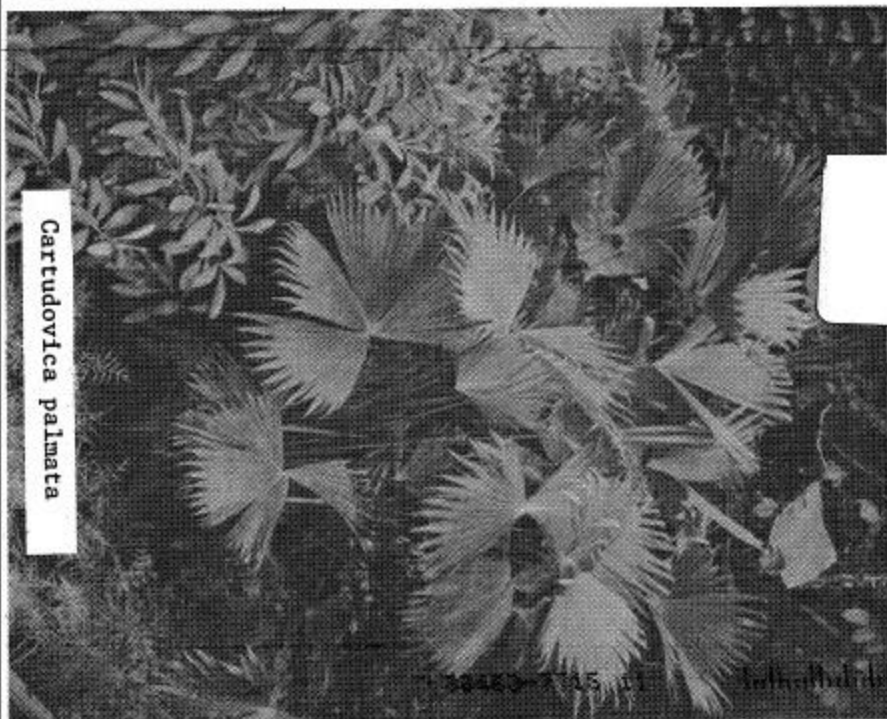


THE CENTRAL FLORIDA PALM SOCIETY

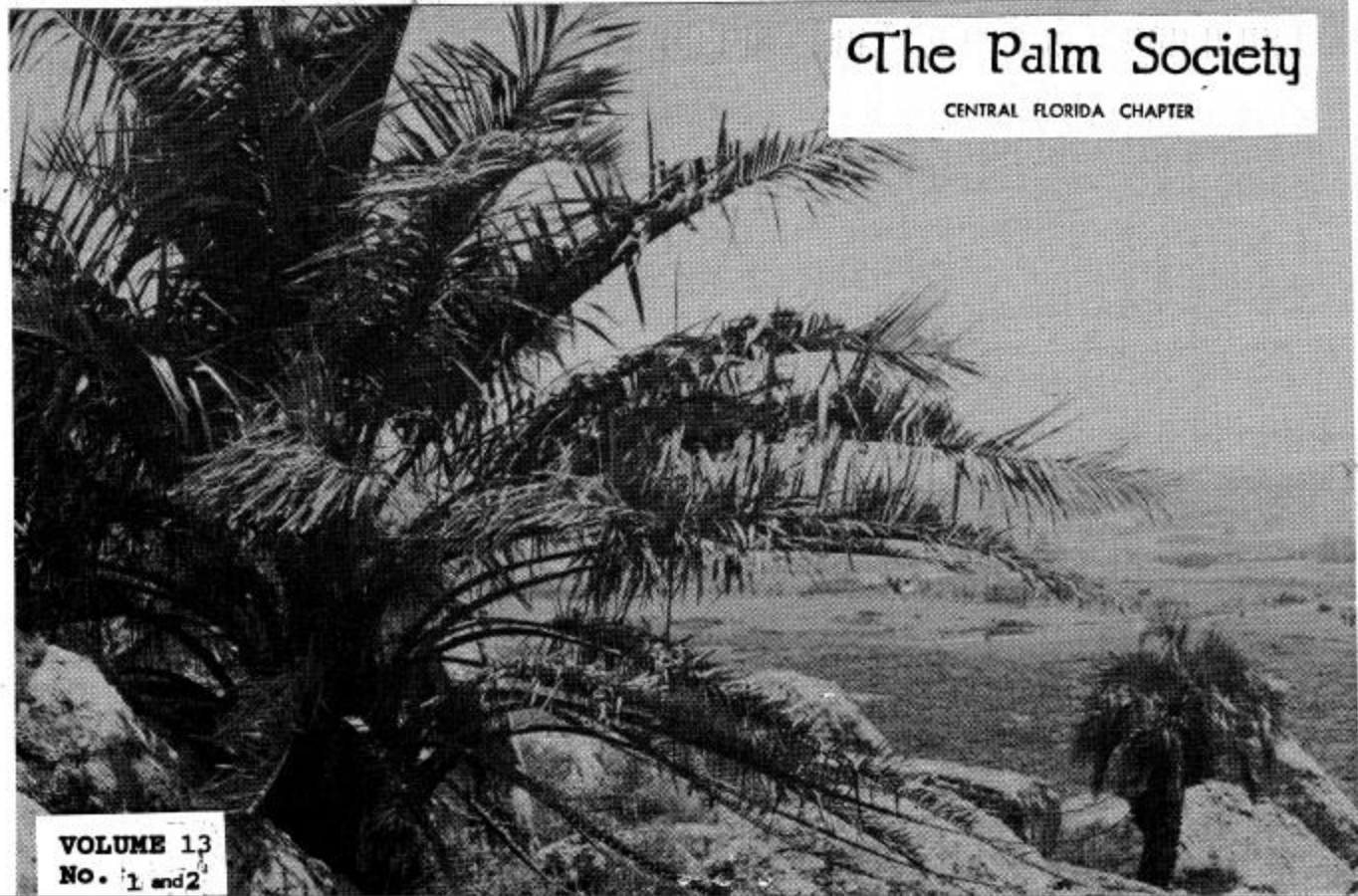
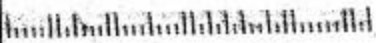
TREASURER & SECRETARY

ED & NANCY HALL
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MAITLAND, FL 32751
PHONE (407) 647-2039



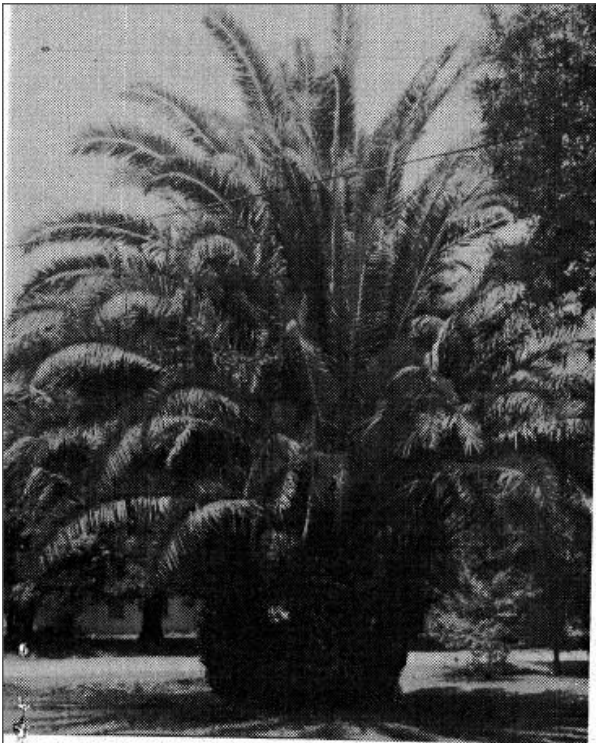
Cartudovica palmata

FIRST CLASS



The Palm Society
CENTRAL FLORIDA CHAPTER

VOLUME 13
No. 1 and 2



Multiple trunk Phoenix canariensis
in south Tampa by Donna Livenspire of Aloha Palms.

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Bulletin Board

From David and Geri Prall: Another T-shirt for sale! Sponsored by the Fort Meyers/ Lee County Garden Council, the T-shirt design was created by local artist Lin Bochette and produced by Harlequin Nature Graphics. Titled "spirit of the palms", they will be available for purchase during the fall meeting.

Larry Bains is looking for mature specimens of Livistonia australis, Sabal causiarum, and Nannorrhops ritchiana to photograph. If you know the location of any one of these palms, please call Larry collect at (407) 894-7766 or write to 1401 E. Washington St. Orlando, FL 32801.

Ed Hall sends word that the CFPS expects to acquire a set of all available back issues of Principes to be made available for loan to CFPS members. Details in an upcoming issue.

Here's the names of those palm trunks in sequence from left to right- Zombia antillarum, Livistona robinsoniana, Astrocaryum mexicanum, Pigafeta filaris, Livistona decipiens, and Elaeis guineensis. Photo of Pigafeta courtesy Lois Rossten from Palm Journal- California Sept 1988. Others courtesy of Bernie Peterson.

Many thanks to the many contributors and all involved who helped get this newsletter to print!

