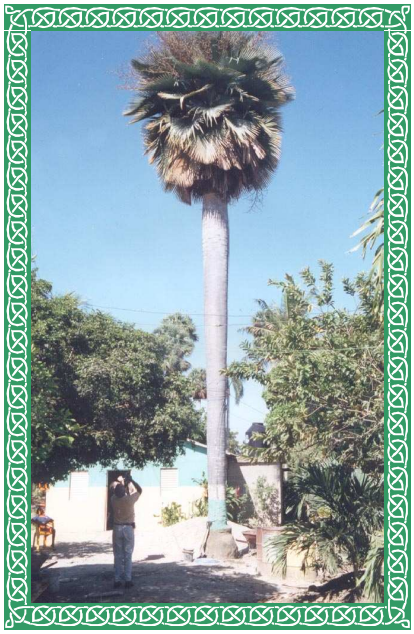
The Palmateer

Volume 22, Number 2 *Central Florida Palm & Cycad Society* *June, 2002*



Above, a 118-year-old Copernicia baileyana *in the Dominican Republic. (Plant one for your great-grandkids.)* *Story on page 23.*

Palm Fest 2002 Review

By Ray Hernández

The third annual Palm Fest was held in the Miami/ Homestead area the weekend of May 17-19, 2002. After good turnouts the prior two years, the South Florida Chapter was faced with the task of meeting or exceeding what the Palm Beach and Central Florida societies had accomplished in 2000 and 2001. This could not be overly difficult with a plethora of gardens located in an ideal climate for growing palms and cycads. In fact, going to something like this can be a bit discouraging for those of us trying to cultivate some tropical beauties in the arctic tundra of Central Florida. This being said, I anticipated seeing some gardens and palms that I could only dream of keeping alive much less witness in seed. I was not disappointed.

The Ramada Inn Homestead was the official headquarters for the increasingly popular annual event and the festivities started early Friday evening. By the time I arrived at the poolside Tiki hut, many PACSOF members were enjoying a nice south Florida night with a few libations and horsd'oeuvres. Dave and Geri Prall looked very com-

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What's the attraction here? It's the checkout line at the CFPACS plant sale on March 16 at Florida Tech in Melbourne. The distant hat is Mike Merritt, our treasurer.

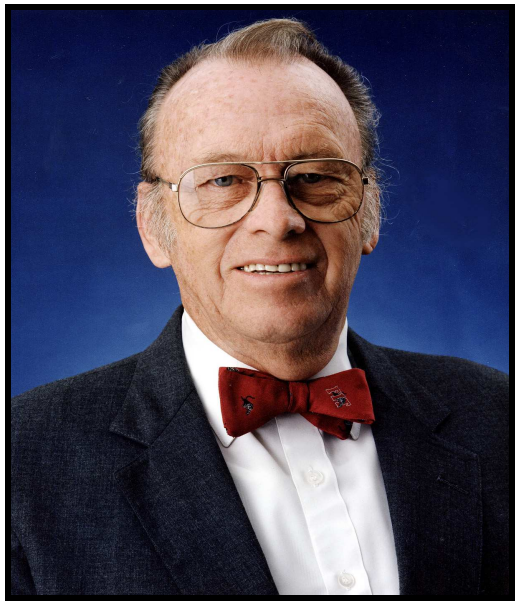
Cryptic caption came with photo above—
"New member Jason Baker and 'garbage pickup' at Borassic Park: a triangle palm is removed."

TWO NEW CFPACS VICE PRESIDENTS

Charlene Palm, who received and counted the votes, announces that Diana Grabowski, Cocoa Beach, has been elected East [Coast] Vice President..

Dave Witt. CFPACS president, announces the appointment of Jerry Hufnagel, Clermont, as Central Vice President. Such appointment is permissible under the chapter's bylaws.

Ray Hernández, Tampa, continues as West [Coast] Vice President.



Dr. Jerome Keuper, president emeritus of Florida Tech in Melbourne, died on March 25. A former president of The Palm Society, he was a leading patron of palm-growing in Central Florida. See an appreciation of his life on page 13. This recent photo was provided by the public relations office of Florida Tech. CFPCAS has met on the campus at least four times, beginning with May, 1986 and, prior to last March, in April, 1996.

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Deadline for September Issue:
Friday, August 16

Palms in the Conch Republic

By Mike Merritt

A tour of palm gardens in the Florida Keys was offered on Saturday and Sunday, February 16-17, by D'Asign Source, a firm that designs, builds, and landscapes fine homes in the Florida Keys and the Caribbean, many in waterfront locations. (It should be noted that *The Palmateer* does not endorse or recommend the products of private firms.) The CEO of D'Asign Source and CFPACS member, Franco D'Ascanio, has long had a keen interest in palms, and, in recent years, has emphasized the use of the widest possible variety of rare, exotic, and picturesque palms as part of the firm's landscaping projects. The firm has nursery facilities where most varieties of palms that satisfy the criteria above are raised to large size before being sold to customers for use in their landscape designs.

The staff of D'Asign Source has recently been joined by Paul Craft, one of Florida's best known and regarded palm experts. Franco and Paul were the leaders of the weekend tour of palm gardens designed and installed by the firm in landscapes belonging to their clients, which differed to some extent from the usual tour structure in that all of the venues were representative of a single palm esthetic rather that that of several individual collectors. Nonetheless, numerous well-grown and spectacular palms were available to delight the enthusiast.

Location is an advantage to growing palms in the Florida Keys. In the cold winter of 2000-01, the temperature fell into the mid-40's for 6 to 8 days. Franco reports that the only significant damage was to "lipstick palms", *Cyrtostachys renda*, and to breadfruits. In the not-damaged category were *Verschaffeltia splendida* and *Pelagodoxa henryana*. Certain species familiar to central Floridians are rarely seen. Queen palms (*Syagrus romanzoffiana*) do poorly, so *Syagrus amara* is often used instead. Several healthy-looking *Syagrus schizophylla* x *romanzoffiana* were observed at Punta Roquena. *Butia capitata* is regarded as "touchy" because of the high temperatures.

Soils are generally not favorable for growing palms in the lower Keys. The surface soils and rocks of the area were formed by the same geologic processes that formed the surface rocks of southern Dade County, both areas having limestone caprock near the surface overlain by a thin layer of limy soil. Franco reports that his firm trucks in additional soil for his landscaping projects to give palms, cycads, and other vegetation enough depth of soil to prosper.

Photo 1 - Group in front of large Hyphaene sp., *Punta Roquena (Paul Craft in green shirt, pointing.)*

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Palms in the Conch Republic(

Continued from page 3)

Punta Roquena (Pirate's Point)

Saturday morning revealed the damp effects of an overnight rain. As the day progressed, the skies cleared and a breeze developed that was especially strong at the oceanfront locations that we visited. The first venue was an estate occupying 13 acres on a point of

Photo 2 - Pritchardia vuylstekeana *at Punta Roquena.*

land extending from the southern shore of Sugarloaf Key. Fairly recently, it was the home of Mr. Baxter-Gentry, who landscaped with many palms that still remain, despite the devastation of Hurricane Georges in 1998, including two tall *Borassus aethiopum* and a huge *Hyphaene sp.* (photo 1).

Following the death of Mr. Gentry, the new owners turned to D'Asign Source for the re-landscaping of the estate grounds. The grounds are now said to be home to "over 250 species of palms and cycads as well as many other tropicals". Species included: *Elaeis guineensis*, various *Arenga*s (including *undulatifolia*), *Attalea cohune*, *Phytelephas seemanii* ("Ivory nut palm"), *Zombia antillarum*, *Pritchardia vuylstekeana* (photo 2), *Ravenea*

Photo 3 - Orania palindan, *below, at Punta Roquena.*

s*ambiranensis*, *Neoveitchia storckii*, *Orania palindan* (photo 3), and *Gastrococcus crispa* (photo 4).

It was reported that the new owners of Punta Roquena have a particular liking for the "bottle palm" (*Hyophorbe lagenicaulis*), and dozens of large, robust specimens with well-developed "bottles" were present on the grounds of the estate (one is pictured on the next page, in photo 5).

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Palms of the Conch Republic

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Photo 4 - Gastrococcus crispa (*above, with John Bishock in checkered shirt) at Punta Roquena..*

Among the more interesting specimens were a trio of *Pseudophoenix sargentii* that, though not especially large, impressed everyone with the robustness of their development. Another interesting item in a pot was a palm with bright glossy-green pinnate leaves and spines over an inch long on the stem. Paul identified this as a *Metroxylon* (probably *sagu* because of the spines). A group of robust *Coccothrinax* tentatively identified as *barbadensis* grew on a point overlooking the ocean (pictured in photo 6).

Saturday night

Saturday night was still breezy near water and also quite cool. The banquet and presentation were to be held on Pigeon Key, a small islet a short distance from the western end of Vaca Key and reachable only by a journey over a section of the old narrow 7-mile bridge that was replaced in the 1970's and is now closed to traffic beyond Pigeon Key. The tram ride hundreds of feet over the cool, windy open sea invited hypothermia for those tour participants who had not brought jackets or sweaters. However, those hardy enough to reach the island could warm up with the help of rum punch and several kinds of beer and wine while listening to the music of steel percussion instruments.

Pigeon Key was the locations of barracks for workers who built the Keys railroad in the first part of the last century. These buildings have been restored and are maintained for tourists, complete with military-looking rows of bunk beds and gear lockers.

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Marlin Cottage

Photo 5 - Hyophorbe lagenicaulis *("bottle palm"), one of many at Punta Roquena..*

The second venue was a smaller development on Stirrup Key, on the northern part of Vaca Key, the large key that includes the city of Marathon. The owners of Marlin Cottage have developed a vacation home that has a comfortable and playful atmosphere, as well as a remarkable number of rare palms.

Palms of the Conch Republic

(Continued from page 5)

Photo 6 - Coccothrinax sp. *(possibly* barbadensis*) on sea wall at Marlin Cottage.*

After walking the grounds, catching up on things with acquaintances, tour participants were treated to a sumptuous meal influenced by Cuban cuisine. Afterward, the group gathered to hear a talk by Chuck Hubbuch, the Director of Acquisitions at Fairchild Tropical Garden, although Chuck confided with his audience that he is currently transitioning to other activities. Chuck's talk was a thoughtful evaluation of man's relation to nature and how this relationship, part of man's own evolution, influences his intuitive and deeply felt response to gardening, the preservation of natural areas, and to other aspects of the natural world. In contrast, man's response to modern technology, even its dangerous aspects, is shallow and non-intuitive. After Chuck's talk, it was time for hypothermia again.

