorie Leon received the news that she has cancer and will be under going chemotherapy. We hope all goes well with her treatment. Former Society President Wally Fox passed away in April. We remember all the the hard work he did to put on the 2004 Chicago BSI Conference. One of the pollinators of bromeliads are hummingbirds. They really like Bromeliads! The March 2014 San Diego Newsletterr had a good article about them.

### Hummingbird Facts by Dave Kennedy

Bromeliad enthusiasts owe much to the hummingbird. The spread of our beloved plants from their initial appearance in what is now northeastern Brazil largely parallels that of these marvelous New World birds, which are among the smallest warm-blooded animals.

Perhaps around 50 million years ago, flowering plants began to grow in the higher regions of South America, where insects were unable to provide pollination services due to the cold and damp conditions. Birds were the logical choice for evolution to step up and develop an animal more suited to this vital task. Plants recognized the value, and themselves began to specialize, in order to favor their new feathered friends. Since bees are red and green color-blind, plants developed flowers in those colors to ensure a generous supply of nectar for the newly-arrived hummingbird. Flowers also appeared with lengthy, tubular constructions that favored the hummingbird's characterisic long, pointed beak.

Hummingbirds consume more than their body weight in nectar each day. Their ultra-fast metabolism requires frequent feedings, often at 15-minute intervals. They are never more than a few hours away from starvation, which helps explain their pugnacious, territorial behavior. Males will guard a particularly rich source of nectar, allowing only females from his 'harem' to feed there.

In flight, their wings can flap 80 times per second, their hearts beating an astonishing 1200 beats per minute. Perched, this slows to 'only' 400 beats per minute. They spend around 80% of the day perched, to save energy, while at night they go into a torpor stage, unmoving, vulnerable, when their tiny hearts slow to a mere 40 beats per minute.

Hummingbirds also require protein, which they obtain by capturing insects on the fly. Their extravagant coloration isn't pigment. It's a result of micro air bubbles in their feathers, which are 'activated' by direct light. Here in San Diego, two species are considered resident: Anna's and Costa's. However, there are migratory species which may stick around the warm local environs for months. It's easy to enjoy hummingbird visitation by puting out a feeder. Be aware, though, that this is quite similar to having pets, in that the birds quickly become dependent on said feeders, which must not only be kept full of fresh nectar, but kept free of mold and other undesirable contaminants. This means carefully cleaning out the receptacle every two or three days. A hummingbird that incurs mold growth on its beak is almost certainly doomed. So, when selecting a feeder, look for one that will be easy to clean, as many of the 'fancier' ones are not.

To make your own nectar, bring four cups of water to a boil. Add one cup of white granulated sugar, stir in well and turn off the heat. Let it cool, then transfer to a container (I use a 1-liter plastic bottle) and store in the refrigerator. Do not use food coloring, honey, or brown sugar. Keep your hummers happy and healthy, and they'll reward you with frequent visits and airborne hijinks.

The following article by Mulford Foster was from the July/August 1957 Bromeliad Society Bulletin.

### MEXICO, LAND OF TILLANDSIAS

My four previous plant collecting trips to Mexico have been taken entirely by car, but in April 1957, I did it the air way. It is not the most interesting way but it certainly is the quickest: less than six hours of actual air travel from Orlando-Miami to Mexico City.

In 1935, I went to Mexico the hard way. An artist friend, Tibor Pataky motored with me in an old Chevrolet, dragging a trailer behind. The road from Laredo to Mexico City was not yet finished although it was supposed to be passable. This proved to be our main obstacle, but rewardingly interesting.

My mission was plants, of course, orchids and cacti being firsts at that time. Mexico due to its diverse up-and-down topography, produces an abundance of fascinating plant life and, as I was attracted to plants of all kinds, I noticed bromeliads, secondarily, taking a few, pressing a few, and sketching a few. Gradually the bromeliads began to make a really big impression: alas, I have been an incurable addict ever since.

Throughout miles and miles of desert land, where almost the only

bromeliads in evidence were Hechtias and Bromelias was the setting for my first foreign introduction to the family. Upon reaching the Tampico area, where more trees thrived my eyes were startled to find what I was to learn was Aechmea bracteata. After that I began to look up as well as down.