ALAN

Two recent publications on cycads:
Palms and Cycads Beyond the Tropics,
1992, Keith Boyer. Excellent color
photographs. \$19.95 + S&H. Write
Rainbow Gardens Bookshop, 1444 R. Taylor
St., Vista CA 92084

Cycads of the World, 1993, David
Jones. The book covers botany, natural
science, ecology, horticulture and
conservation of cycads worldwide. 200
color plates, 50 line drawings, 796
pages. \$45.00 + S&H Write Rainbow
Gardens Bookshop, 1444 R. Taylor St.,
Vista, CA 92084.

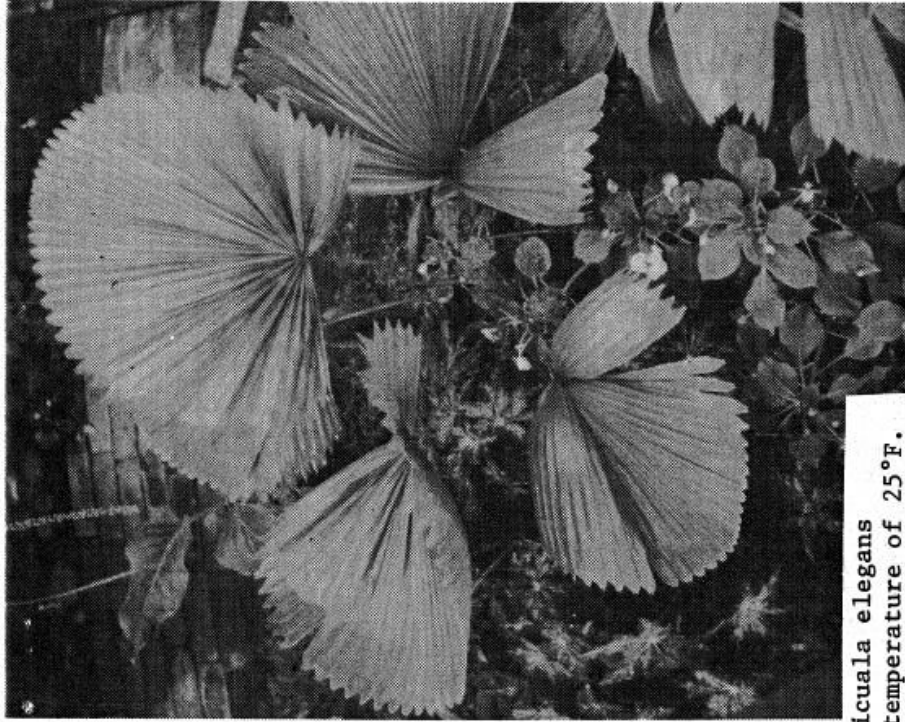


Photo- Louie Hooper, LaHabra, California- It shows Licuala elegans growing outdoors at his home, which survived a low temperature of 25°F.

THE YEAR OF JOINT MEETINGS

By the time this news letter reaches you, the CFPS will have had three meetings in 1993. All three being held jointly with other Florida Chapters. This sharing of interests & resources, will continue with our fall meeting in the Ft. Myers area. An invitation to the fall meeting is extended to the South Florida Chapter.

The first meeting of 1993 took the CFPS members south to the West Palm Beach area. After assembling at Paul Crafts Cricket Creek Nursery we journeyed to the unique private botanical garden in Manalapan. Gemini Gardens thrilled many of us last November when the International Palm Society biennial convention attendees had the chance to visit it. With this return visit, you Treasurer had the chance to observe the progress on developing the garden, and appreciate much better the planned beauty of the facility.

After a briefing, we broke up into groups for a conducted tour of the facility. Though far from completed the development of the garden is nearing completion and thus beginning to reveal the planned beauty of the garden.

Gemini Gardens is named for the unique nature of the house. The majority of the main residence is located on the west side of ALA overlooking Lake Worth, but the occupants of the residence have the ability to walk under ALA on the first floor of the residence and enjoy a view of the Atlantic Ocean.

From Gemini Gardens we headed north to Norton Sculpture Gardens for a delightful catered lunch. There we toured the Gardens filled with over 300 species of palms plus major art. Finally we headed back to Cricket Creek Nursery to roam the facility in search of just the right palms. After an hour of search through the thousands of palms for sale your treasurer selected 5 plants as the perfect acquisitions. Several of the genera were previously not known prior to seeing the beautiful young plants.

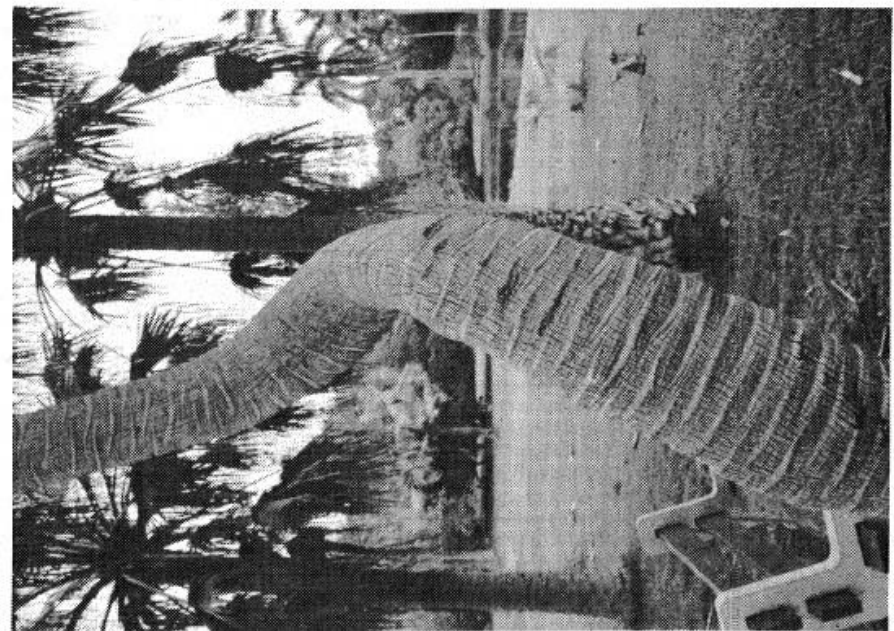
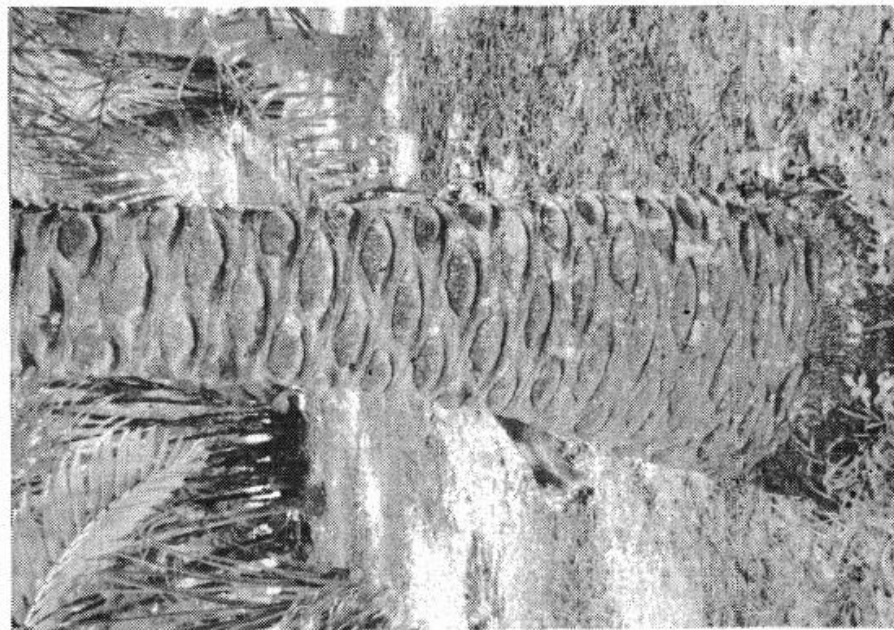
Thank you Paul Craft and the Palm Beach