Casa de Aqua y Palma

Sunday morning dawned clear, windy, and rather cool. The third venue was a one-acre estate in Key Colony Beach built in 1996 and landscaped by D'Asign Source with 150 species of palms and cycads as well as other tropicals. Notable specimens were: *Syagrus amara*, a seeding (and moribund) *Caryota cummingii*, a blooming *Dypsis leptocheilos*, *Encephalartos villosus* and *hildebrandtii, Pritchardia beccariana*, *Arenga pinnata* and *undulatifolia*, *Thrinax morrisii, Coccothrinax argentata*, *Coccothrinax miraguama, Sabal mauritiiformis*, *Archontophoenix beatrice*, a large *Latania loddigesii*, *Coccothrinax crinita*, *Pseudophoenix vinifera*, and *Copernicia macroglossa.*

Photo 7 - Copernicia macroglossa *at Casa de Aqua y Palma.*

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Palms of the Conch Republic

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Key Vaca Retreat

The fourth and final venue was an estate located on Vaca Cut, just east of Marathon and north of the Overseas Highway. Though the lot was not large, the house was, having porches and patios that didn't stop, and a wonderful view north into the Gulf of Mexico as shown in photo 10 (right). The view is framed with *Cocos nucifera*. A *Pseudophoenix sargentii* is in the large pot on the far rail overlooking the water, and the pot to the right houses a species of *Coccothrinax*. In the center of the area to the far right is an artificial saltwater tidepool.

Photo 10 - View of ocean framed by palms at Key Vaca Retreat.

A *Wodyetia bifurcata* planted near the water further to the back looked a little windblown, but an amazing collection of exotic species were planted along a shady walkway on the inner side of the lot. These palms included many species already named, and a *Johannesteijsmannia* (Joey) *magnifica* with 2-ft leaves.

Photo 8 - Coccothrinax crinita *at Casa de Aqua y Palma*

The Auction

We returned to the headquarters of D'Asign Source for lunch and the afternoon auction, both of which took place in the nursery. Numerous large plants of exotic varieties were present for sale to the public, including a large *Pelagodoxa henryana* (photo 11), *Marojejya darianii* (photo 11), *Pinanga dicksonii*, *Verschaffeltia splendida*, *Dypsis sambiranensis*, *Coccothrinax borhidiana*, *Kentiopsis oliviformis,* and young, stemless *Gastrococcus crispa*.

The auction was held to benefit new land-

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Photo 9 - Pseudophoenix vinifera *(Faith Bishock to right) at Casa de Aqua y Palma.*

Palms of the Conch Republic

(Continued from page 7)

scaping at Pigeon Key. A look at the donated plants revealed *Copernicia fallaense*, *ekmanii,*

and *cowellii*, *Latania loddigesii* and *verschaffeltii*, and a *Pigafetta sp*.

However, facing a 7-hr drive back to central Florida, I had to leave before the auction. As I returned, visions remained in my mind of the ocean, the Keys am-

Photo 11 - Pelagodoxa henryana *(left) and* Marojejya darianii *(right) at nursery.*

Overseas Payments Addendum

By Mike Merritt, CFPACS Treasurer

Since publication of the little article on this topic in the last issue, more has come to my attention on the subject of overseas payments by the Western Union alternative. Apparently, payers can make payment by electronic cash transmittals, as well as by purchase of paper money orders that must be transmitted by snail mail. The buyer can email or otherwise advise the payee of a code number or other information. The payee provides the code or answer and collects cash at the receiving end. The Western Union form I looked at required the payer to enter a 4-word question and an answer to the question.

Western Union tellers seem to be in every supermarket store here in Florida. A CFPACS member recently in the Dominican Republic tells me that they are everywhere in the rural areas of that country.

Despite the cash alternative, my preference would be for the paper money order, because they can be deposited to our bank with checks. However, the seedbank and membership chairpersons are the normal recipients of small payments in CFPACS, and their preferences would be the best guide.

Photo 12 - Oceanfront ambiance at Key Vaca Retreat.

A Tale of Two *Livistonas*

By Mike Dahme

In 1991/92, I planted 26 individuals of four *Livistona* species in an area between ponds that was cleared of *Serenoa* and elevated somewhat with fill dirt. Fourteen L. chinensis and four *L. saribus* were planted in '91, and then four each *L. mariae* and *rigida* in March '92. The *saribus, mariae*, and *rigida* were grown from seeds received between August and October '89, the latter two from the newly-privatized "Seed Service," formerly the IPS Seedbank

Crowns of two Livistona rigida *emergent above the remainder of the* Livistona *canopy.*

A decade on, it comes as no central Florida surprise that most of the plantings have done well, a path between the palms having full head clearance. However, two of the palms have done more than "well," as the picture (left) attests. Both are *L. rigida*, now about 25 feet overall and with 15 feet of trunk below the leaf crown.

A bit of *Livistona* history. In his revision of the Australian members of the genus, A. N. Rodd (1998: *Telopea* 8: 49-153) placed *L. rigida* as a sub-species of *mariae*, although the ranges of the two are close to 1,000 miles apart. *L. mariae* is restricted to a small area in the near-desert of central Australia, whereas *L. rigida* occurs in riverine habitat in several disjunct areas, but primarily in northwest Queensland and the upper Roper River area (Mataranka) of the Northern Territory. *L. rigida* thus occurs in a much warmer climate than that of *L. mariae*, but freezing temperatures do occasionally happen where *rigida* grows, which helps explain the survival of *L. rigida* in central Florida.

What I have wondered about, however, is the apparent superiority in our climate of *rigida* over *mariae*, for in Australia the latter endures much more winter cold, often down to freezing, than does *rigida*. In the most recent of the "historic" Florida freezes, Christmas 1989, there were four *L. rigida* at my house and three *L. mariae*.

After the freeze there were still four *rigida* but only one *mariae* survived. *Mariae* can survive in central Florida, where extreme low temperatures of 18-20°F (-7/8°C) are likely considerably lower than those of either species' habitat area. Examples abound, but it suffices to mention the large, old specimens at Doris Smith's (Daytona) and on the campus of F. I. T. in Melbourne. But it isn't just the extreme freezes that are a threat to *L. mariae* (while sparing *L. rigida*), for I have lost *mariae* subsequent to the '89 freeze: two of the four planted out in '92 succumbed to cool, wet winters in the '90s, and the two surviving are not thriving.

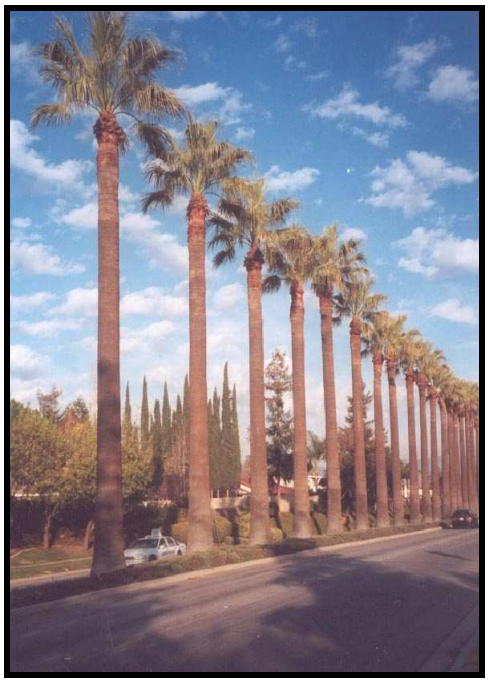
Summary of my *mariae* and *rigida* planting experience

Species	***Total planted***
Alive Today	***Condition***
L. mariae	7
3	1 thriving, 2 surviving
L. rigida	20
19*	19 thriving

*deceased was run over by cable TV truck

I've asked other central Florida growers over the years about their experiences and never heard of any that didn't mimic mine.

So how to account for this? Humidity? *L. mariae* occurs where humidity is low, in near desert, whereas *rigida* grows along rivers or in moist soils. As we know, our winter cold fronts are often preceded by rain, and thus it could be that our (relatively) high winter humidity is the reason that *L. rigida* so clearly outperforms *L. mariae* in our climate zone.



Charm, as opposed to beauty, is a symmetry whose laws elude us, a mysterious harmony of the features taken as a whole, and of the features combined with coloring and expression.

—La Rochefoucauld, Maxim 240

Left, a row of Washingtonia filifera*, California's native palm, growing there in Simi Valley. The species doesn't do well in Florida, and never looks this good.* *(Photo by Geoff Stein)*

At the March meeting, Miriam Pascual of Tampa stands in front of one of the curiosities of Florida Tech's Dent Smith Trail, a partially uprooted Livistona chinensis *that has hung on and now turns up toward the light. Why the palm fell over isn't entirely clear: either hurricane winds or being undermined by flooding in the low area.*

Notes on New *Livistona* Species From North Queensland and Papua New Guinea

[This version of the article was abridged by Bill Beattie, editor of Wodyetia*, journal of the Far North Queensland Palm & Cycad Assn. in the January, 2002, issue of that publication. Mr. Beattie has kindly given permission to reprint the abridgement. The original, unabridged article appeared in* Austrobaileya*, 6 (1): 165-174 (2001)]*

By John L. Dowe and Anders S. Barfod

Livistona R. Br., with about 33 species, has an unusually widespread distribution for a palm genus, occurring from the Horn of Africa and Yemen, through east Asia to Japan and the Bonin Islands, throughout south east Asia and Malesia to as far east as the Solomon Islands, and in the north, east and centre of Australia. Australia has about 18 species. New Guinea has about 7 species, two of which also occur in northern Australia across Torres Strait, and others which are endemics that are most closely related to species in the Philippines, eastern Indonesia and the Solomon Islands. **In Australia**, many species of *Livistona* are ubiquitous in some areas, forming large colonies that dominate their local environment. Only a few species are considered rare. In New Guinea, the distribution ranges are fragmented and locally most species are rare occurring in scattered groups on isolated ridges and mountain slopes. The new taxon from north Queensland has had some previous recognition as a distinct species. Jones (1984) listed it as "*Livistona* sp. Cooktown", and suggested that it "was similar in many respects to *Livistona benthamii* F. M. Bailey, but the leaves are light green on both surfaces and the lamina has a broad central area where the segments are fused." This 'tag' name was accepted by Irvine (1984) who placed the taxon in a group that included *L. drudei* F.Muell. ex Drude as well as *L. benthamii*, while Tucker's (1988) informal account provided convincing evidence for the taxon's distinctiveness.

The two new taxa from New Guinea were discovered during field-work conducted within the the Palms of New Guinea (PONG) project that is currently being coordinated by the Royal Botanic Gardens, Kew, England. This project covers the island of New Guinea, and its aim is to publish an account of the palm flora of this island in the near future. In 1981, Essig and Young described from the West Sepik Province "specimens of a large *Livistona* bearing red fruit that we had seen from the helicopter, but found only a few sterile individuals." Hay (1984) mentioned an uncollected taxon in Madang Province: ". . .isolated stands near the mouth of the Ramu river has [sic] apparently not been collected. Here the Livistonas are growing in a remarkable rainforest dominated almost to the exclusion of dicotyledonous trees by palms. . . ." These populations are indeed of the new taxa described in this account.

