The Palmateer

Volume 24, Number 1 *Central Florida Palm & Cycad Society* *March, 2004*

Our most hospitable hosts on Dec. 13th in Cocoa Beach were Diana and Mark Grabowski (pictured). There was a lot more food than what you can see here.

March 13th Meeting:

Fort Pierce and Vero Beach

Heathcote, Farmers' Market, Ed & Joyce Carlson's, Joe & Anne Michael's, maybe Jules Horwitz, maybe McKee?
Plant sale at the Carlsons'.
Directions, suggestions on pages 2-4.

December 13th

A Merry Time in Cocoa Beach

By John Kennedy

Well, the Cocoa Beach sociable on December 13th was just as great as I had thought it would be! The weather cooperated, mid-70s and mostly sunny, the wind off the ocean not reaching gale force. The locale, as ever, was a lovely place for a party, the lanai—or is it just a patio, Mark?—with lots of room for chairs and many, many pots of Montgomery palms. The beach just a step away, the surf pounding.

Our hosts, Diana and Mark Grabowski, made every-one comfortably welcome. Diana, our East Coast vp, also printer-in-chief of this publication, numbers among her many other talents, the ability to cook toothsome viands, particularly seafood. She prepared baked salmon with béarnaise sauce, Manhattan clam chowder, steamed veggies, and her own special key lime pie, as well a few more mundane items. Of course, everyone attending brought something else to eat beyond the six or seven edibles concocted by our hostess. Despite the earnest and conscientious efforts of the 50 people attending, there was actually food left over.

Two years ago, when last we were here, Diana and

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That's Richard Moyroud, in the distance, in rubber boats, in his little swamp, giving perspective to two of his 30 Mauritia flexuosa. *The site is in Lake Worth, 'west of the turnpike, east of the sun.' Story on page 14.* *—Photo by Mike Merritt*

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DEADLINE FOR JUNE ISSUE:

MAY 7

Fort Pierce Motels

(all are a little south of Heathcote)

Days Inn
3224 S. U. S. #1
(772) 464-8010

Farrell's Motel
3625 S. U. S. #1
(772) 464-1019

Econo Lodge
3236 S. U. S. #1
(772) 461-2323

Fort Pierce Restaurants

Out of Bounds Steak & Grill
2838 S. U. S. #1
(772) 468-4363
(south of Heathcote)

Café La Ronde (Saturday, dinner only: expensive, reservations)
221 Orange Avenue
(772) 595-1928

Manatiki Restaurant
200 N. Indian River Drive
(772) 460-9014

Tiki Bar & Restaurant
(open air right on Indian River)
2 Avenue A
(772) 461-0880
(three above are in downtown area)

Mervis's Café
5th St. & Citrus Ave., 1 block west of U. S. #1, behind KFC on U.S. #1
(772) 462-6600 (Cuban)

Donut Circus (honorable mention!)
2040 S. U. S. #1
(772) 461-8017
(a few sandwiches, great donuts & coffee, open 24 hours, half mile north of Heathcote)

There are at least 15 restaurants in downtown Fort Pierce; not all are open for lunch on Saturday.

Fort Pierce/Vero Beach

March 13th Schedule

9:00—Board Meeting, Heathcote House.
10:00—Meeting begins, palms and cycads at Heathcote Botanical Gardens, Fort Pierce.
11:00-1:00--Lunch, Farmers' Market (see sidebar for suggestions).
1:30-2:30—Carlsons' Vero Beach Aerodrome, visit and plant sale.
3:00-4:00—Michaels', Wabasso.

To Heathcote, Fort Pierce

From North: I-95 south to Exit 129, Okeechobee Rd. (SR 70). Left (east) on SR 70 to U. S. #1, 4 miles ahead**.** The road forks, a little more than a mile from the interstate: stay right, on SR 70. At U. S. #1, turn right (south) for two blocks. Turn left on Savannah Road. Video Superstore on corner. Heathcote is a half block east of U. S. #1, on north side of Savannah Road.
From West: SR 70 to I-95, then follow directions above.
From South: I-95 north to Exit 126, Midway Rd. (CR 712). Right (east) about 4.5 miles to U. S. #1. Turn left (north) on U. S. #1 for 3. 2 miles to Savannah Road. Video Superstore on corner. Turn right, Heathcote half block on left.