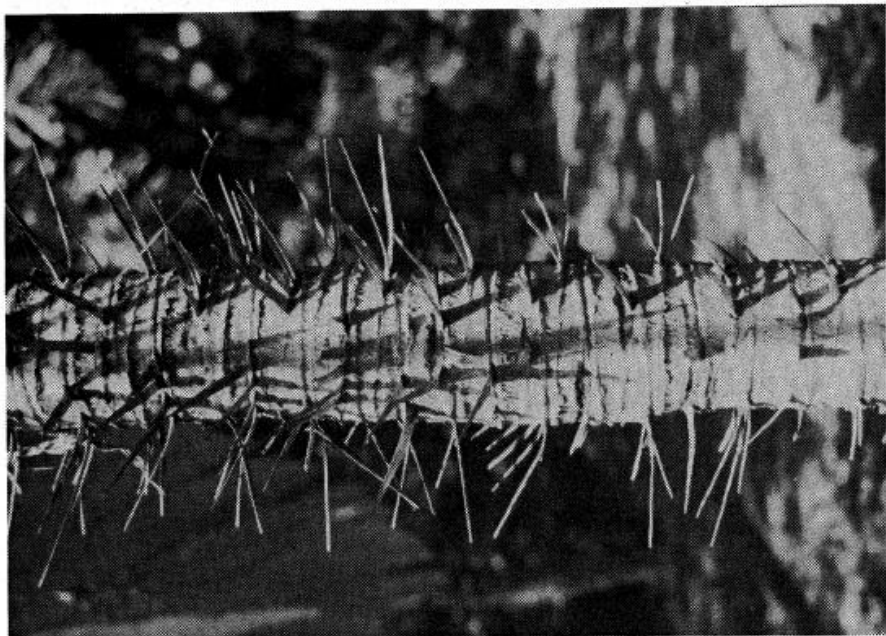
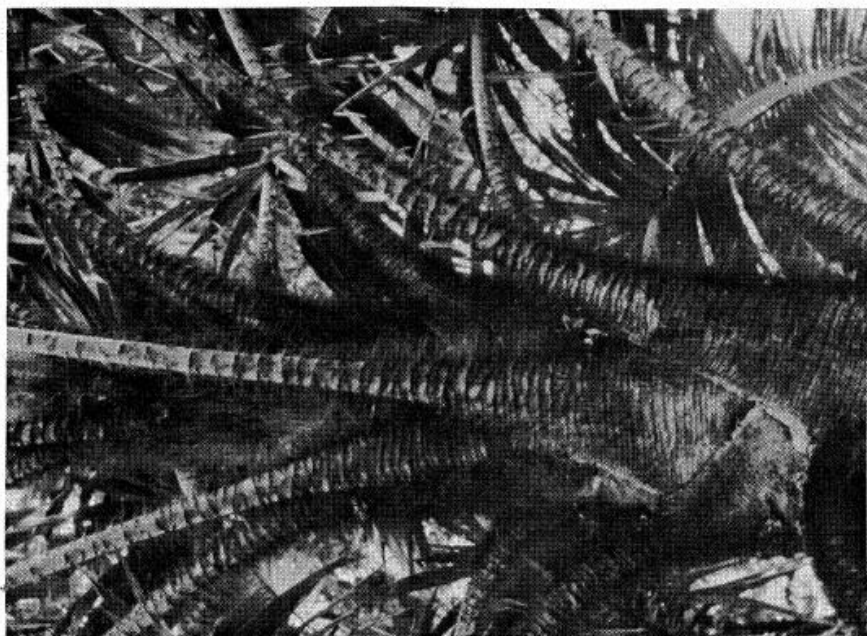
The second meeting of 1993 was held May 16 in conjunction with the North Florida First Coast Chapter. The meeting started at the most revered palm collection in Florida. The mature collection assembled by the founder of the IPS, Dent Smith. As always Doris Smith was a congenial host. That is why one always looks forward to visiting.

By today's standard of rare and unusual palms, one would say Smith's mature collection may not hold any unique features. To prove this is not the case read Bernie Peterson's article in this issue where he revisits Dent Smith's favorite palm. Following a visit with Doris, we headed south to Sugar Mill Gardens. There Martin Wittbold discussed the cold protection technique he developed for the gardens and his plan to construct a usable size tridesic dome this fall. Martin's protection technique incorporates two unique features. These being: 1) A structural design that can be expanded in both diameter and height just by adding additional elements and 2) The use of agricultural frost blankets as a cover that holds heat but doesn't require cooling fans. For those palm lovers in the northern Florida area take note of the article: Barn Raising At Sugar Mill Gardens. Here is your chance to do some volunteer work at Sugar Mill plus receive a lesson in constructing good winter protection for your palms.

In honor of Dent Smith, the Central Florida Palm Society donated a *Caryota mitis* to The Dent Smith Palmetum at Sugar Mill Gardens.

After touring the gardens the group headed to Deland and the residence of Doug and Barbara Keene. Due to taking a longer route, your Treasurer was one of the last to arrive. By then nearly all the palms for sale were already picked out and no one wanted to leave their planned purchases for a tour, so the sale began. Doug Keene's *Acrocomia totais* were a hot seller.





Sale results are summarized below:

<u>SELLER</u>	<u>NO. PLANTS</u>	<u>GROSS</u>	<u>NET</u>	<u>DONATION</u>
Aloha Palms	1	\$ 20	---	\$ 20.00
Charlie Grant	1	25	---	25.00
Doug Keene	9	124	\$ 99.20	24.80
Ted Langley	8	45	36.00	9.00
Bernie Peterson	12	79	---	79.00
D&G Prall	16	148	118.40	29.60
Total	47	\$441		\$187.40

Once the people had secured their new palms, everyone was ready to tour the Keenes' "casual jungle". The 120 variety of palms around their house included both mature and juvenile specimens on several acres of land.

Your Treasurer plans to return in several years to see how time and Florida winters shape the collection. Thank you Barbara & Doug for the great hospitality.

The third meeting was held on Aug. 14 and again was a joint meeting with the North Florida First Coast Chapter. The meeting included a tour of two gardens, a buffet lunch and plant sale. The meeting began at the FCCJ South Campus Palm Garden in Jacksonville where many mature specimens of palms hardy to North Florida are grown and cared for by the First Coast Chapter. From there the meeting shifted to Dr. Kyle Brown's house in Glen St. Mary. Following the buffet lunch and palm sale, Kyle conducted a tour of his garden. During the tour Kyle pointed out numerous plants he collected or germinated as part of his thesis work.

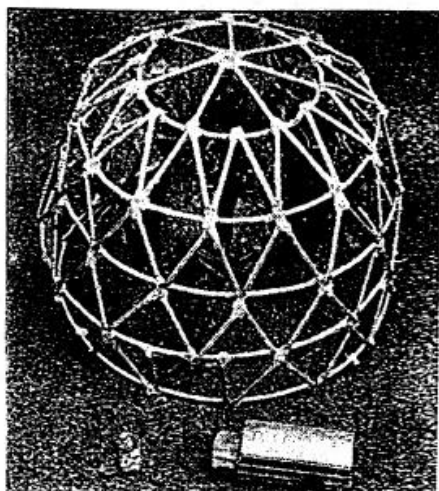
BARN RAISING AT SUGAR MILL GARDENS

In the tradition of our forefathers, Palm Society members are invited to a good old fashioned "Barn-Raising" in the Dent Smith Palmetum at Sugar Mill Gardens in Port Orange, Florida. To give everyone a chance to participate, it will be a two day affair, starting at 9 a.m. Sat. NOV. 13 AND ANYTIME Sunday, Nov. 14. In case of bad weather on Nov. 13 & 14, Nov. 20 & 21 will be the dates. The picture gives an idea of what we will be constructing; an expandable tridesic dome about 44" in diameter for protecting tender palms. It will be covered with agricultural frost blanket in the winter and heated with oversized candles, charcoal, or supercharged compost bins.

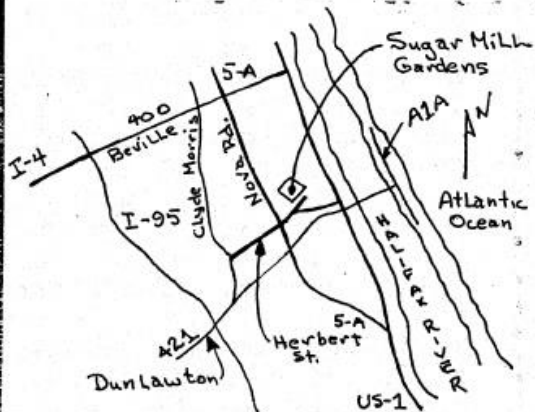
Four years of trials with this material have been encouraging with minimal heating. No cooling devices have been needed.

The late date has been chosen to give us better working conditions, and give us time to perfect our methods, gather tools and materials, and get our picnic area ready for use.

As this effort requires some coordination please contact Martin Wittbold, 1084 Ridgewood Ave., Holly Hill, FL 32017 or call 904-252-1345 and let him know you will be participating.

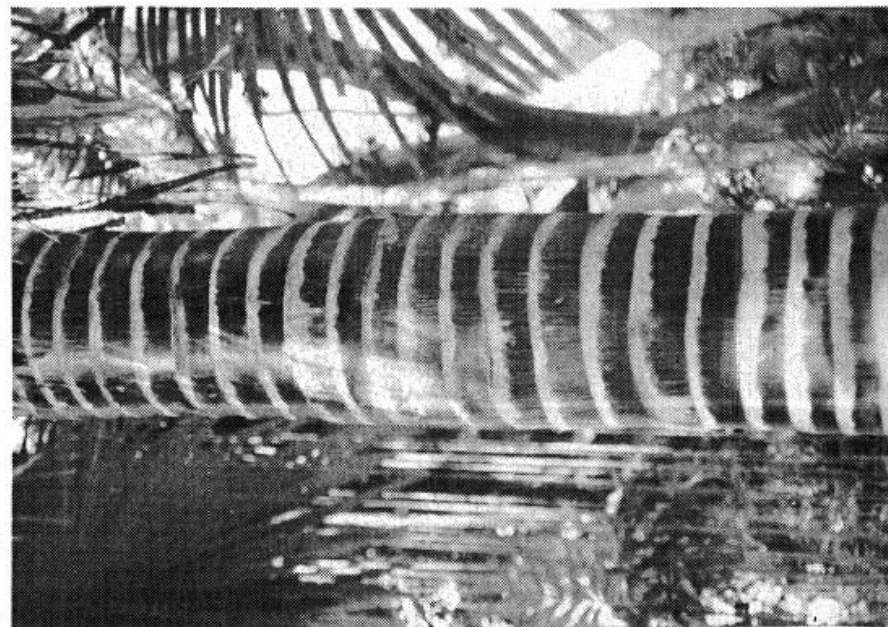


This model shows a tridesic dome used to protect palms from cold.