Livistona concinna

Distribution and habitat:

Australia. Queensland: Flinders Island, drainage area of the Kennedy river and tributaries, Barrett Creek and along the Endeavour river north of Cooktown and Archer Point south of Cooktown; in seasonally moist open forest, seasonally inundated *Melaleuca* swamp, along creek and river banks, and at mangrove margins in non-saline environments; soils usually alluvial. Occurs with *Corypha utan* Lam. In the Kennedy river area and with *L. muelleri* F. M. Bailey in the vicinity of Cooktown. Most populations are regularly affected by fire.

Description:

Solitary, trunk to 30 m tall, and to 100 cm diam. at the base. Leaves 50-65 in crown; petioles 120-300 cm long, glabrous, green, margins with solitary black spines 3-5 mm long; hastula raised, sharp, papery on the margins; lamina strongly costapalmate, glabrous, adaxially mid-green, abaxially slightly lighter green, glossy of both surfaces. Inflorescence (non fruit-bearing) branched to 3 or 4 orders; inflorescence(fruit-bearing) branched 3 to 5 orders. Flowers solitary or in clusters of 2-4. Fruit globose, 9-12 mm diam., shiny black. Seed globose to subglobose; mesocarp c. 1 mm thick. Eophyll 5-ribbed.

Phenology:

Flowering December to March; fruiting April to October.

Eytomology:

From Latin *concinnus*, neat, well arranged, in reference to the organised and neat appearance of the petioles in the crown compared to those in other *Livistona* species.

Conservation:

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Three New *Livistonas*

(Continued from page 11)

Adequately conserved in Lakefield National Park, Endeavour River National Park and on Flinders Island.

Notes:

Specimens of this taxon were tentatively placed under *L. drudei* by Rodd (1998). Rodd cited three specimens (*Irvine* 2204 &2205, and *Hind* 4594) that were collected in the distributional range of *L. concinna*. One consists of a fallen dead leaf and an old infructescence. Although there is some gross resemblance of *L. concinna* to *L. drudei*, differences are otherwise significant, particularly in morphology of the inflorescence and fruit. The inflorescence of non fruit-bearing individuals is similar to that in *L. drudei*, but the fruit-bearing inflorescences are more robust and branched to a further order in *L. concinna* than they are in *L. drudei*. Although *L. concinna* occurs with *L. muelleri* in some locations, we have not detected, at least by visual means, any putative hybrids between the two.

Livistona surru

Distribution and habitat:

Papua New Guinea, West Sepik Province, Miwaute area and Mt. Ekwai; Madang Province, in the vicinity of the mouth of Ramu River.

Description:

Trunk to 20 m tall, 18-25 cm diameter at breast height. Leaves 17-29 in crown; petiole 140-180 cm long, green, margins with black spines 5-10 mm long; hastula very prominent; lamina sub-circular to ovate, mid green adaxially and abaxially. Inflorescence (non fruit-bearing) branched to 3 orders, inflorescence (fruit-bearing) branched to 2 orders. Flowers in clusters of 2-4. Fruit globose to obovoid, 55-65 mm long, 50-55 mm diam., orange-red, shiny. Seed globose to subglobose, 3040 mm diameter.

Phenology:

Flowering November to January; fruiting March to June.

Etymology:

From the native Olo language vernacular name *surru*, used in the Miwaute area for this plant.

Ethnobotany:

Leaves are used for leaf thatching and umbrellas, stem portions for axe handles and house frames, and leaf sheath fibres for brooms and sago strainers.

Notes:

Livistona surru is distinguished by its leaf lamina with almost equal colour on both surfaces; leaf segment apices pendulous, the absence of bracts on the inflorescence peduncle, the presence of densely pubescent, fibrous bracts subtending the basal branches of the partial inflorescences, the surfaces of the inflorescence axes being densely pubescent, and by its large orange-red fruit to 65 mm diameter with thick mesocarp fibres and prominent longitudinally parallel sclerids embedded in the epicarp.

Livistona tothur

Distribution and habitat:

Papua New Guinea: West Sepik Province, Onake Mts., 400-600 m altitude, in rainforest on ridges of limestone and metamorphic rocks.

Description:

Trunk to 20 m tall, 15-20 cm diameter at breast height. Leaves 24-40 in crown; petioles 150-200 cm long, green, glabrous, margins with green spines 1-2 mm long throughout its length; hastula raised to c. 10 mm, semi-circular; lamina sub-circular, adaxially bluish-green, abaxially silvery glaucous. Inflorescence (fruit-bearing) branched to 3 orders. Flowers solitary. Fruit globose but with a basal constriction, 35-43 mm diam., orange-red and with a longitudinal stripe of epidermal tissue usually visible for the full length of the fruit. Seed globose, 22-28 mm diameter.

Phenology:

Flowering November to January; fruiting March to June.

Etymology:

From the native Bewani language vernacular *tothur*, pronounce 'tot-her', and used in the Niau area for this plant.

Ethnobotany:

Bows and roof struts are fashioned from the petioles, umbrellas are made from the leaves and salt is extracted from the ash of burned petioles.

Notes:

Livistona tothur is distinguished by the silver glaucous bloom on the abaxial surface of its leaf lamina, the leaf segments with rigid apices, the presence of a bract at the base of each axis of the inflorescences and papery and glabrous or moderately glabrous bracts on the inflorescence rachis, glabrous or moderately pubescent inflorescence axes and orange red fruit to 43 mm diameter.

Acknowledgements [from Bill Beattie, editor of Wodyetia*]*

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The caption of this picture from the October, 1970, issue of Principes*: "New officers of The Palm Society. From left to right, Mr. Wallace E. Manis, Treasurer, Mrs. Lucita H. Wait, Secretary. Dr. Jerome P. Keuper, President, Mr. Kenneth C. Foster, Vice President. Photo by Ralph Velez." (Reproduced with permission.)*

Three New *Livistonas*

(Continued from page 12)

We thank the Queensland Herbarium and advise our readers that copies of *Austrobaileya* 6 (1) are able to be obtained by writing to: The Editor, *Austrobaileya,* Queensland Herbarium, Brisbane Botanic Gardens Mt. Coot-tha, Mt. Coot-tha Road, Toowong 4066, Australia and enclosing a cheque for $31.62 (incl. GST). We also express gratitude to the senior author of the original paper, John Dowe, for his advice and guidance in preparing the abridged version.

[American readers should be aware that the amount is in Australian, not American, dollars. The editor of the journal of original publication, Austrobaileya, *is Laurie Jessup. Inquiries about copies and costs may be addressed to him: laurie.jessup@env.qld.gov.au --Editor,* The Palmateer*]*

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Dr. Jerome Keuper,

1921-2002

Nine days after our chapter's plant sale on the F. I. T. campus in Melbourne, Jerry Keuper died on March 25th after a long illness. He was 81; his passing was in Melbourne. Many of us remember him from a meeting we held on the campus six years ago: a genial, welcoming presence, a handsome elderly gentleman clearly proud of the recently spruced-up Dent Smith Trail.

Jerry Keuper played a significant role in the early years of The Palm Society (which became the IPS in 1984). He joined the society in 1967 and, becoming immediately active, served as vice president from 1968 to 1970, then as president from 1970-1972. He hosted the Biennial on the Melbourne campus in 1970 and 1976.

For Central Florida palm-lovers, the Florida Institute of Technology campus has been over the years a magnet, a living laboratory of mature palms, showing what can be grown in Central Florida. The landscaping of the campus was Jerry Keuper's inspiration. He created the Dent Smith Trail of palms along a twisting path in a hardwoods hammock on the campus to honor his good friend, the founder of The Palm Society. But the palms were not confined to this small area. Nixon Smiley described the Florida Tech campus as a major palm collection in a long, illustrated article in the April, 1975, issue of *Principes.* At the time, more 2,000 palms of over 100 species had been planted all over the campus within a seven-year period. In Florida, only Fairchild Tropical Garden and the Montgomery Foundation had more palms.

How did Jerry Keuper come to plant all these palms on campus? Simple, it was his university. As founder of F. I. T./Florida Tech he had the freedom and ability to shape the physical environment, to beautify an ordinary pine flatwoods with palms. He served as the university's president from 1958 to 1986. He lived in Melbourne Beach and, in retirement, devoted himself to a favorite study of 50 years that culminated in his publication of a dictionary of Manda-

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The Cycad Classification Concepts Symposium

By Tom Broome

On April 7, 2002, a one-day symposium on the taxonomy and systematics of cycads was held at the Montgomery Botanical Center. There were 12 presentations by the world's leading cycad experts who are involved with cycad taxonomy. Many of the people making these presentations were experts in a particular genus of cycad. To name a few, Dr. Paolo Caputo spoke on *Dioon*, Dr. Bart Schutzman spoke on *Zamia*, and Dr. Ken Hill made his presentation on *Cycas*.

This type of symposium is unprecedented in the history of cycads. The Montgomery Botanical Center brought in people from all over the world. There were people from South Africa, Italy, Mexico, China, Australia, Thailand, and, of course, the United States. Each of the speakers talked about what criteria they use to describe species in their given subject, and a few had some very unusual concepts that I had never heard about. I was honored to be one of only a handful of people who were especially invited to attend this symposium. I would like to thank the Montgomery Botanical Center for inviting me, and the CFPACS that paid my travel expenses for my trip.

The symposium was only one day of a three-day event. The other two days were part of a workshop where all the people involved with describing cycads got together and discussed how cycads are described and what criteria should be used. There are many different methods and different ideas on how species should be described. Some people think that DNA analysis is of main importance where others feel there is more to all this than just chemical analysis. The two-day workshop was very hard work and everyone did not agree with everyone else. What is important is that all these people got together under one roof, and discussed what each person had to offer, and how they could work together for the good of cycads and cycad taxonomy.

I could tell from their talks that each person from other parts of the world had certain assets that others did not have at their disposal. The majority of Bart Schutzman's presentation showed electron microscope slides of leaf material and pollen sack shapes at high magnification. It was interesting to see that each species of *Zamia* had pollen sacks that were unique. Paolo Caputo has equipment at the botanical garden in Naples that most people don't have that can analyze chemicals in cycads that would determine if a plant were unique or the same as another species. Each of these people promised to start working together and share material with each other to maximize results when someone is trying to describe a species. I have never seen this kind of cooperation between so many people from so many parts of the world.