To Carlsons', Vero Beach

From Avenue A & U. S. #1, Fort Pierce: turn right (north) on U. S. #1 for 10.8 miles to Oslo Road (CR 606), second traffic light in Indian River County. Turn left (west) on CR 606 for 7.4 miles to 82nd Ave. (blinker). Turn right (north) on 82nd Ave. Turn left (west) in 0.2 miles on 5th Street, S. W. Turn right on Nieuport Drive, 50 yards ahead. The Carlsons' is the second house, 485 Nieuport Drive.
From I-95 (latecomers): Get off at Exit 147, SR 60. Go east to 82nd Ave., turn right (south) on 82nd Ave., 3.1 miles to 5th Street, S. W. Turn right here, right again on Nieuport Drive.To Michaels', Wabasso

To Michaels', Wabasso

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Right, Joe and Anne Michael in a golf cart below their Corypha umbraculifera, *Earring Point, Wabasso. That's the Indian River in the background. Picture taken in October of last year. Members and guests will get to see this palm and others during the March 13th meeting.*

Lunch Suggestions

Every fast-food franchise known to American gastronomy may be found on U. S. #1. A more digestible interlude is possible at several restaurants in the newly-renovated Fort Pierce downtown, right on the Indian River. For a more scenic drive than U. S. #1, once out of the Heathcote parking lot, turn left (east) on Savannah Road, which deadends in 0.8 miles in Indian River Drive. Turn left (north) on Indian River Drive—which parallels the river—for 3.1 miles to Orange Avenue; turn right. The Farmers' Market is held every Saturday until noon, on a broad patio, planted with royals, at the end of Orange Avenue. Restaurants, more than those noted, are found on Orange Avenue and on Avenue A (one block north of Orange). After eating or sightseeing, go west three blocks to U. S. #1, turn right (north) for the Indian River County stops.

Admission to Heathcote is $4.00 for adults. Anyone belonging to another botanical garden (Leu, Selby, others) gets free reciprocal admission with current valid membership card.

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From Carlsons' in Vero Beach Aerodrome: Back to 82nd Ave., turn left (north), 3.1 miles, to SR 60. Left (west) on SR 60 to I-95. North on I-95, 8.8 miles, to Exit 156, Fellsmere-Sebastian (CR 512). Bear right (east) on CR 512 , 2.4 miles, to CR 510 (traffic light). Turn right on CR 510 and continue on 510, over the bridge, for 8.1 miles to Jungle Trail. Jungle Trail is the second dirt road on the right, just beyond the fire station, about 100 yards from the bridge. Turn right (south) on Jungle Trail for 0.3 miles. Street sign for Earring Point on the right.

Two Optional Stops

***Jules Horwitz, Lakewood Park, north of Fort Pierce** Jules is a small vendor known to many from various palm sales, mostly to the south. He sells small palms at modest prices. If you wish to visit his backyard nursery, this can be done while traveling between Fort Pierce and the Carlsons'. From Fort Pierce (Avenue A & U. S. #1), go north on U. S. #1 for 5.6 miles to Indrio Road (CR 614). Turn left (west) on CR 614 for 2.9 miles—just past the traffic light for SR 713. The second street beyond SR 713 is Fort Pierce Blvd. Turn right (north) on Fort Pierce Blvd. for 1.2 miles to Hibiscus Road. Turn right on Hibiscus Road, go 0.2 miles to 7301 Hibiscus Road (last house on right).

Traveling on to the Carlsons', return to Fort Pierce Blvd. and turn right (north) 1.2 miles where it deadends into Emerson Ave./27th Ave. (SR 607). Turn right (north) for 2.2 miles to Oslo Road (CR 606)—traffic light. Turn left on CR 606; it's 5.1 miles to 82nd Ave. Right, then left on 5th Street, S. W.

***McKee Botanical Garden, Vero Beach**

McKee is 1.5 miles north of Oslo Road (CR 606) on the right (east) side of U. S. #1. CFPACS met at McKee 10 years ago, when it was largely uncleared jungle, with plans for opening as a botanical garden. The clearing was selective and tasteful, leaving largely intact the thousands of naturalized *Livistona chinensis* and the naturalized royals. Few palms have been added to the collection inside the garden. The parking lot, however, is lavishly, luxuriantly landscaped; the most interesting palms are here and have been in place for a few years. Anyone wishing to stop over at McKee, then proceeding onward to the Carlsons' can return south to Oslo Road and follow this road west to 82nd Ave., making a right turn (north), then a quick left on 5th Street, S. W.