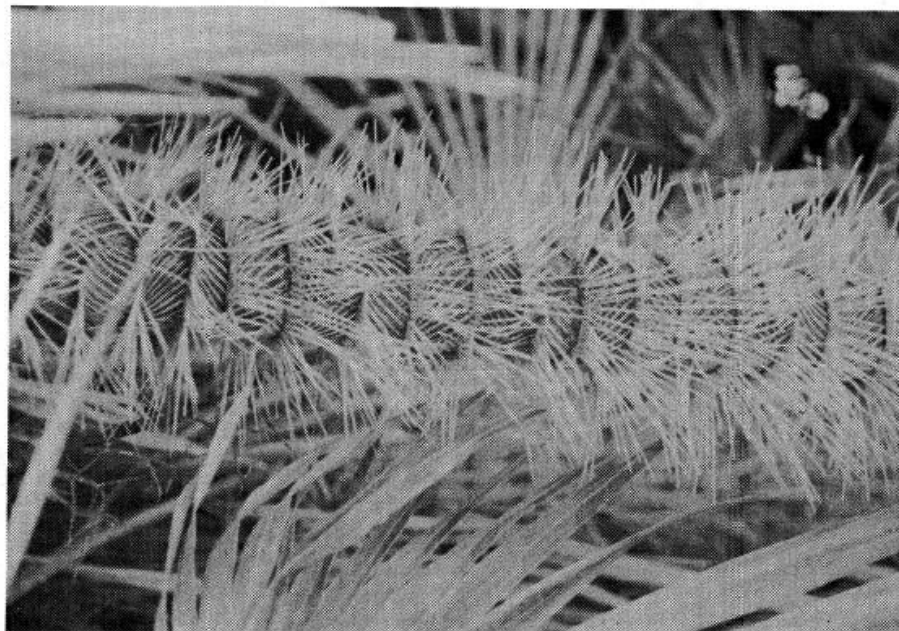


Directions To Sugar Mill Garden.

THIS PHOTO IS FIG. 1 OF THE NEXT ARTICLE! →



Can you identify these palm trunks? Answers on the last page



feature new plantings. Massive *Phoenix canariensis* have found their way into the area behind the auditorium as well as many beautiful Bismarkias. *Wodyetia bifurcata* and *Neodypsis decaryi* greet you as you enter the Garden and venture down the path to the bookstore. There are now two large *Phoenix dactylifera* on either side of the palm glade overlook where originally *Syagrus sancona* stood. There has been a great deal of underplantings of ground cover plants done as well. The Rare Plant House is about to become larger and taller to handle more and larger plants. The entire nursery is about to undergo a complete renovation as well.

There are a great many more projects planned and a sense of determination by everyone who works at Fairchild to make it the premier tropical botanical garden in the world. I know many of you have been reluctant to visit Fairchild because of all the destruction. Many wish to remember it as it was before Andrew. It has undergone a great change and it will take years for all the healing to take place, but I would encourage everyone to visit and see just how much it has recovered already. By visiting Fairchild Gardens, it helps show our support for the tremendous efforts being done by all the staff there. If you have not been to Fairchild since before the hurricane, expect to see some trees missing and areas disturbed, but there is still much to see and the palm and cycad collection are still unequalled anywhere in the continental United States. The interest shown by all those who visit help the staff realize the importance of what they are doing and the appreciation we have of all their hard work.

COLLECTOR'S CHOICE

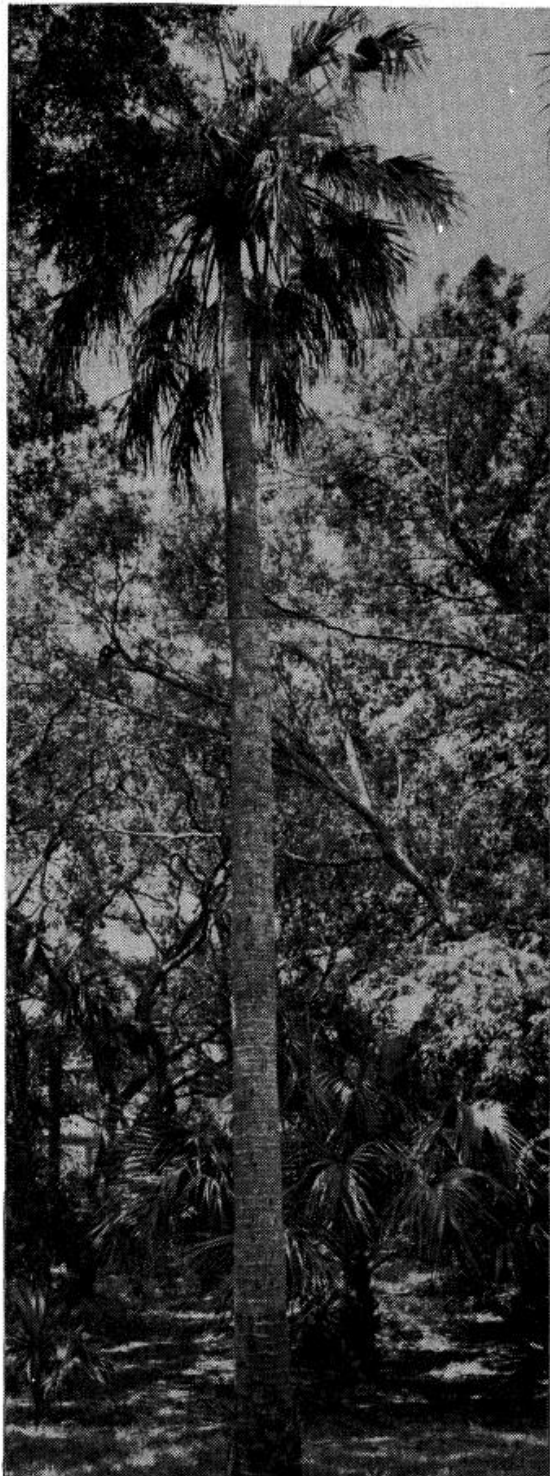
Reprint from
Principles Vol 12 #1

A Very Special *Livistona*

Your favorite palm? Perhaps you know which one it is, and why it is, without pausing to give it a moment's consideration. Seemingly it should be very easy to name that superlative palm and also to dash off a few telling sentences for publication, if requested, to a total of about five hundred words. But when such a request was made of me just recently, I was at first pretty well perplexed and very much surprised to find out there would be some difficulty in making a choice. All God's chillun got wings, and there's the rub. The difficulty stems from admiring too many palms and not actively disliking any of them.

Any question about a choice, I had thought, could be resolved readily enough by electing the *Phoenix rupicola*, often called the handsomest species of its genus; or the *Licuala grandis*, a little honey of a palm; or the *Jubaea chilensis*, a honey palm but massive, not little; or the *Roystonea oleracea*, the *Rhyticocos amara*, the *Cyrtostachys Lakka*, or David Fairchild's special love, the *Pigajetta jilaris*; or any other chosen from an elegant infinitude. Upon examining the matter, however, it was clear it would not be easy to find compelling reasons for putting one palm above all the others. Besides it would hardly be cricket to single out a palm I had never so much as glimpsed unless in an illustration—an Andean wax palm, for example, perhaps towering to nearly two hundred feet. Of course there was the temptation to buck the trend and be different by naming the lowly, and usually scrubby, saw palmetto (*Serenoa repens*), or something even less distinguished, the *Sabal Etonia*, which will never win a beauty contest.

With some reluctance, however, I



passed up the opportunity to gain notoriety as a sort of James Joyce of the palm world, whose gibberish would be highly respected because nobody could understand it.

I had to make a choice and stop floundering around, so I decided to confine it to the palms that are growing on my own grounds. I would look at them all again, for about the billionth time, but more objectively than ever before, and then make a decisive choice. This I proceeded to do, and it seemed to me that one stands out above the crowd of about a thousand competitors here and is by all odds, if not the prettiest or most elegant, the most majestic in appearance.

This majesty of a palm belongs to the genus *Livistona*, though its species is uncertain. It resembles most nearly *L. chinensis* when compared with examples of all seven species growing in the same garden, but there are several differences from the palm I take to be good *L. chinensis*. A taxonomist might consider the differences not significant enough to warrant separate specific status for my favorite, but it does differ from *L. chinensis* most noticeably in these particulars: 1) it grows more than twice as fast; 2) there is, on the upper surface of the leaf blades, a sheen or glint that is in wide contrast with the dull green leaf surfaces noted in *L. chinensis*; 3) the petioles are armed with heavier and longer less recurved spines than those of *L. chinensis*, but this factor is not dependable because the petiolar armature is not always constant even in the same palm; 4) it first blooms at about half the age usually observed in *L. chinensis*; 5) it is much more retentive of live leaves than *L. chinensis* is, at least in this garden, where fifteen of the latter ranging in age from ten to about forty years may be observed in various stages of growth, and this greater retention of foliage is evident at once, even though *L. chinensis* retains more live foliage, when favorably situated, than most other coryphoid palms.