The result from all this will be of great importance. There will be a book written from the results of this three-day event. Each person making a presentation wrote a paper on their subject. Actually, one person was not able to come but did write a paper. Each paper will be one chapter of the new book. There will be two additional chapters showing the results of the two-day workshop and what the group concluded. This 15-chapter book will be somewhat of a bible for anyone wanting to describe a cycad species for decades to come. It will also be very informational for the average cycad enthusiast who wants to learn more about cycads and how they are made up. I enjoyed the symposium a great deal and I especially look forward to the upcoming book. I think this whole three-day event will go down in cycad history and will shape things to come in the cycad world.

Below, Libby Besse (left) introduces featured speaker from China, Prof. Chen Jia-Rui, at the cycad symposium.
(Photo by Tom Broome)

There are dressed up lies which imitate the truth so well that it would be poor judgment not to let them deceive us.

—La Rochefoucauld, Maxim 282

Newly Come to Palms? Here Are Some Basics . . .

[Wherein John-the-Radio-Evangelist for Palms continues, by request, some installments of his 42-second palm spots which have been broadcast (and continue to be) over Indian River Community College's public radio station WQCS, 88.9 FM, Fort Pierce.]

Palm Points #6 Planting a Palm, Part Three

Before planting a palm, find out how big it will get. How much bigger?
Look up! Is there an electric line overhead? That little palm may grow right into the line, sooner than you think.
If the little palm is planted close to the wall of the house, it may quickly grow larger than the space to which it's confined. A small palm planted too close to the front walk can turn into an obstacle for visitors.
Always find out how tall the palm will grow and what is the eventual spread of its leaves.
Palms can't be used—except very temporarily—as groundcovers. They won't stay low all that long.

Palm Points #7 Palm Features, Leaves and Trunks, Part One

The fronds of ***pinnate*** palms have a stem from which leaflets are attached on either side. Sometimes these are called feather palms. Queen palms and coconut palms are ***pinnate.***
Palmate palms have leaves the shape of a hand. Sometimes these are called fan palms. Washingtonias and Chinese fan palms are ***palmate.***
The native cabbage palm is more than palmate. Because the stem doesn't stop at the edge of the leaf but extends into it, causing the leaf to have a fold, this is called a ***costapalmate*** leaf.

CFPACS' presence at the USF spring sale. (Photo by Tom Broome)

Palm Points #8 Palm Features, Leaves and Trunks, Part Two

Palms are either single-trunked or multiple-trunked. If a single-trunked palm is damaged at the basal growth spot, or in the bud at the top, the plant will probably die.
A multiple-trunked or clumping palm may have stems damaged or removed, and will send up new trunks from the base. The so-called "areca" palm is an example.
Another identifying feature is a ***crownshaft***. Some palms, such as royal palms, have a green section of the upper trunk, just below the leaves. This is the ***crownshaft***, which actually is the leaf bases. When the leaves of ***crownshaft*** palms die, they fall off the plant. Such palms are self-cleaning and require no cutting of old leaves.

Palm Points #9 Cold Hardiness, Part One

Florida only *looks* tropical.
In winter, there is always the threat of an annihilating cold front sweeping down from the Arctic. No mountains protect us along the Georgia-Alabama line from the full effect of the occasional Alberta Clipper. And, usually, the cold snap is fairly brief, a few days at most.
Unlike the North, however, Florida plants—including palms and all other tropicals—do not have a gradual cooling down season (autumn) during which they go into dormancy.
Since it's mostly warm, if not hot, many plants in Florida just continue to grow. (This is one reason why familiar Northern plants that require cold dormancy can't be grown in Florida.)

Palm Points #10 Cold Hardiness, Part Two

When freezing temperatures strike, palms are in full growth, pushing out new leaves. Palms are at their most vulnerable.
If the freeze lasts for a few hours and warm temperatures return quickly, damage may be relatively slight.

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CFPACS donated a Bismarckia *to the University of South Florida Botanical Garden in Tampa. From left, chapter secretary Chuck Grieneisen, Tom Barrese, Ray Tintera, and prez Dave Witt. Tom Broome says he did most of the digging, but is not in the picture because he's taking it.*

The Central Florida Palm & Cycad Society service area includes the following counties:
Alachua, Brevard, Citrus, DeSoto, Flagler, Hardee, Hernando, Highlands, Hillsborough, Indian River, Lake, Levy, Manatee, Marion, Okeechobee, Orange, Osceola, Pinellas, Polk, Putnam, Sarasota, Seminole, St. Lucie, Sumter, Suwannee, and Volusia.
Please notify the Membership Chair (see directory on p. 35) of any changes in street address, phone number, area code, or e-mail address. The newsletter is sent to the address of record.

Needless to say (before saying it), the opinions expressed in **The Palmateer** are those of the contributors and do not carry the explicit or implicit imprimatur of the CFPACS. In other words—not official dogma.

Propriety is the least important of laws and the most observed.
—LaRochefoucauld, Maxim 447

Palm Points #10 Cold Hardiness, Part Two

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If freezing temperatures last more than a few hours or warm weather does not return immediately, then damage can be considerable.

Most people living here have come less than 10 years ago, and have no real experience of a hard freeze and its destructive power.

If they live in a cold pocket or inland, there may have been an occasional quick dip below freezing. Frosts can arrive at 40 degrees, damaging leaves and, sometimes, causing more serious problems.

Mark Grabowski collects the seed of Chamaedorea tepejilote *in the Jardín Botánico La Laguna in El Salvador. Plants all labeled, we are told.* *(Photo by Diana G.)*

Right, somewhere in Sudan, Hyphaene sp. *(probably* H. compressa*) with spectacular branching. Spotted by Erik Anderson, CFPCAS member in Phoenix, Arizona, and copied here—with permission—from www.zorona.com, a Middle Eastern website headquartered in Michigan.*

Diana Grabowski at the Jardín Botánico La Laguna in El Salvador, surrounded (she says) by Licuala grandis. *Where? (Photo by Mark G.)*

Dr. Jerome Keuper

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rin Chinese in 1997.

The Renaissance Man, an ideal from Shakespeare's time and earlier, is defined as a man of all-round versatile talents: courtier, poet, soldier, scientist, scholar. We can't say—perhaps Mrs. Keuper can—whether Jerry Keuper was a poet, but the other gifts were definitely there. He was an Army intelligence officer in World War II, serving in China and Burma. On returning home, he earned degrees from Massachusetts Institute of Technology and Stanford University before receiving a doctorate in nuclear physics from the University of Virginia. When he came to Brevard County as chief scientist for a defense contractor, there was no university in the area for training and upgrading the skills of engineers and scientists. Florida Tech filled a clear need.

His love of palms was obvious and deep. In the 1960s and 1970s, an interest in palms was just this side of strange. Little information was available then and far fewer species were known. Learning about palms and obtaining them required time and patience. Despite many other competing demands, Melbourne's Renaissance Man found that time and accomplished so much.

We are indebted to Jerry Keuper. *Requiescat in pacem.*

--John Kennedy

Seedbank Report (2001-2002)

[This report was accidentally omitted from the March issue of The Palmateer. *My Sharp-eyed Critic is suspicious of such a mistake, but the Editor does assure members that—paranoia aside—an egregious error was committed for which he has already done penance.]*

A total of 26 palm and two cycad species of seeds were distributed in the last quarter (Nov. thru Jan.), from 14 sources. For the cycads we have as usual Montgomery Botanical Center to thank, for *Dioon spinulosum*, this time and Neil Yorio for collecting and mailings of the Florida coontie. Including his donation of *Carpentaria* seeds, Neil's donations exceeded $100.

Other palm seeds distributed included *Livistona benthamii* from the tree that Bill Bidlingmayer planted 25± years ago at his Vero worksite on the Indian River lagoon, five species from Puerto Rico (including non-native *Licuala grandis*), and *Sabal mauritiiformis* from the palmiest campus in the world, Florida Institute of Technology (FIT) in Melbourne.

The "longest-distance" donor was again Shri Dhar of India, this time for two more *Phoenix spp.*. *P. acaulis* and *P. rupicola*, though Guy Coleman of the New Zealand chapter was surely a close second with his of a variety of *Rhopalostylis* that came from the Chatham Island group. (These islands are some 500 miles east of the main islands and the form of *R. sapida* growing there is thought to differ.) From not quite so far away came two South African species, *Hyphaene petersiana* from Adrian Van Rensen and *Jubaeopsis caffra* from Dr. Henderson of the New York Botanical Garden.

Closer-to-home donors included Charlene Palm (four spp., $150), John Bishock (*Coccothrinax "alta"*), and Tim Abbott (*Elaeis guineensis*), thanks to all. Donations for the quarter amounted to about $1100.

Seeds of the following species remain available: *Hyophorbe vershaffeltii* (Spindle Palm), *Phoenix rupicola* (Cliff Date Palm)—these from habitat—*Livistona saribus*, *Chamaedorea cataractarum*, *Archontophoenix cunninghamiana*, and *Elaeis guineensis*, please contact me or Charlene Palm about these.

--Mike Dahme

It should be noted that the CFPACS Seedbank does not purchase seeds. These are <u>donated</u> by members. The modest profits from their sale help support the activities of the CFPACS, including publication of this newsletter.

—Editor

Seedbank Report (2002, 1st quarter)

The seedbank was busy from Feb. thru April. Many rare and never before offered seeds were available. Some were habitat collected, some from cultivated plants and still others were hand pollinated by Central Florida members. Most sold out quickly.

Topping the sell-out list,(the hybridizing handiwork of Ed Brown), was the Reciprocal "mule", *Syagrus X Butia*. Even at $1.00 per seed they were gone the first day- $235.00. I continued to received orders for these for two more weeks. Likewise for his three-way *Cycad* hybrid, We had many more requests than seeds.The mother plant is a hybrid of *Cycas revoluta* (female) X *Cycas taitugensis* (male), this plant was then pollinated with pollen from *Cycas parvulus* (now *C. dianensis*). It is hoped that the seeds from this three way hybrid will result in a tropical looking plant like the *C. parvulus*, but have the cold hardiness of the *C. revoluta X C. taitungensis*-$99.00

Mike Dahme sent tons of seeds he collected in Puerto Rico, these included *Aiphanes minima*-$60, *Syagrus coronata*-(from USDA station in Mayagüez)-$35.75, *Roystonea borinqueña* -$42.50, *Thrinax morrisii* -$18.00, *Acrocomia aculeata* -$19.25, *Pritchardia pacifica* (cultivated) -$21.40, and *Coccothrinax spissa* (collected in Dominican Republic) $7.50. From his yard in Grant, *Arenga caudata* -$38.00, and *Chamaedorea cataractarum* -$20.00. Mike also collected *Sabal mauritiiformis* from FIT campus in Melbourne - $100.00.