Transportation problems took precedent. To our dismay we learned that the nearly finished road to Mexico City was then closed on account of huge landslides; there was only one other way to get to Mexico City by car, which was from El Monte to Cerritos, Ciudad Maize and San Luis Potosi and the first part of this route was almost an impossibility in those days. However, no other course was open so we struck out across the Huasteca mountains with



www.fcbs.org

the only food, gas and other supplies which we would need, carried in the car. We reached San Luis Potosi weary but relieved, then turned south to Mexico City, the countryside continuing to be populated with the high desert side of plant life.

However, east of Mexico City and down the mountains the picture changed plantwise, as we entered the lush mountains of the state of Vera Cruz where I was first introduced to the rain forest areas of Jalapa, Coatapec and Cordoba. Here, for the first time, I saw the trees literally covered with bromeliads and other epiphytic flora. Never shall I forget my first impressions of these exotic bromeliads. Most of the bromeliads in Mexico are Tillandsias and the great diversity in form, size and color within this group, from T. Tenuifolia (the small grass-like leaves) to T. Grandis (the broad, massive granddaddy) would hold anyone's interest for a lifetime even if this were the only genus in Bromeliaceae.

Tillandsia Butzii, T. Lucida, T. Lieboliana, T. Streptophylla, T. Schiediana, T. Punctulata, T. Ionantha, T. Andrieuxii, T. Tricolor and many, many others were just a few of the Tillandsias that fell into eager hands but I was then unaware of

their names. I just knew they were extraordinary, unique plant experiences which had never come my way before.



www.fcbs.org

The high, cool mountains between Mexico City and Puebla brought new highland bromeliad gems. Here they were characteristically upside down. One outstanding pendant species, T. Macdougallii, not even named at that time was so striking that it made us forget the laboring engine and boiling radiator of our car as we reached the 9,000 ft. crest.

So far, we had experienced much of the central and eastern area, but nothing of the Pacific coastal area, so we went on the only passable road west and that took us to Acapulco. This trip yielded my initial discovery of a new species although this fact was not to be revealed until several years later; this plant found in the state of Guerrero, proved to be Hechtia melanocarpa. It was nearly ten years laterr when Dr. Lyman B. Smith named it from the

flowering material which was sent to him after the plant had ultimately produced a bloom in our garden.

That was the prize terrestrial: two other notable bromeliads, one saxicolus, one epiphytic were found on that trip: the sturdy T. Capitata, growing on rocks and tree roots and the fantastic well-named T. Caput-medusae, the truly xerophytic epiphyte growing on small trees in a harsh, wind-swept and sun-burned region.

Many of the live plants were killed when fumigated but this factor did not dampen enthusiasm for Mexico: this trip had set the pattern for future work. So in the spring of 1936 Racine and I were Mexico bound on a postponed Honeymoon. Then it was a doubled enthusiasm in the search for each and every crazy bromel whether hanging upside down from an impossible tree or clinging to a precipice beyond reach.

Tillandsia grandis, T. Dasyliriifolia, T. Imperialis came into our lives. T. Grandis and a number of Hechtias and Tillandsias soon became residents of our garden. We studied them closely. I sketched a few and then with oil painted a few plant portraits, we reluctantly made a few herbarium specimens: we began to see a pattern in the habitats. This pattern was to be more fully understood many years later.

The summer of 1937 saw us, yet again, off to Mexico taking in additional territory in the Guadalajara and Oaxaca sections as well as the frequented familiar areas. In the state of Michoacan, near Morelos, we found our first plants of T. Filifolia growing on rocks and those same plants are still in our collection. It is a charming Tillandsia with thread-like foliage not nearly as delicate as it appears. Each excursion added a few more bromels, although we were still collecting orchids and cacti. A new species of cactus, Peniocereus Fosterianaus Cutak, and a new amaryllid, Zephyranthes Fosteri Traub were discoveries that added fuel to our enthusiastic plant hunting trips.

Other trips to Cuba, Brazil and Colombia as well as the war in the years between interfered with the Mexico-trend, but in 1952 I managed to squeeze in a short excursion into north Mexico across the border from Brownsville, between

lecture dates in Texas! The purpose was mainly for just another bromeliad glimpse, even for only a few days.