My favorite is clothed at present with over one hundred unblemished vivid green leaves, to within a few feet of the ground. The lowest and oldest of these still green leaves have been on the palm since 1964 and 1965, quite unchanged by the frosts, freezes, droughts and windstorms of recent years. It would still be clothed quite to the ground if the lowest leaves had not been pruned away before

they had become even a little unsightly. It is this unexampled mass of vivid green foliage that awes the beholder and gives the palm its majestic appearance. Added to this is the beauty of the leaf blades with the glint of sunshine or moonlight upon them, though brilliant even when shaded; and the fountain effect of the drooping leaf segments. This effect is heightened by the sheen so readily apparent in the accompanying illustration, but no mere black-and-white photograph can really convey the striking appearance of the green foliage.

Clearly enough, as the illustration suggests, my favorite is one of the "fountain palms," a sobriquet usually applied to *Livistona chinensis*, yet perhaps quite as apt for some of the other species. It may be an unnamed variety of *L. chinensis*, or a form of it not different enough to give it varietal rank. Or it may be the hybrid product of, say, *L. chinensis* and *L. australis*; but I hasten to add this would seem to me farfetched and quite unlikely to say the best of it, for I don't know if these palms cross, and moreover have no doubt, without any assurance to the contrary, that anyone else knows.

Perhaps I should mention, before I forget it, whence came my palm, its height and its age. It is now about fourteen years old. Ten years ago a few young palms of several different kinds had overgrown a small test-area in the lowland marl at the Fairchild Tropical Garden, and this phenomenal plant of mine, then consisting chiefly of roots and four-foot leaves, was dug and extricated from the tangle, placed on the floor of my car and transported to its new home, where it was replanted and at once began to flourish. It is now just over twenty-three feet tall to the top of its topmost leaf, a fact easily determined by using a ruler to relate the height of the palm in the illustration to the known height of the man standing near its base.

Apparently *Livistona*, a genus said to consist of some twenty species, has not yet been exhaustively studied. The species are widely dispersed in regions as far apart as central Australia and south central China, as also in Malaya, New Guinea and the Philippines, and presumably good herbarium specimens of every one do not exist.

If a botanist had compared the flowers of my palm with those of good *L. chinensis*, I daresay he would have found

FAIRCHILD - A YEAR AFTER ANDREW

Paul Craft

I went on a trip recently to Fairchild and was pleasantly surprised by all the lush new growth and plantings that have been done.

After seeing the destruction that Hurricane Andrew did to Fairchild Gardens, it is amazing the amount of recovery that has occurred in only one year. Even the untouched area set aside to show the destruction caused by Andrew looks much better. The tree canopy of the rainforest area is still largely missing, but the palms and cycads are recovering nicely. Virtually all the cycads are exhibiting fresh new growth and have never looked better. The palms have pushed out a great deal of growth and many have recovered fully. Even the giant *Borassus* at the bottom of the hill are trying to set seed and have several new leaves. The *Copernicia baileyana*s are also looking much better. Several did die, but most have survived and are beginning to return to their regal appearance. The rainforest area will be the slowest to recover. Without the natural canopy, weeds have sprung up and some of the understory plants show the stress of too much sunlight.

Many new plantings have been done and more are in the planning stages. Currently the parking area is being completely renovated. Trees are being moved, more are being added, and it is being made into a more efficient and prettier parking area. Several areas inside the Garden

PALM TREES IN EASTERN EUROPE

by PHIL STAGER

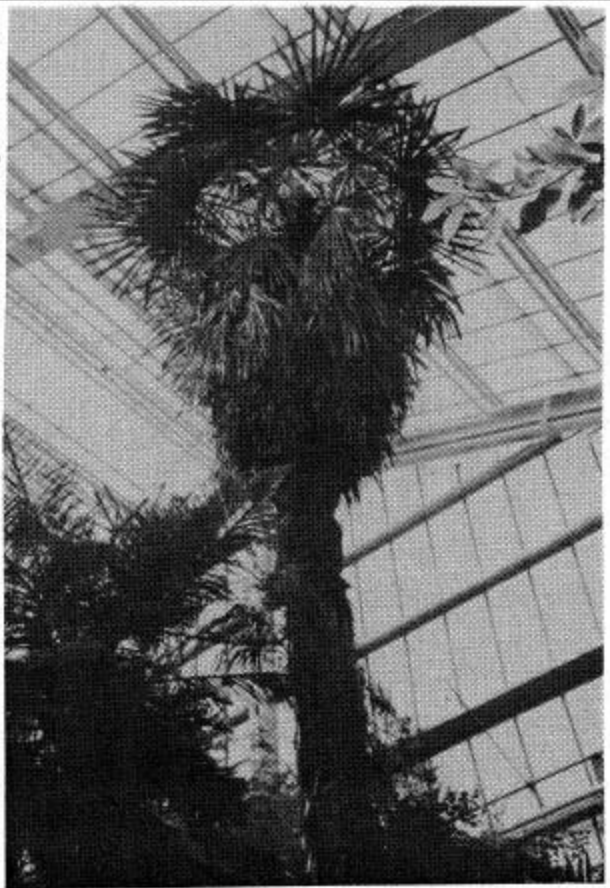
I recently returned from a once-in-a-lifetime trip to Eastern Europe. The main purpose for this trip was to attend an international stamp show in Poznan, Poland. The trip was expanded to include Vienna, Budapest, Prague, and Nurnberg, Germany. Although one does not immediately think of palm trees when one mentions eastern Europe, they can be found with a little searching.

A palm house is located in Vienna, Austria and is in a complex known as the Hofburg, the old Imperial residence of the Hapsburgs. Unfortunately, it was temporarily closed. In Budapest, many of the pedestrian malls or zones were graced by tub plantings of *Chamerops humilis* or *Phoenix canariensis*. I have no idea where these palms were stored in the wintertime. In Prague, I hoped to visit a small palm house associated with the Belvedere Palace and surrounding park. Unfortunately, this too was closed. However, palms such as *Howea forsteriana* were extensively used in the interiors of the larger hotels. Poznan, Poland was a bit of a palm-surprise since it possesses the largest glass house in all of Poland. The glass house is located in Wilson Park which was easy walking distance from the center of the city. Most of the palms in the glass house were of the cold hardy varieties common in Florida. The heating requirements of the glass house must be astronomical in the middle of a Polish winter. The glass house was well-attended by numerous groups of school children and by Polish tourists. The PALMIARNIA had an admission price of 15,000 zloty; cameras were an additional 15,000 zl. and videocameras were another 25,000 zl. (The exchange rate at the time was about 16,000 zloty to one U.S. dollar.) The stamp show also had a splendid thematic stamp exhibit on palm trees by a French exhibitor. Although eastern Europe is not exactly a hot-bed (no pun intended), the palms are there with a bit of searching.

Note to Ed> zloty is pronounced zwoty since in Polish, the 'l' in the word has a dash through it. My word processor does not have this diacritical mark in its repertoire.

The two photos are of: 1) *Trachycarpus fortunei* and small fan leaf clumping palm identified as *Cartudovica palmata*. I cannot find this name in any book in my small palm library.

Photo #2- See back cover.



no differences; but up till now, this would have been impossible, for the palm had not reached bearing age. Two days ago, however, or precisely on January 7 of this year, I was amazed to find that it had suddenly come of age. I had gone out to check the number of leaves for this page in my script, and saw, while peering upward through the foliage, that seven long spadices had emerged and the inflorescences were already in full bloom. In January, mind, when at this latitude one often shivers and sometimes wonders if, after all, it might not be well to sharpen that long disused pair of ice skates. But not this season, for the local weather has been abnormally warm so far and not much different from a tropical winter, with avocados, citrus, bananas, and many other plants blooming before their time. This prompted an inspection of all the other *Trachycarpus*, of whatever species on these grounds. Not one spadix is visibly emerging as yet from any of a dozen or so palms of flowering age, with the sole exception of that daring performer, which as I have already said, is in full bloom. Could this be significant of a

specific difference? I cannot say, and must remain in this respect an agnostic, a word invented by Thomas Henry Huxley from the Greek *agnostos*, meaning "unknown" or "not to know." So I am an *Idon't*-knower about this as about all else having to do with taxonomy.

To have a favorite palm at all there has to be something outstanding about it. My palm seems to me overwhelmingly beautiful, but if the next hard freeze would turn it into an eyesore and perhaps kill it, I would not knowingly choose it as a favorite to be preferred above all other favorites. Luckily my palm is possessed of virtues more solid than the accident of beauty. It is tolerant of cold, drought and windstorm, and requires no special care of any kind. It is manifestly happy to be where it is, and seems wholly indifferent about whether anybody else besides me loves it or not. I should hope, though, that everybody would.

DENT SMITH



This *Trachycarpus* species holds over one hundred unpublished, vivid green leaves. To measure its

A Very Special Livistona Revisited
by Bernie Peterson

The May meeting of the CFPS, held in the Daytona-Deland area, gave me an opportunity to visit Doris Smith's beautiful garden for the third time. It's always a pleasure to see the palms planted by Doris' late husband Dent, the founder of the Palm Society. There are only a few places in Central Florida where one can see such mature and well maintained palms.