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For those of you who don't know him, this is the proprietor of Borassic Park, Seedbank co-coordinator Mike Dahme caught here in an uncharacteristic quiet moment at the December meeting in Cocoa Beach. (Photo by Diana Grabowski)

Cycad symposium participants in a group portrait: seated (from left to right) Dr. Andrew Vovides, Dr. Ken Hill, Prof. Chen Jia-Rui, Dr. Roy Osborne, Dr. Paolo Caputo, Dr. John Donaldson, Mr. Loran Whitelock, Dr. Paul Forster, Dr. Dennis Stevenson, Mr. Jeff Chemnick, and Dr. Piet Forster. On floor, in front, Mr. Anders Lindstrom, Dr. Bart Schutzman, and Dr. Tim Gregory. Story on page 14.

(Photo by Terrence Walters)

Below, a family gathering at the Melbourne plant sale in March: recent CFPACS president, Neil Yorio (back to camera). Facing Neil is his brother, Mark. At right is Mary Jo Yorio, Mark's wife. Not visible, their 16-month-old son, Cole.

Seedbank (2002, 1st quarter)

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Scott Ward donated the following from cultivated plants in his garden, *Ptychosperma elegans* -$24.80, *Livistona drudei* -$23.75 and about 25 *Allagoptera arenaria* seeds which went to fill a back order-$10.00. We also recognize the following members for their contributions: Bill Bidlingmayer, for *Rhapidophyllum hystrix* (first time offered)-$41.50 . Three species from Neil Yorio including hand pollinated *Hyphaene sp X H. coriacea*-$21.25, *Zamia floridana*-$26.00, and *Archontophoenix cunninghamiana*- $15.25.

Steve and Cindy Rael for another donation of *Wodyetia bifurcata* (Foxtail)-$15.00 and *Adonidia merrillii* -$16.75. Montgomery Botanical Center for *Encephalartos gratus*- $76.00. John Kennedy for more of his *Allagoptera arenaria*- $10.00, Shri Dhar for sending *Phoenix rupicola*, and *Tectona grandis* (a native hardwood) both collected in habitat in India- $29.00.

Lou Thomas for four species including the much anticipated *Cyrtostachys renda* -$181.25. Also *Zamia polymorpha*-$125.20, *Sabal mexicana*- $27.50, and *Reinhardtia latisecta*- $32.50. Andrew Hendrickson for *Archontophoenix alexandrae*- $15.00. The *Copernicia alba* and *Hyophorbe verschaffeltii* came from my own plants- $51.25

Total sales for the period came to $1438.40. Thanks to everyone who donated or bought seeds.

As a side note, please keep your seed bank and membership chair notified if you change e-mail addresses. We are receiving a lot of returned mail when sending out the seed offers.

—Charlene Palm

ASK TOM

By Tom Broome

Q: I have a sago that has 5 heads. Fronds from each head are crowding each other, and many become deformed. I understand that you can't remove any of the heads, but there must be a way to trim these plants so that new growth is not as crowded, thereby reducing deformity. I just recently trimmed off all prior years' fronds, and left only this year's growth, but it still looks as if the fronds from each head will interfere with the others' growth and appearance.

A: **The longer** you grow that plant the larger the individual stems will grow. Sooner or later the stems will separate more, and your problem will be reduced. I trim off most of the inner leaves and keep the outside leaves that are not in competition for space until the stems form larger trunks.

Both Washingtonia*s at the Los Angeles County Arboretum.* W. robust*a, more than familiar to us, is tall and skinny.* W. filifera *is shorter, with trunk covered by dead leaves. Neither species looks this prosperous in Florida. Note figure for scale. (Photo by Geoff Stein)*

Q: I bought a five-gallon sago palm from Wal-Mart and put it under full sun. It got nice green fronds. A week later I noticed the fronds directly facing afternoon sun turned whitish gray. Is this a symptom of sun burn? I immediately moved it to a shady area. Now three weeks has gone by and I have not seen any sign of recovery, in fact some of the gray fronds now turn into brown. Anything I can do to help it recover? It's still in nursery container and gets water about once a week when soil is a bit dry.

A: **Once a** leaf gets sun burned, it will never come back to look green where it is damaged. The most you can hope for now is to force a new flush of leaves. This is easy this time of year because they are ready to flush new leaves anyway. I would apply a high nitrogen fertilizer that releases quickly and make sure to water the plant on a regular basis. Twice a week would be good. This should produce new leaves faster and you will be able to remove the old leaves after that.

OK, it's a Livistona. *Which species in this file photo? Answer below.*

L. saribus: *those distinctive shark-tooth spines give it away.*

Palm Fest 2002 Review

(Continued from page 1)

fortable behind the bar serving up drinks like a couple of pros. Could this have been in their past before day jobs and palm cultivation?

Saturday morning came bright and early after a few drinks the night before. Did I mention it was bright? The day started with a 4-hour Caribbean palm symposium at Fairchild Tropical Garden. Speakers and topics included the following:

1. "Buccaneer Palms rediscovered in Dominica: So What!" – A. James
2. "Palms and Broom making in St. Lucia" -- Jean Pierre Laurent
3. "Native and Exotic Species for Caribbean Landscape" – Katherine Maidman
4. "Copernicia" – Raul Verdecía
5. "Palms of the Yucatan Peninsula & their Traditional Uses" – R. Orellan
6. "Cuban Palms and their Conservation" – Angela Leiva

There was a $25.00 symposium fee in addition to the $75.00 for PalmFest. Those opting not to attend the morning presentation could join John Bishock on a one of a kind tour of FTG. Having lived in Miami for most of his life, John can tell you where just about every palm is within the garden. Do YOU know where the 40' *Metroxylon* is located? I thought not. After FTG, the majority of the group ventured next door to the Montgomery Botanical Center for lunch. Subs, fruit, chips and drinks were provided before touring the massive garden. Sue Katz, MBC Database Supervisor, gave an extensive tour of the garden and answered questions along the way. We passed such palms and cycads as *Pseudophoenix vinifera*, Victoria River *Livistona*s, *Syagrus botyrophora* and an enormous *Macrozamia*, to name a few that stuck out in my mind. Sue also discussed the recently planned "Palm Circle" at the end of one of the palm walks. At the culmination of the walk, will one day be a circle of mature *Sabal causiarum*. That will surely be quite a sight 15 years from now. Saturday's last stop was the University of Miami Palmetum completed in 1999. Palms of interest included *Corypha umbraculifera*, *Wallichia disticha*, *Copernicia ekmanii, Dypsis decipiens, Heterospathe elata* and *Elaeis guineensis*. The road leading to the garden is appropriately called Hurricane Ave for the hometeam Miami Hurricanes. Just as appropriately, the street is lined with *Dictyosperma album,* "the Hurricane or Princess palm."

Saturday evening started with a luau and pig roast at Jungle B's landscapers in Homestead, a short distance from the hotel. One could chow down while enjoying the coral castle being built on the premises. What a sight this was with its pools, ponds and a huge waterfall. After dinner, South Florida chapter vice president Ken Johnson auctioned off a few plants to preview Sunday's big event.

At the USF sale: Chuck Grieneisen (center left) helps a customer, with Frank Brandt & his tent in back. (Photo by Tom Broome)

IPS President Horace Hobbs, who bid unsuccessfully on a *Microcycas* at the 2001 PalmFest auction, again tried his luck with this rare cycad. He was tricked into bidding a ridiculous amount before being given the plant for free and being told it was a joke. Other plants auctioned off included a *Caryota zebrina* and a *Copernicia ekmanii*. As the sun set, so did the festivities at the un-lighted Jungle B's. Everyone shortly made it back to the hotel for a little karaoke. Yes, Horace Hobbs got up and convincingly sang the Beatles classic "I am the Walrus". South Florida member Claude Roatta also did a few numbers with his guitar out on the Tiki deck.

Sunday morning started as a gloomy, rainy morning but the rain turned to drizzle by the time we arrived at the University of Florida Tropical Research and Education Center in Homestead. Palms of all types are being cultivated but the large trio of *Coccothinax borhidiana* was of particular interest to me. The next stop was RF Orchids of Homestead. This included a brief tour of their greenhouse and surrounding home and landscape. The gentleman giving the tour was an orchid expert and answered many questions throughout the tour. The day culminated with the traditional PalmFest auction. The number of plants was less than years past but interesting nonetheless. *Veitchia sp*, *Coccothrinax scoparia*, *Pseudophoenix ekmanii* and *Wodyetia bifurcata* were among the plants auctioned off.

If you missed it this year, plan to attend next year's event hosted by the Southwest Florida Palm and Cycad Society. Tentative plans are for a visit to gardens in the Ft. Myers/Naples area in May of 2003. See you then!

Dominican Palms. . . story begins on opposite page

Coccothrinax boschiana *(left) on rugged cliffs overlooking the sea and (below) a closer shot. The species is named for a former Dominican president, Juan Bosch? (Botanists, please inform!)*

Above, Leonel Mera has re-introduced the almost vanished native species, Prestoea acuminata. *At right, the older, wetter, and higher (930 meters) of Leonel's two palm plantations.*

DOMINICAN ODYSSEY

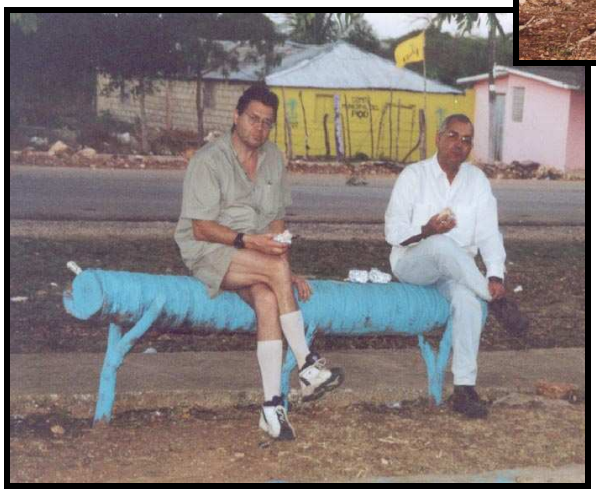
By Mike Dahme

At the invitation of a friend, I recently visited the Dominican Republic for a week, though travel isn't as much fun as it once was, the prospect of a knowledgeable guide—Leonel Mera—to the island's palms wasn't one to be missed. The D. R. is an immediate neighbor of Puerto Rico, so there is some continuity in the palm species but, as the D. R. is much the larger of the two (at 18,000 square miles, nearly five times the land area of P.R.), it's befitting that there are three times the number of palms.