A Merry Time in Cocoa Beach

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Mark had hand-painted Christmas balls each decorated with a palm; every family attending was invited to take one. This time, it was different handmade holiday tree ornaments, mine a 6-inch wooden cutout silhouette of a palm, green leaves, orange trunk, sprinkled with glitter dust and nano-pasta.

The highlight of the day for the serious-minded was the palms to be auctioned off that had been donated by Montgomery Botanical Center. These included two "pretty large" *Bactris coloradonis*—not formerly on anyone's yard list—and a passel of *Chamaedorea pinnatifrons*, "must be 50" (according to Charlene Palm, at whose house all the Montgomery palms were kept until meeting day), at least 18 inches high, each in a 1-gallon pot. So many, in fact, that every member got **one** as a door prize, still leaving 21 to be auctioned off. A sly comment—whose?—that two were needed for seeds resulted in a spirited bidding by those who wished to carry away two of these palms. Then there were three *Corypha utan*, one described as "jumbo," the others merely as "large." And a few *Chamaedorea plumosa, Copernicia macroglossa, Licuala spinosa, Roystonea regia, Chamaedorea ernesti-augustii, Livistona* 'Cooktown" seeds, *Sabal causiarum* seeds and community pots. Also on sale were packs of seeds of five additional species, and a community pot of *Chamaedorea tepejilote.*

The auction itself brought in $628. Not yet figured into the total was the percentage of sales from the six or seven small vendors. About 25 of our new CFPACS T-shirts were sold, only a few of which were juniors ($10), the adult large and XL priced at $15.

As usual, all departing vehicles seemed to have waving fronds inside. Mercifully, everyone got across A-1-A to his or her car, SUV, truck, van without adverse connection with the traffic speeding toward the center of Cocoa Beach.

Where shall we celebrate next December? Ray. . .?

NO MAPS!

Maybe you noticed? No maps. The Editor's artistic skills lie in the area of words. His attempts at drawing maps have, in the past, elicited laughter. So, all directions for the March 13th meeting are in words, with explicit directions.

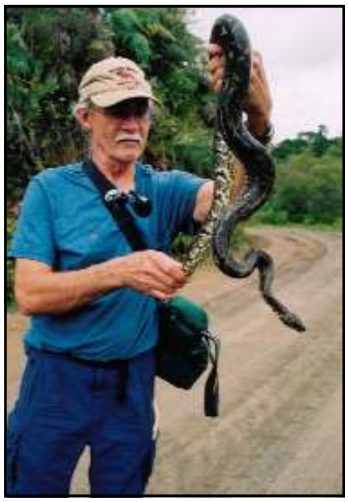
A Sense of Adventure in Madagascar

Every passion borders on chaos, that of the collector on the chaos of memory. --Walter Benjamin.

By Bill Beattie

The grand plan was to drive an Earthwatch Inst. 4WD from Antananarivo (Tana) to Maroantsetra. We would take our time and visit many of the small forests and National Parks en route and camp wherever whenever. We would search for many palms and other plants of interest and take the opportunity to observe extraordinary wildlife. Madagascar had settled down after recent political upheaval and we anticipated few problems that could not be overcome.

'We' on this occasion being Peter Balasky from Florida, Ivan Nozaic and myself from North Queensland and Leon Pierrot Rahajanirina, a biologist with Earthwatch locally. All of us had considerable experience travelling in Madagascar and were quietly confident of a wonderful trip. We knew where to go and who to see and what to look for. A modest framework but a basis for adventure. Ah! The misplaced confidence of grizzled veterans! A small hitch right at the start. My luggage had been diverted to the island of Reunion and, just in case it had vanished forever, I spent an extra day in busy Tana buying suitable replacement clothing and footwear. We also bought about 40lbs of food supplies including many tins of sardines and mackerel and lengths of bread rolls. Our 4WD turned out to be one from the Inst. for the Conservation of Tropical Environments and it was old, suspiciously old!



Peter Balasky, Floridian, holding a (fortunately) non-poisonous boa constrictor met with in Madagascar.