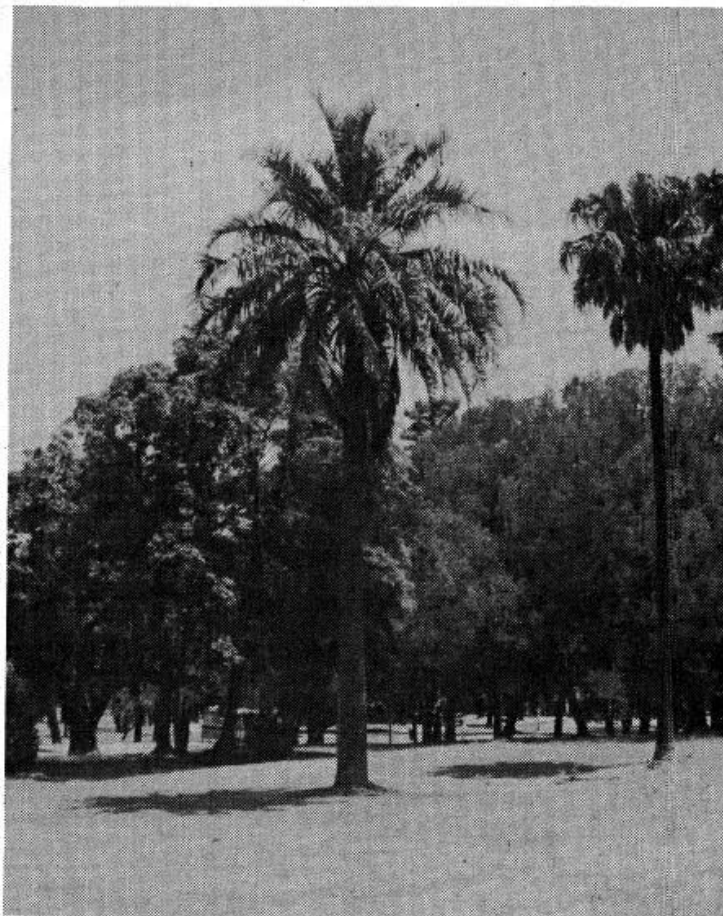
Of special interest on this occasion was seeing Dent Smith's favorite palm, a towering Livistona, which was pointed out to Roy Works and myself by Doris Smith. Twenty five years ago Dent Smith wrote an interesting article about this very palm entitled: "A Very Special Livistona", (reproduced elsewhere in this bulletin).



FIG. 2



2nd hybrid (on path) Pan de Azucar



Syagrus x Butia at Prado

SOME NOTES ON SYAGRUS X BUTIA IN URUGUAY

While travelling in Argentina last January, I took a short side trip to Uruguay to investigate the existence of the hybrid Syagrus X Butia in the country. I had discovered a citation in Los arboles cultivados en los paseos publicos and Flora arborea y arborescente del Uruguay, both by Atilio Lombardo, which stated that Syagrus X Butia occurred on the Pan de Azucar mountain near the city of Piriapolis, between Montevideo and Punta del Este in Southern Uruguay. In Los arboles, Lombardo also made note of several old Syagrus X Butia growing in Montevideo in the Prado, a group of public parks west of downtown near the old Botanical Garden. Even more interesting, Lombardo mentioned that a tree in the Botanical Garden had been grown from seed collected off one of the old hybrid trees in the Prado.

When I arrived at the Botanical Garden I was rather disappointed. The grounds looked as if they had been long neglected and were in worse shape than those at Buenos Aires, but nevertheless there were many interesting, mature plants to be found. It was not until my second trip that I saw a group of old plants in a corner of the garden, including a tall, "normal" looking hybrid, and a much stockier hybrid which had large, stiff bright green leaves. The massive trunk and the large leaves were most unusual. Possibly this is the F2 hybrid mentioned by Lombardo. The trunk is so robust that I considered the possibility of a Syagrus X Jubaea cross, since Jubaea is grown to a limited extent in Montevideo.

The Prado still contains several fine Syagrus X Butia (see picture). Unfortunately, the fruit was still developing and was not ready for collection. March would likely be the best month for collection.

Pan de Azucar is a small mountain, 1644 feet tall, less than 10 miles from the Atlantic Ocean. The mountain is something like a nature preserve and there is a trail to the summit. Butia capitata var pulposa (according to Lombardo) is common on the drier, rocky areas of the mountain, while Syagrus romanzoffianum is confined to more protected areas where seepage evidently occurs from the rocks. While climbing the south summit of the mountain I encountered two mature palms which were obviously hybrids between the two (see photos). One of these plants was right on the main trail up the mountain. Neither, however, had inflorescences with fruit, in contrast to the plants in the Prado in Montevideo. No seedlings were observed under the trees.

In Glassman's revision of Syagrus, he comments that Syagrus X Butia is only known from cultivation. The plants on Pan de Azucar appear to be a wild population and are noteworthy for this alone. The trees in the Prado are also interesting since hybrids in the United States are almost always completely infertile. The trees in the Prado may well be from parents of a different genetic background than most plants in the United States, and these trees might prove to be less sterile than their US counterparts. Seed from these trees should be tested for fertility.

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DEPT OF HORTICULTURE
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In 1993 the Livistona in question is quite tall, Fig. 1, and has some of the characteristics of Livistona decipiens, but as Roy pointed out it is more robust than that species. Although Dent Smith expressed doubt, in his article, that this palm was a hybrid, Doris told us that later he felt it was a hybrid, and it seems certain to be true.

Livistona hybrids are becoming more common in Central Florida, at least in the collections of CFPS members. L. australis and L. decipiens seem to be involved in most of these crosses, with one or the other being the female parent. L. australis may be

particularly prone to producing hybrids since in this species there are separate male and female trees. Seeds gathered from a L. australis growing in a collection of mixed Livistona species produced a high percentage of hybrids with varying appearance and varying vigor indicating several different pollen sources.

Most of the Livistona hybrids I have raised had L. decipiens as their female parent, and while I don't know the male parent the appearance of these hybrids is consistent. They are quite vigorous, fast growing and cold hardy. Fig. 2 shows one of these plants growing at the home of Jim Parkhurst in Indian Harbor Beach. Jim's 2 1/2 year old son Shawn lends scale to the scene; the palm is approximately twice Shawn's age. Fig. 3 is a closer look at the foliage of Jim's hybrid. Notice the similarity to the leaf of L. decipiens particularly the way in which the individual tips of the bifid segments spread away from each other; the color however is very different from that of L. decipiens.

Donna Livenspire of Aloha Palms, in Wimauma FL., has collected seed from L. decipiens growing in close proximity with L. chinensis. Donna reports that of the resulting crop of several thousand plants less than 1% were hybrids, but since only two species were present the exact parentage of these hybrids is known.

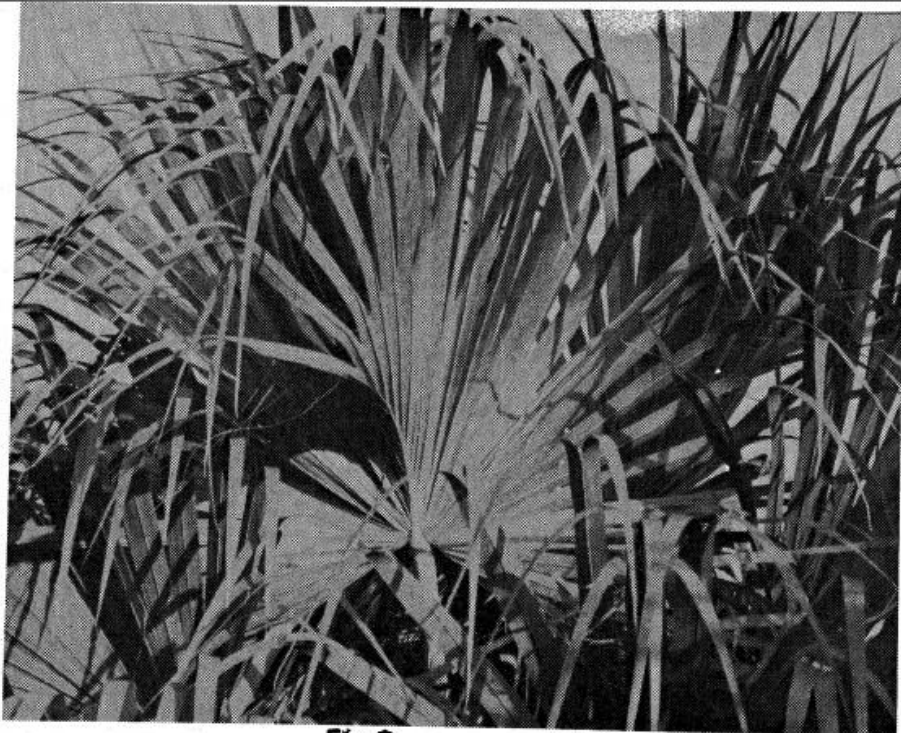
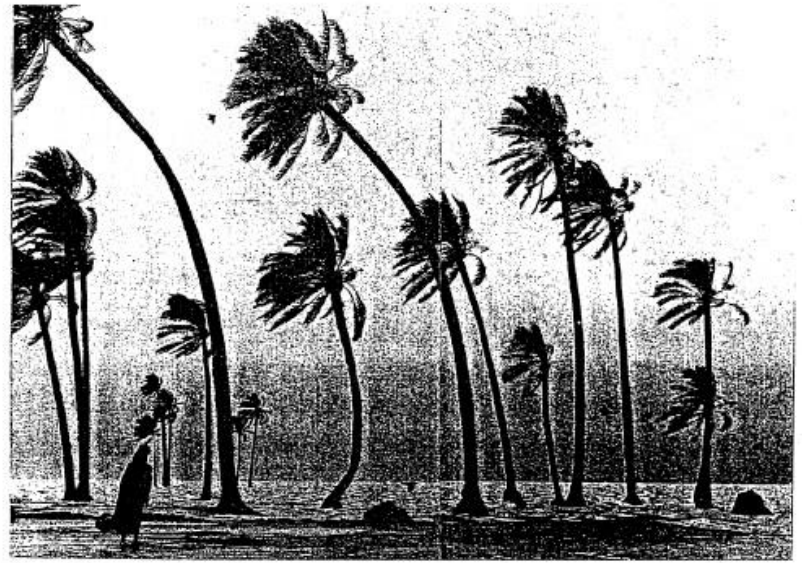


Fig 3

It is not known, by me at least, if these hybrids will be able to produce offspring of their own. Perhaps it would be well if they proved to be sterile, because while they are beautiful, sturdy and highly desirable; fertility of these hybrids could eventually lead to the sort of confusion (some might say mongrelization) which currently exists in the genus Phoenix wherever they are cultivated.