Shared palms include *Thrinax morrisii*, *Acrocomia*, *Calyptronoma rivalis*, *Prestoea acuminata*, the Royal and the *Sabal*—locals in the D. R. do not distinguish between *S. causiarum* and *S. domingensis,* all of which we saw except the *Thrinax*. In immense profusion was the *Sabal*, which seemed to own the seasonally dry northwest and the even drier, near-desert conditions of the southwest. This is in stark contrast to the situation of the *Sabal* on Puerto Rico, where the "range" is restricted to a coastal strip of a couple of miles at the northwest corner. Elsewhere that we traveled where there was more rainfall, the Peninsula of Samaná in the northeast and in the east-central (San Pedro to Los Haitises National Park), the *Sabal* was distinguished by its absence.

The aridity of great swathes of the D. R. (and presumably adjoining Haiti, to the border of which we went, but didn't cross) was one of the real surprises. While P. R. has its dry parts (most especially the southwest corner) it is a far greener island than is Hispaniola. Leonel explained that it is the several mountain ranges (and I assume their configurations) that account for this, intercepting the moisture on their windward sides. The central range, with peaks in excess of 3000 meters, is a remote place, evidently without any economic benefit to people, for it is virtually roadless. Likewise were parallel ranges, such as the Sierra de Baoruco in the southwest, starkly prominent in the dry air of the region and seemingly devoid of any form of life.

Above, natural beauty and aridity: Sabal domingensis *growing in parched earth, the Caribbean just beyond.*



The author's companions on the Dominican Republic jaunt: René Coativy (left) and host Leonel Mera (right), who is a CFPACS member. Yes, that is a palm log on which they are eating their lunch.. No, the Sabal *is not in nature that color.*

Another surprise for me was the use to which palms are put by the country's rural residents. Clearly the majority of homes in the *campo* utilized thatch (usually from the *Sabal*) for roofing and walls were commonly strips cut from trunks of the ubiquitous Royal. These "slats," two or three inches in width and often painted on the exterior side, are surprisingly long-lasting; one man whose house we were in replied that the walls were 33 years old, likely the age of the house itself. ***Prestoea acuminata***, we were told on our last day, is likewise used for wall construction in the fashion of

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Dominican Odyssey

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the Royal, but has been cleared from areas of easy access. We had traveled from our prior night's lodging on the north side of the Bay of Samaná to Los Haitises N. P. on the bay's south side (a trip of some six hours

Above, René Coativy walks—very carefully—through a group of Pseudophoenix ekmanii. *Right, the ground in which the palms are growing shows why he keeps his eyes down.*

to end about 30 miles away) as this is where the "Mountain Palm" was said to grow at sea level. An employee of the park, who appeared to be about 60, spoke of the close-by 200-300 foot high coastal hills and said that they had been thick with the palm. Now all cut, existing perhaps only as house wall material in the villages of the area in and around the park. *Prestoea* remains on the island as it does in P. R., only at the higher elevations in inaccessible areas/parks. Why does the Royal remain common in the D. R. while *Prestoea* has been eliminated from the landscape when both were used for the same purpose? Perhaps it's the value of the massive infructescences of the Royal for fodder.

Our first two days were passed in the country's northwest section near to Leonel's home in Santiago. The rainy season for this area, he informed, is from May to October, so in March everything looked more than a little dry. (Annual rainfall, he said is only 1.2 meters, a little less than Florida's average.) He has two palm-growing areas, close to each other in the mountain range that fronts the north coast. Both of these are large acreages, the longest-in-possession being on the top of the ranges at about 930 meters. This was a coffee plantation, still is, but for five years or so prices haven't permitted harvesting. Leonel first started planting palms here in the '70s, one of his earliest efforts being Canaries grown from seeds he collected while at university in Mexico City! I was pleased to discover that he had great numbers of *Livistona decipiens*, also that he had planted a few native *Prestoea* to this property. As I recall, he said that the mature plants were about 13 years old and have been flowering for about six years. These were the only Mountain Palms we saw on this ride (he later showed us some at high altitude in a different range), though the species had once carpeted the slopes.

Though much younger, Leonel's other rural property is of greater interest to him now. At about 200 meters elevation, it is much drier than the one at the top of the range, and of necessity he is specializing in palms from arid zones, such as *Pseudophoenix, Coccothrinax, Copernicia, Phoenix,* and *Washingtonia.* Over the years growing palms in central Florida, I've grown a bit dis-

enchanted with species of the latter two genera, but seeing what he is doing in a climate suitable for them I can only applaud for surely a superb collection will one day be obtained.

I should also mention that Leonel has bought into the concept of mass-planting big-time—perhaps his visit to Nong Nooch Tropical Garden in Thailand provided inspiration? The sight of desert-like hillsides dotted with hundreds of young palms caused our cameras to swivel instinctively in their direction.

Although this major-palm-garden-in-the-making was for me the first day's highlight, we weren't done yet—ending a day before dark would prove to be the excep-

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Below, Coccothrinax spissa *growing healthily in dry ground in the Dominican Republic near Bani. Note the trunk bulges .*

Above, the 118-year-old Copernicia baileyana *pictured on the front page. In the background,* Sabal domingensis.

Dominican Odyssey

(Continued from page 24)

tion. Next up were two locations in the La Guama area about 60 kilometers west of Santiago. Here we were treated to stands of *Calyptronoma rivalis* and the odd *Zombia*, in addition to *Sabal*s and Royals. The *Calyptronoma* species is also found on P. R., but is only known from a few sites, some of which are on the way out. Not exactly common in the D. R. either, but likely the species has a more secure future there. It grows as in P.R. in swampy areas along creeks, the only economic competition being cattle grazing. The next and final stop of the day was nearby Sabaneta where with just enough daylight to click off some photos, we saw *Coccothrinax fragrans, Copernicia berteroana*, and more of the sporadic *Zombia.*

Day two was a travel day, from the dry northwest to the really dry southwest, but not before the morning was spent touring Santiago, the D. R.'s "second" city and commercial capital. Of note was the huge and old *Copernicia baileyana* that was featured in *Principes* a few years ago (Vol. 43, no. 3—July, 1999). This palm is Cuban, but the history has been documented and the plant is 118 years old, still thriving. En route to our destination in Baoruco, we stopped at the outskirts of Bani, south coast west of Santo Domingo, for a magnificent hillside stand of *Coccothrinax spissa*, all individuals of which here had pronounced "bellies," this ventricose feature not so noticeable on specimens at Montgomery Botanical Center in Miami. Leonel explained that the constant humidity present in Florida may account for this more "normal" palm appearance.

Day three was the "Steve Trollip Trail" day, the most physical of all. For those interested in Mr. Trollip's humorous account of his near-death experience, see *Palm Enthusiast* 17:1 (2000). [The journal of the South African Palm & Cycad Society —Editor] Nothing like that this time, but we were certainly glad to be done with the four-hour (round trip) hike, this not counting the time resting or spent at the destination. The trail isn't rigorous in an up and down sense, there being only an ultimate rise of 50 meters or so, but it becomes ever more difficult due to the increasingly greater amount of erosion that has occurred to the (I presume) lime rock that is the Earth's surface where *Pseudophoenix eckmanii* and *Coccothrinax* ditto have selected as their spot on the planet to evolve into being. (For the hiker it's eyes down or something nasty will happen to your leg/ankle/foot.)

The Cocco has the wider range, extending across the country's border with Haiti in the southwest region, but apparently for the Pseudo " this is it:" "this" being the Jaragua National Park, the boundaries of which being easily created, one assumes, because of the extreme lack of utility for human endeavor. (We did pass some lads armed with a rifle out to shoot some birds, but they weren't laden with game and had a discouraged look.)

The next day was another travel day, this time to the capital, but en-route was a mini-march, following a lengthy diversion from the highway, to the habitat of the newly-described (1997) *Coccothrinax boschiana*. I don't know from what species this was split but it is really spectacular in aspect, growing along sheer cliffs

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From the Editor's Desk

Do you find the box above—and its border—just the smallest bit tacky? You do? You wonder how I, a person of clearly cultured intelligence, could produce something so vulgar, not to say garish? And you have averted your eyes from the background color of this column? A good idea. You are evidently a person of good taste (unlike yours truly).

In the last issue, the first fully in color, I told you-all that color was experimental. We did not have a clear idea of how much it would cost. If the next issue—that's this one—was all in black-and-white, you would know that color had proved much too expensive for our modest coffers. I had promised Mark Van Antwerp, official printer and Membership Chair, that I would not, at first, run crazy with color.

HOWEVER, **color** turned out to be not as expensive as feared, and well within our budget. **THEREFORE**, I hereby inform you that I am running amok with color, indulging myself shamelessly. No doubt, moderation and good sense will re-appear (in their own good time).

* * * * * *

Seriously (why?), there have been many expressions of pleasure and congratulations from the membership about the March issue, how beautiful it was in color. This provides me with the opportunity to point out that color is effective only when there are good pictures to put into the issue. So—if you have any good, dramatic, striking, unusual, vivid pictures of palms, palm parts, cycads, cycad parts (etc.)—kindly send them to the Editor, either as glossies that can be returned or electronically as jpeg. attachments. Remember that a good picture is one that shows some detail. Pictures taken in much shade or from a great distance are often too indistinct to show the character of the plant(s).

Previously unexplored areas of artistic expression may now be open to me. Long ago, in my stumbling through the many, and unnecessary, possibilities of Adobe Deluxe Home Edition 3.0—the photo scanning program—I discovered that I could make pictures with wavy nightmare qualities like a bad dream. So, if I don't get the right kind of good pictures, I may feel driven to experiment artistically to spice up completely mundane pictures of cabbage palms. Is this what you want? Be warned!

The new printer, the freebie found and explained by Mark Van Antwerp in the March issue, makes all the difference. Mark, by the way, has moved to Melbourne from Land O'Lakes and is setting up a business in Brevard. The address and phone number listed for Mark are those of his business, so don't wonder if you've dialed correctly.

* * * * *

You have been promised a membership roster several times, only to be put off—several times. At this writing, it does seem as if you will actually receive this, though whether it will be tipped into your copy of *The Palmateer* or mailed separately has not yet been decided. Mark and the new printer will be assisted in the endeavor by Mike Dahme, his son, Gary, and volunteers yet to be selected.

* * * * *

My "fame" (only local) for those radio spots on palm culture—and from my personal appearance slide-show presentations—has brought me two recent e-mail inquiries on problems with cycads and a third by phone. Since my knowledge of cycads is limited to what Tom Broome has written for the newsletter and the occasional pearls of wisdom he has given forth, I immediately told the inquirers that I would consult the cycad guru himself for the answers. Tom has, very good-naturedly, come through. Then there was the widow who called asking me to go look at a palm she had ordered to memorialize her husband before she went north, leaving the tree service to install it. The palm didn't look right to her and, when I went to see it, I had to say that it was the correct species (Canary Island date) but an old and ugly specimen. She had paid quite a lot of money but had not indicated that she had to approve the specific palm that was to be planted.