There is an A.A. for alcoholics but there is nothing that will cure an acute case of Bromelitis except more bromels. Thus, five years was too long to wait before a return visit to Mexico and April 1957 saw me eagerly bound for the Bromelandia south of the border. It seemed awfully mean to go without Racine but someone had to stay at home, so it was "ladies first" (!).

This flight from Miami took fewer hours than days by car on our previous trips.



www.fcbs.org

In Mexico City Mr. And Mrs. Oather VanHyning of Winter Park awaited my arrival; they had motored down for their third trip.

As impatient as an old fire department horse at the first clang of the alarm, I could hardly wait until I laced up my high boots, 'rarin to go!'! It was twenty years since my first sight of Mexico! Changes everywhere, yet so many things the same. Better roads, of course and many hundred miles more of them.

Before the pattern of bromeliads in Mexico is understood there must be many, many more observations and collections made throughout that magnificent country where one can find every climatic and topographical condition from tropical sea-level to snow-capped mountains from arid deserts to dense, lush jungles.



www.fcbs.org

Only eleven of the forty-five that are recognized genera in Bromeliaceae are represented in Mexico; however, up until the present time only nine genera have been recognized as indigenous there. It was our good fortune to make the first collection for the record of a Hohenbergia, H. Guatemalensis, and also discover what will doubtless be a new species of Greigia, the first for this genus in Mexico. This last find was a surprise, indeed for it extends the range of this interesting genus several hundred miles to a point which must be nearing its northern limit. Strangely, this genus is confined almost exclusively to volcanic mountains, centering in Colombia.

Tillandsia and Hechtia are the predominant genera in Mexico and you will meet them from the U.S.

Border to Guatemala. While Tillandsias are native to every country in the Americas, excepting Canada, nearly all of the Hechtia species known will be found in Mexico, wherever there are rock desert areas, high or low altitude. The

Hechtias, no doubt, represent some of the earliest members of the Bromeliad Family and are closely related to Puyas, Dyckias and Encholirions, all of which are confined to South America with the exception of one Puya native to Costa Rica.

Doubtless the greatest range in form and size of Tillandsias in Mexico will rival that of any genus throughout the Bromeliad Family.

The adaptability of some of the Tillandsia species and their great range in altitude as well as latitude is most interesting.

We just naturally expect to find T. Recurvata and T. Usneoides from the U.S. to the Argentine although T. Usneoides is rarely as vigorous in growth as in Florida and Louisiana.

In Mexico T. Schiedeana has taken up residence wherever you meet T. Recurvata; in fact, I believe it is more often met than the latter species is in the southern states.

T. Caput-medusae too, is common from Sonora throughout the country especially in the deciduous forests where wind and sun play a major part.

T. Butzii, filifolia, ionantha, tenuifolia will also be found in this same group but they join the ranks of these xerophytes nearer the central Tillandsia filifolia photo by Herb Plever

www.fcbs.org

part on down throughout the country. These latter species along with T. Juncea and festucoides, fasciculata, polystachya, tricolor punctulata, dasylirifolia may often be found in similar localities where the rainfall and humidity is much more prevalent at certain seasons.

T. Streptophylla, Seleriana and pruninosa are not as wide spread in their range and are to be found, mainly, nearer the eastern areas from Vera Cruz south.

Most all of these xerophytic species mentioned have their leaves covered with coarse spreading cinereous scales and they can withstand wind, drought and sun. Others such as T. Butzii, punctulata, polystachya, juncea, festucoides, tricolor, dasyliriifolia, fasciculata, tenuifolia, and filfolia have leaves covered with adpressed scales; they also have more numerous leaves which are, generally, closer together and in more crater-like forms; many of them can hold a certain amount of water in their leaf reservoirs. T. Butzii is an exception in this group as it is bulbous in form but grows in compact masses. T. Filifolia, tenuifolia, juncea and festucoides have very fine thread- or grass-like leaves and also grow in compact masses, thus each group have their own effective qualities for collecting moisture and resisting drought and wind and it is these conditions that create the often fantastic shapes such as in T. Caput-medusae, streptophylla, pruinosa, Seleriana, ionantha and others.