I would like to thank Donna Livenspire and Roy Works for sharing their knowledge with me, and special thanks to Jim Parkhurst for providing Figures 2 & 3.



Windswept Phoenix dactylifera in a gale. This photo was taken in 1954 the year of the great flood, when water from the marsh in Iraq spilled over into the desert inundating the date palms under six feet of water. Notice the fuller crowns on these specimens.

ARE YOU A MEMBER OF THE
INTERNATIONAL PALM SOCIETY?

The Central Florida Palm Society is an affiliated Chapter of the International Palm Society (IPS) but not all of our members are IPS members. Your officers strongly encourage you to join if you are not already an IPS member. Our present society is a vigorous force for conservation, appreciation, an increased knowledge of palms.

The journal, *Principes*, is an informative publication covering various aspects of palms and palm culture. Copies are available from IPS to look over if you are unfamiliar with *Principes*. Members can also participate in the IPS Seed Bank and obtain seeds of many species at reasonable cost. Contact Ed or Nancy Hall for an IPS membership application.

infected with *Graphiola*, surprisingly the fruit of the Dayri is probably the most tolerant cultivar to rain and humidity. Ironically, it appears that the fruit and foliage respond to humidity independently to one another. The fruit of a specific cultivar could have a high resistance against humidity but the foliage a low resistance to *Graphiola* fungus and visa versa. The Barhee cultivar appears to fit both categories of fungus resistance to the foliage and moderate humidity and rain tolerance to the fruit. Barhee is also unique in that the fruit has a relative absence of astringency or tannin flavor in the early stage of ripening. Fruit from the Barhee does not have to remain on the tree as long exposing it to humidity and rain. Punjab also studied the chlorophyll content in several cultivars and found that Barhee retained much of the chlorophyll in the older leaves. Halawy maintained a moderate amount while Zahidi and Deglet Noor lost severe amounts of chlorophyll in the older leaves to *Graphiola*.

Finally in 1985 F.W. Howard, R. Atilano and D. Williams at the University of Florida Agricultural Research Centre in Ft. Lauderdale studied Halawy, Zahidi and Deglet Noor. The study examined the number of fronds badly damaged by *Graphiola* leaf spot. The Halawy cultivar lost the fewest leaves while Zahidi and Deglet Noor lost the most.

Most Florida nurseries label smaller *P. dactylifera* without the varietal name mainly because it is not known. Unnamed varieties were probably started from an unknown seed source which could also turn out to be hybridized or a male or female tree. When selecting *P. dactylifera* for Florida it is not recommended to purchase trees without varietal names for reasons discussed in this article. It is hoped with this information varieties with foliage more resistant to *Graphiola* and/or fruit that is tolerant of humidity and rain will be imported to Florida for possibly edible fruit and a more ornamental appearance. At this writing I have a Medjool, Dayri, Thoory, Halawy, Amir Hajj and Barhee. I will observe how each cultivar responds under Florida conditions to *Graphiola* on the foliage and rain and humidity on the fruit. These cultivars in my estimation show the most promise for Florida for either edible fruit or a more ornamental appearance or both. If others have any observations of *P. dactylifera* please contact me by writing or call (407) 894-7766.

Acknowledgments

USDA Agriculture Research Station National Germplasm Repository Riverside, California for providing Amir Hajj, Barhee and Thoory offshoots. Thanks to Tim Williams and Chris Carbett for their professional help and advice.

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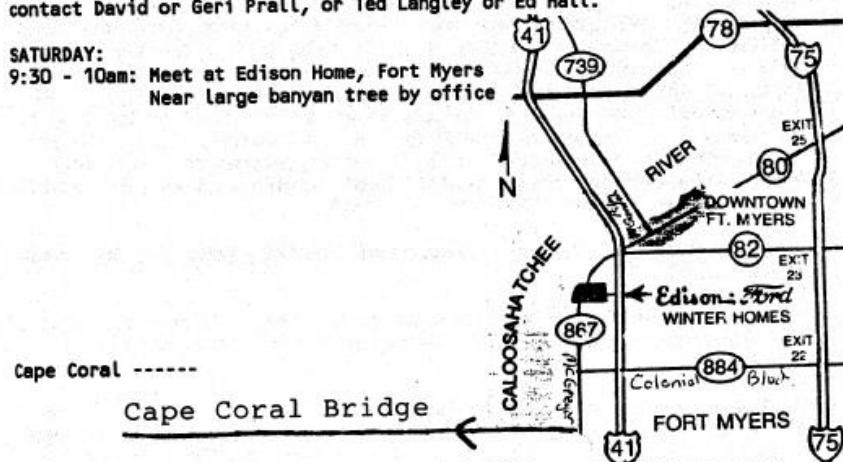
Photograph

Wilfred Thesiger's book "The Last Nomad"

FALL MEETING CAPE CORAL/FORT MYERS October 2nd & 3rd, 1993

The two day Fall meeting will be held in Fort Myers-Cape Coral, on the first weekend in October. Fort Myers is labeled the "City of Palms". You will see a variety of palms planted in the city right-of-ways as well as in the sub-tropical home landscapes. We would like to get an idea of how many people would be interested in attending so that we can see if we will qualify for group rates. If you think that you might be interested, contact David or Geri Prall, or Ted Langley or Ed Hall.

SATURDAY:
9:30 - 10am: Meet at Edison Home, Fort Myers
Near large banyan tree by office



Directions: I-75 to exit 22 "Colonial Blvd (884), west to McGregor Blvd (887) north to Edison Home.

Edison Home Tour - Admission - Group Rate \$7

Edison & Ford Homes: Regular tour rate \$10

Regular Tour: 1 hour 20 minutes; Opens 9 am - 4 pm. We would request Special Botanical Tour and group rate if we have at least 20 people.

Lunch: Edison Home has picnic tables for those that want to pack a lunch. There is also a cafe within walking distance.

1pm: Walk one block from Edison Home to Edison Park to tour the Bochette Estate, 2413 McGregor Blvd, an beautifully landscaped older Fort Myers home.

Tour of Garden of Palms Park on Edwards Drive & Lee Street, downtown Fort Myers. A small palm garden across from river marina with a nice collection of palms including a giant *Corypha*.

Ride on McGregor Boulevard "Boulevard of Palms" and see the rows of Royal Palms planted along side.

Time permitting - there may be stops at various specimen palms.

Phoenix dactylifera Cultivars with Resistance
to Graphiola Leaf Spot

Larry Bains

360 Oak Avenue, Umatilla, FL 32784

Then on to Cape Coral.

The entrance to Cape Coral Bridge is at the intersection of McGregor Boulevard and College Pkwy. Cross Cape Coral Bridge; 1st traffic light is the intersection of Del Prado Blvd & Cape Coral Pkwy. Turn left (south) on Del Prado. Quality Inn is on the corner. Go one block and turn left into the rear entrance to SunBank. Meet at the SunBank/Avalon Building 1612 Cape Coral Parkway - parking and entrance in rear of building. Meeting will be held upstairs.

7:00 pm Evening Program - Talk & Slide Presentation
- David Besst will speak about Palms and Interiorscapes

Lodging available at Quality Inn 813-542-2121, one block from location of evening program. A block of ten rooms have been reserved at \$35 for 1-4 people/room. Additional rooms are available providing they have space available. Mention that you're with the Palm Society and Confirmation #P49114) when making reservations. Reservations must be made prior to Sept. 1st for the discounted rate. The regular rate is \$50 per night. There is additional lodging available in North Fort Myers on US 41 prior to crossing the Caloosahatchee Bridge, but the Quality Inn is the most convenient since it is close to both the evening program and Sunday morning tour. (See Geri for a list of additional lodging locations if you are unable to make a reservation prior to 9-1-93).

Dinner: There are numerous restaurants heading north on Del Prado Boulevard.

Note: If you are unable to stay over until Sunday, you can make special arrangements to stop by Palm Tree Gardens prior to 6 pm on Saturday.

SUNDAY

9:30 am - Prall's Palm Tree Gardens:

Directions: Take Cape Coral Parkway west to Palm Tree Boulevard, turn right (north) at Farm Store, until you reach Country Club Inn parking lot. Across from Phone Company, Turn left on SE 40th St, go one block to SE 4th Ave, head north until it ends on 33rd Terrace, turn left. Parking in front of pilings. (Phone: 813-542-2245)

10 am - Tour of private collection at the home of David & Geri Prall at 328 SE 33rd Ter, Cape Coral. Palms from their collection appear on the "Palm Tree Gardens" T-Shirt that many of us are wearing. See a home landscape in Cape Coral that includes over 200 different species of palms, cycads, and bromeliads in landscape and containers as well as a variety of other plants.