* * * * * *

I hope that you have noticed that there is no Errata column apologizing for mistakes. Does this mean that there were no mistakes in the March issue? Or does it mean that these were not spotted? In any case, the statute of limitations on *The Palmateer*—March issue—has expired and no late objections will be entertained. The seedbank report accidentally, not deliberately (as its writer suspects), omitted from the March issue does not fall into the Errata category—does it?

Dominican Odyssey

(Continued from page 25)

over the sea a few miles west of Puerto Viejo. Yet again, shareholders of Fuji or Kodak stocks had reason to smile.

In Santo Domingo we said goodbye to Leonel, who had donated four days of his life to us, and at dawn we were off to Samaná with its millions of coconuts. Formerly for copra, the Coco industry is in the same state of decline in the D.R. as coffee and cocoa production (we saw activity in palm oil [*Elaeis*], rice and sugar cane production, however), but the nuts are not being harvested. At the end of the day we took a short ride from the lodging to the road's end and noticed another group of *Coccothrinax*, presumably *C .gracilis*, growing on a rocky escarpment about a mile and a half north of a road sign proclaiming 'El Frances' (such signs in the D. R. being thoughtfully provided by the local rum manufacturer), this group growing just above a colony of cycads (presumably *Zamia pumila*), the only time we saw the island's cycad in the wild. The next day, as already mentioned, was to the park on the south side of the great Samaná bay.

The main roads in the D. R. are quite good, we saw some construction that demonstrated by the depth of the future road bed that the highways were being built for the ages (not always the case in Puerto Rico). However, the primary roads are about it, secondary (and other) roads shown on the map look "good"—until traveled upon. A slight matter, such as a bridge not existing, can result in a considerable backtrack. Talking to the locals is therefore advisable ere taking any "shortcuts."

An item of value for the D. R. palm visitor is the recent book, *Palms of the Dominican Republic*, available at IPS bookstore. Reasonably priced, it's worth the money though half the entries are exotics. The main drawback is that—as seems usual in palm books these days—precise locations for viewing native species are not provided.

Finally, there's a plan for the D. R. to be part of the 2006 IPS biennial tour which, if it materializes, would be a fine opportunity to see some of the palms we just did, not to mention Leonel's palm gardens four years on.

Thanks to Leonel for his time and to René Coativy for the invite and for providing the (very expensive) transportation, not to mention the driving. Main regret is we didn't get to see Hispaniola's only *Bactris, B. plumeriana*—maybe Leonel can provide seeds?

Leonel Mera's mass planting of Washingtonia filifera *and* Livistona decipiens*—doing well despite (or because of) the aridity of the location.*

Above, Copernicia berteroana *in the Dominican Republic.*

A Royal Place: The Fakahatchee Strand State Preserve

By Roger Bachmann

"Green Hell" or palm paradise – it's all in one's perception of wild areas. About three years ago the Board of Directors of the Central Florida Palm and Cycad Society discussed the idea of having one of our meetings at the Fakahatchee Strand State preserve to see the wild population of royal palms (*Roystonea regia*). We didn't know very much about the area, though at the time Marilyn was reading the new book, *The Orchid Thief,* by Susan Orlean that involved the theft of orchids from this state preserve. The author had a chapter about the Fakahatchee titled "The Green Hell" that started with the sentence "You would have to want something very badly to go looking for it in the Fakahatchee Strand." She also quoted from the park's strategic plan "The preserve attracts visitors with an affinity for totally undeveloped areas, who enjoy strenuous hikes and have no aversion to wading hip-deep in a swamp." At the time this did not seem like an attractive place for a meeting of our society.

The Board decided to meet elsewhere; however, all of the discussions and the book raised our curiosity about the Fakahatchee, so we looked for more information. We found a map that included the Preserve, which lies just north of Palm Hammock on the Tamiami Trail. We learned that Fakahatchee is a Seminole word meaning "forked river", and that indeed the world's largest concentration of royal palms with 3000 trees is located in the central royal palm hammock of the preserve. This area is credited with being the source of several royal palms planted in the infield of the Hialeah Race Track in the 1920s. The strand also harbors the Paurotis palm (*Acoelorraphe wrightii*), so there were some items of interest for our society but certainly not the diversity of palms and cycads that we would typically find in the yard of one of our members. It also has the largest concentration and variety of orchids in North America with 44 native North American orchid species, 11 of which cannot be found anywhere else on the continent. One of the particularly interesting ones is the leafless Ghost Orchid (*Polyrhiza lindenii*), the poached orchid of the book, *The Orchid Thief.* Wildlife found in the Fakahatchee Strand includes the Florida black bear, the Florida panther, bobcats, raccoons, otters, deer, mink, alligators, snakes, lizards, hawks and various wading birds. This all sounded very interesting, so we planned on a visit the next time we were headed for south Florida.

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Above, the Florida blue sky highlights the impressive group of Royal Palms along the scenic drive in the Fakahatchee Strand State Preserve. Below, old tramways form dry walking paths into the Preserve. *(Photos by Roger Bachmann)*

A Royal Place: Fakahatchee Strand

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The Fakahatchee Strand is in Collier County in southwest Florida. We started our first visit in Naples and drove east 25 miles on the Tamiami Trail (US 41). As we neared the park, the landscape was very flat with large areas of sawgrass prairies enveloping long narrow swamp forests called strands. We had read that the area was underlain by a sloping, limestone floor that ran 60 miles from north to south into the Gulf of Mexico. Past erosion had formed an elongate channel in the limestone that had filled with deep organic soils or peat and formed the Fakahatchee Strand. It is about 20 miles long and 3 to 5 miles wide and actually contains many smaller strands separated by sloughs or deeper channels cut between the strands. Subtle changes in elevation determine whether the land is occupied by a swamp forest with bald cypress or if we have trees like the royal palm that do not like wet feet. The resulting mixture of the temperate bald cypress and the tropical royal palm is unique, and results from a microclimate maintained by the cypress canopy and the heat content of the swamp water that moderates cool spells. As a result 69 per cent of the Fakahatchee's trees, 86 per cent of the ferns, and 88 per cent of the orchids are of tropical origin

There are two ways to get easy access to the royal palms without having to wade through the swamps. The first is to stop at the Big Cypress Bend, located on the north side of the road about 5 miles to the west of the intersection of US 41 with SR 29. There is a parking lot and a store selling high quality articles made by native Americans. A 2000-ft boardwalk extends into the strand. It is a beautiful walk into the swamp with a wide variety of trees dominated by the bald cypress with large numbers of bromeliads visible on their branches and trunks. There are some small royal palms right next to the boardwalk and in certain spots much taller trees can be seen farther back in the woods. Needless to say, it is also a great place to see birds and other kinds of swamp life. At times the mosquitoes are supposed to be bad, but we have not encountered any problems with them on three trips to the area.

The best way to see a lot of large royal palms is to continue east on US 41 to SR 29 and head north about 3 miles to the town of Copeland. Turn east into town; go past the ranger station and head towards the north and east on the Janes Memorial Scenic Drive. This is a limerock road that wends its way through a large swamp. If you remember the comic strip *Pogo*, you will have a good impression of what the swamp looks like. Between 1947 and 1952 most of this region was logged for its large cypress trees. To get the logs out, about 130 elevated tramways, each about a mile long, were constructed into the swamp by piling up dirt excavated from trenches next to the tramway. Nature has healed the logging scars but the old tramways now form dry walkways into the Strand that can be accessed from the Janes Memorial Scenic Drive. About 12 miles from Copeland the drive enters a relatively flat and dry area that is the central hammock where there is a concentration of large royal palms that can be seen from the road or from trails that extend back into the strand. For us this was the best place to see and photograph the royal palms.

Since I am relatively new to palms, I had always thought that the genus name *Roystonea* was Latin for some important characteristic of this genus. I was thus surprised to run across the statement "In older references you may see this genus referred to as *Oreodoxa* but the genus name was changed some years ago to *Roystonea* (in honor of General Roy Stone an army engineer who served in the Caribbean at the turn of the century)." I was curious about why the name would be changed and got my answer from Dr. Scott Zona at the Fairchild Tropical Garden. It was found that the previous name, *Oreodoxa*, had already been used; so in 1900 O. F. Cook was free to name the genus of royal palms after General Roy Stone. Some Internet searching showed that General Stone (1835-1905) had served in the Civil War as a corporal in the battle of Chancellorsville, and that in 1898 he was a general in the Spanish American War in the Caribbean. I would love to know what he did in that region that entitled him to be honored by giving his name to the genus of royal palms. I also learned from Dr. Zona that the correct name for the royal palms found in Florida is now *Roystonea regia*. For a long time the various references called the Florida royal palm *Roystonea elata* and distinguished it from the Cuban royal palm, *Roystonea regia*. Other than location, the Florida variety was thought to have a more cylindrical trunk, and lacked the mid-section bulge found in the Cuban Royal Palms.

There are two ways to drive to the Fakahatchee Strand. One is to take I-75 from either Naples or Miami and exit at SR 29 and head south to Copeland for the Janes Memorial Scenic Drive or to continue south to US 41 and turn west to the Big Cypress Bend boardwalk. We prefer the alternative of taking the Tamiami Trail (US 41) from either Naples or Miami to go directly to the boardwalk or to take SR 29 north to Copeland. This is a slower route on a 2-lane highway that gives you a chance to get an unhurried feel for the

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FERTILIZE DURING DROUGHT?

The Editor asked several veteran palm growers in early April and May their opinion on whether/how palms should or should not be fertilized in drought conditions, defined as a prolonged indeterminate period with considerably less rain than the average. Most of Florida received an unusual amount of rainfall earlier in the dry season this year. But, if the rainy season begins late and then brings less than we are accustomed to, our problems begin to multiply. The Atlantic seaboard north of Florida has been experiencing parched conditions for about three years now. The question also could also apply to the regular/normal dry season: the several months before the rainy season begins in May or June. Responses below came by e-mail. None takes into account the possibility of severe restrictions on watering that could be imposed by the three water management districts in our region (St. Johns River, South Florida, Southwest Florida), backed by heavy fines.