T.fasciculata var fasciculata www.fcbs.org

The sculptured pattern is sometimes made by elevation but not always by elevation alone. Moisture is one of the biggest factors. Where moisture is lacking we may find the differrerent xerophytic types often, regardless of altitude up to 8,500 ft. From 8,000 to 9,000 ft. generally, in pines or oaks we may expect to find Tillandsias with soft velvet-like foliage and usually having pendent inflorescences hanging from almost inverted plants of Tillandsia

MacDougalii, T. Andreuxii, T. Benthamiana, T. Violacea. These plants take their baths in moist clouds but could not live happily in lower dry or rainy areas.

In the rain forest areas will be found, generally, wider leaf Tillandsias whether in lower or higher altitudes. These average from 5,000 to 7,500 ft elevation. In these areas may be found T. Gymnobotrya, imperialis or deppeana, (the T. Deppeana here in Mexico will be quite different in shape and color from the different varieties of this species found in Trinidad, Costa Rica, Colombia or Venezuela). T. Lucida, foliosa, Leiboldiana, or T. Bourgaei and T. Prodigiosa at 8,000 ft elevations

Throughout Mexico will be met Tillandsia fasciculata in one or more of its varieties. About ten varieties have been named of this most variable species in the genus, native throughout the Caribbean area from Florida to South America; I

suspect that several more will be added to the list as other collections are made. They are always showy and intereesting subjects pervading a great range of various altitudes, moisture or arid conditions and exposure to sun. One should not be surprised to meet this species under almost any condition wherever one goes in Mexico; in fact one should expect to find it wherever one goes except in the highest altitudes. I have never found any bromeliads growing above 10,000 ft in Mexico and but few species between 8,000 and 9,000 ft. At these high levels the bromeliads will more than likely, be Tillandsias or Pitcairnias.

In reading this article, one must remember that his airline trip was in a nonjet aircraft! You didn't have the chain Hotels and motels at that time. Of course, Hilton was in the major cities but not a lot of small towns. He was talking about the changes between 1935 and 1957! You didn't have Credit Cards available for the average person. In the beginning credit cards were issued to business men. Come to think of it, you didn't really have direct dialing on the telephones! Never mind computers, internet, "Smart" phones (never mind non-smart Cell Phones!). Polyester easy to clean clothes were in the future.



T. Andreuxii www.fcbs.org

When Mulford Foster wrote this article, he mentioned that there were 45 genera. Eric Gouda from the Dutch Belgian Bromeliad Society sent me the following table which shows that today there are many more recognized genera.

Species and Infra Species Counts

Genus	spec ies	infr.	Genus	Species	infr.
Acanthostachys	2		Hechtia	69	
Aechmea	277	90	Hohenbergia	66	4
Alcantarea	36		Hohenbergiopsis	1	
Ananas	4	1	Lapanthus	3	
Androlepis	2	2	Lindmania	39	6
Araeococcus	9		Lymania	9	
Billbergia	66	38	Mezobromelia	9	
Brewcaria	6		Navia	92	7
Brocchinia	20		Neoglaziovia	3	
Bromelia	63	6	Neoregellia	122	16
Canistropsis	11	6	Nidularium	54	10
Canistrum	13		Ochagavia	5	
catopsis	18	2	Orthophytum	66	8
Connellia	6		Pitcairnia	412	69
Cottendorfia	1		Portea	9	3
Cryptanthus	79	6	Puya	225	15
Deinacanthon	1		Quesnelia	23	2
Deuterocohnia	16	7	Racinaea	77	23

Disteganthus	3		Ronnbergia	13	
Dyckia	163	12	Sequencia	1	
Edmundoa	3	2	Steyerbromelia	6	
Eduandrea	1		Tillandsia	683	159
Encholirium	28		Ursulaea	2	
Fascicularia	1	2	Vriesea	251	56
Fernsea	2		Werauhia	88	1
Fosterella	32	1	Wittrockia	7	
Glomeropitcairnia	2		xHohenmea	1	
Greigia	36	4	xNiduregelia	3	
Guzmania	215	26			

Total: **3455** species in **57** genera (excluding **584** Infra-Specific taxa).