11:30 am Palm Sale after tour. (Please have your plants tags with identifying number to receive the usual 80/20 grower/CFPS split. If you are a new seller, please contact Ed Hall for a seller number).

T-Shirts (in a new natural off-white color) will be available for sale (\$15 each for sizes L & XL)

Sunday Afternoon: Tour of another collection or tour Sanibel Island if time permits.

[Detailed information will be giving out at meeting sites.]

This article is part two in a series on the cultivation of Phoenix dactylifera in a humid rainy climate. The last article addressed the possibility of producing edible dates in Florida. This article will discuss the limiting factor of Graphiola leaf spot on P. dactylifera in Florida and possibly overcoming it.

In 1901 John V. Watkins described P. dactylifera in his book "Florida Landscape Plants" as "A very stately feather palm making an excellent freestanding specimen or avenue tree". Phoenix dactylifera adorned the grounds of many central Florida citrus belt estates around the turn of the century. There are still P. dactylifera thriving in open areas of the Ocala National Forest, apparently once a homestead now long abandoned, attesting to their hardiness. Forgotten for years in central Florida landscapes P. dactylifera is once again becoming fashionable appearing at theme parks, resorts, and in city landscape plans. The recent surge of interest in the date palm is due in part to the lack of damage they received in the 1980's freezes, but also their stature. The P. dactylifera and Phoenix sylvestris are the tallest growing feather palms for central Florida. However, most Floridians aren't getting the true prospective for the beauty of the date palms because of the cultivars being imported. Zahidi and Deglet Noor are two of the three most imported varieties to Florida and also suffer the most from Graphiola fungus. Several cultivars have shown more resistance than others to Graphiola. In humid climates Graphiola fungus thrives and attacks the older fronds causing a reduction of chlorophyll resulting in a ragged looking leaf that must be removed, hence the "feather duster" look. Some may like the "feather duster" look because of the formal appearance it may give the palm, but for those who don't, there is an alternative. Graphiola does not pose much of a problem in arid climates consequently date palms have a fuller crown. In humid climates fungicide could be used to control Graphiola but this would be impractical on large specimens. The easiest way to control Graphiola is through the cultivation of more resistant varieties.

In 1957 Roy W. Nixon studied several P. dactylifera cultivars in Weslaco, Texas in the lower Rio Grande Valley where the humidity is high. In Nixon's study there were differences in the amount of infection by cultivar, the most severely infected being Zahidi and Deglet Noor. Surprisingly the two most severely infected cultivars are the main ones used in Florida landscape projects. The Kustawy cultivar was the least infected in Nixon's study, although this cultivar is now thought to be extinct in the United States. The Amir Hajj cultivar was moderately infected. The USDA also reports that Amir Hajj came through six days of rainy weather in Winter Haven, Texas between Larado and San Antonio without fruit spoilage. The Amir Hajj is still available in the United States. Nixon had a second test field 200 miles northwest of Weslaco in Crystal City where the humidity is on average about 10% lower. The Crystal City site had different cultivars and reported Jozee and Tadala as being only slightly infected with Graphiola, both are also thought to be extinct in the United States.

In 1970 another study was conducted on Graphiola leaf spot by Punjab Agricultural University in Abohar, India. M.K. Sinha, Raghbir Singh and R. Jeyarajan found several cultivars ranked high in resistance against Graphiola. The only cultivar ranked high in resistance that I was able to find in the United States was Barhee. Moderately resistant were Medjool, Thoory and Halawy, while Dayri was severely

PLAN FOR FOR THE 1994 IPS BIENNIAL - -
CARACAS, VENEZUELA -- JUNE 12-16

The week of June 12 - 16, 1994 has been set for the Caracas, Venezuela Biennial meeting. The Biennial meeting is being co-hosted by the Venezuelan Botanical foundation (Botanic Gardens) and the Venezuela Palm Society. There will be garden tours and special events during the weekend that the meeting opens as well as during the meeting week. A wide variety of post-Biennial horticultural tours are planned to begin on Friday, June 17th. These will all be in Venezuela and will range from 3 to 10 days in duration, depending on the modules you select. It is planned that a knowledgeable palm expert familiar with the individual habitats and their associated palms will accompany each group.

Primary housing during the primary meeting period (Sunday night through Thursday night) will be in the Hotel Avila which is nestled in its own tropical garden environment on the edge of the city of Caracas, directly under Mt. Avila. Arrangements are being made for an additional hotel, should bookings exceed rooms available at the Avila. PLEASE make your plans early as the Avila is the preferred location. Hotel rates will not exceed US\$75.00 per room (double occupancy) including taxes and luggage transfer gratuities. Transfers from Caracas airport are available at an additional US\$20.00 per person.

Bookings and air travel arrangements will be handled by Superior International Services (S.I.S.), Houston, Texas, Fax: (713) 782-0310, Phone: (713) 972-1095 or U.S. toll free at (800) 338-6996. Contact either Kathy Frederick or Debbie Wier and advise that you are with the "IPS" or the "Palm Group" or just mention Jim Cain and they will know. You are free to make your own air reservations but I would strongly recommend that you first check with S.I.S. since attempts are being made to obtain significant discounts on airfares from various worldwide departure points. If at least ten people agree to travel together from the same departure point (same flights) then substantial fare reductions are expected.

The post-Biennial horticultural tours (palm expeditions) will be handled through Lost World Adventures of Marieta, Georgia. They are very experienced with such operations and have a fully staffed office in Caracas. Exact tour package modules have not yet been finalized, but I am currently working them out with Scott Swanson of Lost World Adventures, in conjunction with our Venezuelan co-hosts.

Caracas is a very European-style city and the birthplace of Simon Bolivar, father of South

American liberty from Spain. The city is in a high valley -- high enough to mitigate the tropical temperatures, keeping average maximum daily temperature around 75°F (24°C). This doesn't vary much with the season. Caracas is often quite congested by traffic, but our planned Biennial meeting site will be somewhat isolated from the central hustle-bustle. Access to other destinations is easy and inexpensive by readily available taxis. There are also great restaurants serving delicious food at quite reasonable prices, as well as many lovely museums, shops, and historical buildings to see as well.

Caracas is a city full of palms. The Botanical Gardens were established many years ago and are filled with very mature plantings of numerous palms that we think extremely exotic. In addition, it's not unusual to see a sloth or several beautiful birds lounging in the trees within the gardens. There are many lovely parks (full of palm trees) within the city. Either Horace Hobbs or I can provide you with slides of many Caracas palms. In addition to the city gardens, the Mount Avila National Park rises majestically above the city. The montane cloud forests (1700-2200 meters elevation) of this park are the home of 12-18 meter *Ceraxylon klopstockia* wax palms, dense populations of pretty and delicate *Geonoma pinnatifrons*, and the extremely beautiful stilt-rooted *Catoblastus praemorsus* palms. There are also numerous bromeliads, orchids, anthuriums, and cyclanths. Bright Tibouchinas bloom near the top of Mt. Avila. Walking tours into the cloud forests will be provided as part of the Biennial. Strolling through the mists among this profusion of plants is a great experience (at least it was for me, who has made the trek several times). Beautiful beaches are very nearby, with various types of offerings (from uninhabited coastal islands to typical tourist beaches). This IPS meeting site was selected by the current President (me) with the concurrence of the IPS Board of Directors. I think it would be great if a number of Texans join us on the trip.

Mark you calendars NOW!! If you have any questions or if you need more information please contact me. Horace Hobbs has also visited the extensively planted Caracas Botanical Gardens several times and can give you his impressions.

Jim Cain, IPS President

SPRING PALM SALES OR YOU WIN SOME/YOU
LOOSE SOME

On March 13 the CFPC participated in the annual plant sale at Leu Botanical Gardens in Orlando. The major attendee though was the Storm of the Century. By noon the sale was shut down and the few participants scurried home to protect the plants. Total gross sales was \$192.50 and the CFPS lost money on the activity.

On May 1 University of South Florida in Tampa held its annual sale. Weather was great but primarily due to the efforts of Ted Langley, the sale was an immense success; setting a new record. The results are summarized below:

<u>Seller</u>	<u>No.Plants</u>	<u>Gross</u>	<u>Net</u>	<u>Donation*</u>
Aloha Palms	102	\$1204	\$ 963.20	\$ 240.80
Marita Bobick	66	441	352.80	88.20
Paul Craft	234	2390	1912.00	478.00
Ted Langley	33	161	128.80	32.20
Stacey Peacock	17	135	108.00	27.00
D&G Prall	29	353	282.40	70.60
F. Tintera	27	634	507.20	126.80
D. Vazquez	54	818	654.40	163.60
R. Whatley	15	296	236.80	59.20
1993 Totals	577	\$6432		
1992 Totals	526	\$5083		

*The 20% donation is split 50/50 between the CFPS & USF. Each received \$643.20.



Main residence at Gemini facing Atlantic Ocean.



Main residence at Gemini from Pool.



Randy Schuster standing next to one of the many *Pseudophoenix sargentii* at Gemini.