Palms should ALWAYS have fertilizer. They are constant feeders and any time that the fertilizer runs out, the palms stop, or slow down a great deal. Now with some fertilizers that react to moisture, they might last longer without getting any rain or irrigation, and you could delay application, but that is about it. (**Tom Broome, Polk City**)

*. . . It seems to me that there's no good reason why we shouldn't fertilize at this time of year [April]. It's not really all that dry. There's heavy dew in the morning and occasional rain—2.2 inches so far this month. Go ahead and fertilize. It doesn't hurt a mature palm to have some fertilizer standing on the ground next to it. If it did, my palms would all be dead because May is one of my months to lay it down. Of course, it helps to apply a proper time release product. The palm special that works good for me comes from Nurserymen's Sure-Gro, 4390 North US 1, here in Vero Beach. That analysis is 8-4-12, with N & K 50% coated, slow release. I apply 400 lb. three times a year, if I'm not too lazy. In addition, I apply 20-6-12 to others—gingers, etc. Since the sand here is essentially infertile, application of fertilizer is a must for growing exotic plants, about 2,000 lb. annually. (**Ed Carlson, Vero Beach**)*

There's no drought today [end of March], at least not here in Tampa Bay. It's good to have that fertilizer down for days like today when the skies open up. Besides, I would hope you're still watering during dry periods. Even slight irrigation will get some nutrients into the soil. (**Ray Hernández, Tampa**)

Although the drought seems to be over (at least for a little

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A Royal Place: Fakahatchee Strand

(Continued from page 29)

Everglades region. If you really do want to wade waist-deep through the swamp as Susan Orlean (and many other people) have, sliding your feet along carefully so you don't step on a gator, I understand this can be arranged with the Preserve rangers. After you have seen the Fakahatchee Strand, you might want to take a short drive down SR 29 to Everglades City. From the docks you can take a guided boat tour of the Ten Thousand Islands region that we have enjoyed very much. If you want to see more royal palms in the wild and are in the Miami area, take the road into the Everglades National Park at Homestead and stop at the Royal Palms Visitors Center.

*A beautiful—and very old—*Phoenix rupicola*, the cliff date palm, at the Los Angeles County Arboretum. (Photo by Geoff Stein)*

There are bad people who would be less dangerous if they had no good in them.
—La Rochefoucauld, Maxim 284

TREASURER'S REPORT

December 15, 2001 to March 16, 2002

INCOME:

Seed sales……	1,208.25
Membership Dues……	880.00
Donations to CFPACS……...……..	0.00
Public Sales ……..…..……...	0.00
Private Sales (meeting at Grabowski's)……	578.40
Back Issue Sales……	18.75
Total _____	2,685.40

EXPENSES:

Publications (v. 22, no. 1)…..……	512.97
Computers and Software (rebate + website)……..	-5.00
Grants ……..……	0.00
Miscellaneous (insurance + corp. ann. rpt.)……...	251.10
Total _____	759.07

INCOME - EXPENSES ……. 1,926.33

Bank balance 12/15/01……	17,508.22
Bank balance 03/16/02……	19,162.70
Net increase…….	1,654.48

(Note: Club-budget and bank reporting periods do not exactly coincide.)

ASSETS:

Endowment (mutual funds)…….	10,000.00 (purchase price)
…….	9,456.26 (value at time of purchase)
…….	8,481.85 (current value, close of market 03/14/2002)
	(5,530.88 Washington, 2,950.97 Putnam)
Office equipment and tent……	1,595.00
Computers and software……..…	2,544.41 minus depreciation

—Mike Merritt, CFPACS Treasurer

Below, an old file photo—from last summer—in the bad old days of black'n'white: Person at Left gives scale to Coccothrinax argentata*, planted at Florida Medical Entomology Lab (IFAS/U of F) in Vero Beach by the mythic Bill Bidlingmayer about 40 years ago. This palm has provided seed for the chapter's seedbank. A smaller individual of the same species is not visible behind the larger palm*

The plant sale on the Florida Tech campus in Melbourne on March 16 produced $1,964 in sales of palms, cycads, and a few other tropicals. The profit to the chapter was $429.

FERTILIZE DURING DROUGHT?

(Continued from page 30)

*while), you can use a hose and sprayer and use liquid fertilizer. (Thus feeding and watering all at once.) For small areas you have to hold it like a garden hose, but on large areas I have heard of someone using one that has worked it into his irrigation system. A "poor man's" fertilizer injector. I don't know what kind of problems he'd have with back flow prevention. (**Chuck Grieneisen, Oviedo**)*

I don't think it does much good to fertilize in times of drought if you are not irrigating the palms by other means (sprinklers). The nutrients from the fertilizer travel through the soil and are made available to the roots in a liquid environment. (**Neil Yorio, Indian Harbour Beach**)

*I can't really answer the drought question since I am guilty of waiting until my palms have a "problem" before fertilizing. (**Charlene Palm, Satellite Beach**)*

I always feel like a slacker, not out there fertilizing my palms as often as I should with the rest of the guys 'n' gals. I have several times been called to account for my policy of "benign neglect." Since I have no irrigation system, I am never quite sure that the palms are getting all the water they need. In these circumstances, I feel doubt about applying fertilizer when it's only me and my hose providing the water necessary to sustain growth. It seems obvious, though, that if the dry conditions persist for a long period, some light fertilization is called for. **(John Kennedy, Vero Beach)**

*About four weeks ago [April] I spread 750 pounds of Lesco's microencapsulated palm fertilizer around my property. If it doesn't rain, it doesn't soak in. If it gets too dry, I turn on my shallow-well irrigation system. I suppose if a person was at the mercy of a municipal water system for irrigation and the water supply was curtailed, gardens would be in trouble—however, that would be the case with or without fertilizer applications. **(Scott Ward, Indialantic)***

I have never considered fertilization "during drought" prior to this enquiry. Florida is "always" in drought, or if it's not, it's in flood. The average rainfall for central Florida is something like 50 inches a year, more than enuf for level terrain. The problem, of course, is that rain doesn't come evenly, 4 or 5 inches a month. Palm Society founder Dent Smith's "palm diaries," which cover about 12 years from early '50's to mid '60's, show that he was well aware of the randomness of rainfall—from reading these daily entries one might assume that Daytona Beach shared the climate of the Sahara, but his problems 40 years ago are no different than ours today. Rain comes in excess quantities, or virtually none at all. As I understand it, the latest received wisdom is that fertilization should be done on a regular basis, monthly, yearround. None of this laying off for winter. I've also long "understood" that fertilizer should be applied while the soil is wet, so when I apply, about 4 X a year, if it's not raining I try to water the fertilizer into the soil via deepwater well irrigation. I've been told that fertilizer on the soil surface can oxidize, evaporate into the air, so it's beneficial to the plant and pocketbook to water when applying if in a period of drought.
(Mike Dahme, Grant)

A magnificent Pseudophoenix vinifera, *one of the treasures of Montgomery Botanical Center, here admired by attendees at last month's Palm Fest in Miami.*

(Photo by Geri Prall)

A Brevard Botanical Garden

By Diana Grabowski

On May 14th, Mark and I attended the second general public meeting for the Brevard Botanical Gardens, Inc. Currently, the group is in the process of attempting to identify several potential pieces of property the county may be willing to purchase for the proposed Brevard Botanical Gardens. Once the sites have been evaluated, a presentation will be made to the Board of County Commissioners in hopes that the proposed garden and funding for the garden will be placed on the agenda for the general public to vote on.

The group has a mission statement and several committees working on various aspects of researching and establishing the proposed gardens. They propose to have native plants and exotics, primarily focusing on plants that grow in the latitude 29 area. They are seeking donations to fund the group's efforts in supporting the "grassroots" appeal taking place, i. e., mailings, phone calls, etc. Donations can be sent to Brevard Botanical Gardens, Inc., P. O. Box 501186, Malabar, FL 32950.

If you have any questions or would like to help share your expertise, please call Wae Nelson, Steering Committee Chairperson at (321) 727-0065. The next meeting, which is tentatively scheduled for some time in August, is open to the general public.

A CFPACS Donation. . .

As a footnote to Palm Fest, it should be pointed out that the Central Florida Palm & Cycad Society has recently donated $1,000 to Montgomery Botanical Center. The contribution, voted by the chapter board, affirms MBC's continuing efforts in the conservation and study of palms and cycads. It is also an expression of the warm, mutually supportive continuing relationship between CFPACS and Montgomery.

—John Kennedy

The March issue of *The Palmateer* carried the press release from the website of the U. S. Fish & Wildlife Service announcing the indictments of several individuals for exporting illegal plants, mostly cycads, into this country. The dateline was July, 2001. A recent visit to the website reveals no new information.

However, the investigation has clearly been continuing. A sting operation targeted individual buyers in the U. S. The former director of The Cycad Society's seedbank, Mike Michaelson, addressed an open letter to that society's membership in the March, 2002, issue of its newsletter. In it, he admits to buying 500 *Encephalartos* seeds that had been smuggled in and expresses his remorse at having done so.

Last January, he was sentenced to six months of house arrest, five years on probation, and a fine of $5,000. He warns other buyers only to deal with reputable sellers and to ask for CITES documentation.

The open letter was published as part of his plea bargain.

—John Kennedy

Another look at the activity on March 16: the sale on the Florida Tech campus in Melbourne. (Pictures of the event taken by the Editor, the usual photographer being elsewhere, tending the plantation in Puerto Rico)

Deadline for September Issue:

Friday, August 16

Hibiscus? Nice, of course, everyone on your street has three or four. Crotons? Ixora? Too common. Wait! There seem to be five or six kinds of palms you can't identify? And some palm-like plants—cycads. Should you wish to learn much, much more, join a group that will not only embrace your curiosity but will provide more information about palms and cycads than you dreamed was possible. Just fill out the membership application to the right. The Central Florida Palm & Cycad Society invites you to become one of Us.

Syagrus glaucescens, *a seldom-seen trunkless Queen Palm relative, shown here in the garden of Ralph Velez, Westminster, California. (Photo by Geoff Stein)*

The International Palm Society (IPS)

Anyone interested in joining the IPS and receiving the quarterly, illustrated journal, *Palms*, should send a check for $35 (regular membership) or $45 (family membership) to:

International Palm Society
P. O. Box 368
Lawrence, KS 66044

Dues may also be paid online at the IPS website, www.palms.org

Please print

Name_____
Street_____
City_____
State,
Zip_____
Email_____
Phone (area)_____

Wish to be added to Seedbank E-mail list?
(Circle one) YES NO

Willing to be listed publicly in roster?
(Circle one) YES NO

Mail check made out to CFPACS (domestic: $10 one year; $25 three years; foreign: US$15 one year) to:

Membership Chair
1600 N. Harbor City Blvd.
Melbourne, FL 32935

Membership also available at website:
www.cfpacs.com

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The Palmateer

That's Norm Moody in his suburban West Palm Beach jungle, with two Caryota no, *70 feet high from seed planted in 1985. A third was blown down in a hurricane. There are two others of the same species growing elsewhere in Moodyland. Susanna Walker, editor of the Palm Beach Palm & Cycad Society's* The Palm and Cycad Times, *shot this picture lying on the ground, camera aimed up.*