But we were off! First stop at Analamazaotra (Perinet) and the Mantadia (Mantady) National Park where Peter had photographed an unusual palm six months earlier. We spent a day in the forest and found quite a few of these palms. Slender, commonly with a skirt of suckers and bearing a pure white crownshaft. Beautiful! But what could it be? No flowers to key out and unfamiliar to us either here or in collectors' gardens. Time was taken to photograph a large, rare orchid that is only found on a *Pandanus* sp. and only found in this Park. This is *Eulophilia roempleriana* and a beautiful sight. While driving back to our accommodation we came across a 5' Boa meandering cross our path. All snakes in Madagascar are non venomous and this species was probably the common *Acrantophis madagascariensis*.

The Manambato Ravenea. *But what can it be?*

Next, down to the coast and another look at the *Ravenea* sp. that Ivan and I had discovered in '99. This is a massive, awe-inspiring palm and may have some affinities with *R. rivularis*. There are only a few individuals

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Madagascar Adventure

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growing in a Manambato swamp.

In this district, as in many parts of Madagascar, a bushy *Grevillea* sp. with creamy flowers had been planted as an easier source of wood/charcoal fuel. Over the years this Australian native has become a weed and quickly dominated vast areas of grassland where, together with *Ravenala madagascariensis*, they form almost impenetrable thickets. Annual burning off only adds to the spread and density of *Grevillea.* And fire ensures the demise of any palm seedlings.

My missing baggage arrived undamaged at Toamasina airport and we headed up the coast road….north to Maroantsetra. The bitumen surface ends two hours away at a small town called Soanierana-ivongo (pronounced 'sooanieran-ivoong') which is perched on the edge of the river Marimbona. Remember the town's name because it is misleadingly exotic. Ivan and I had stayed a couple of days here previously but on this occasion we found that the regular jaunts had either closed or been blown away in a Cat 5 cyclone two years ago.

After some false trails we were taken to a collection of huts near the sea. The owner did his best to set us up comfortably and we had a hut with two beds. One double and one single. No problem for us and on this occasion Ivan drew the short straw and had the luxury of the single! The toilet/shower block had seen a number of other urgent visitors each of whom had left significant calling-cards so it proved easier on all the senses to head for seashore shrubbery. Following a reasonable meal of fish and rice washed down with some excellent cold beer, Peter and I prepared for bed while Ivan chatted with other visitors. It had been a long, sweaty day.

Suddenly, two garish elderly 'ladies of the night' appeared at our bedside demanding attention and looking for immediate and negotiable action! The accommodation owner had gone overboard in his desire to please! Quite what these ladies made of two oldish men in one bed, two piles of bones intermittently covered in grey hair, both looking as vigorous and lusty as shrivelled leaves… we shall never know. They hurried away muttering oaths which turned to shouts of rage when they spotted the owner scurrying towards his hut. Ivan claimed he never saw or heard anything! Very strange!

At 8am., *libidos intactos*, we crossed the Marimbona by barge and soon entered the unknown zone. The weather was fine and sunny after some days of overcast weather. We knew that the road was going to be bad and local people seemed uncertain whether vehicles of any kind could actually get through to Mananara which was our first planned stop. Officially this road had been 'closed' for 2 years but there is always a chance. Or so we thought! The new Government of Madagascar has put education and repair of roads and bridges as top priorities and indeed there was some positive physical evidence of these. Now the going became very difficult in 2/3 gear, deep white sand, many gullies and ridges and a lot of bouncing around. We dug ourselves out a few times and made it to the second river crossing. The countryside is flat here and the vegetation made up of sedge and other wiry sand blown grasses. Very few trees, just occasional groups of *Ravenala* and *Pandanus*. The river Simianano crossing accomplished, we kept going and occasionally passed quite dense patches of forest or village mango and lychee plantations. *Ravenea sambiranensis, Dypsis lutescens* and what appeared to be *D. psammophila* were spotted on occasion. One more river crossing to achieve and we were on our way! It was not to be!

Just short of the river Anove we broke the nearside front leaf springs. To go on would be foolhardy. No hope of spares in this remote region. After much discussion and temporary repairs to the 4WD it was agreed that our driver and biologist friend

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Intrepid palm-hunters in Madagascar cross the Marimbona River, virtue not yet tested. (No Holiday Inn on the opposite bank.)

Madagascar Adventure

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Pierrot, would return to Tana. We chose to remain in the village and try for a small boat north to Mananara or east across the Indian Ocean to Ile Sainte Marie. Luck was on our side and thanks to Pierrot's negotiating skills, a small boat with two outboard motors, a skipper and crew of one, we set out with 3 local family passengers for Ile Sainte Marie! An unexpected voyage indeed!

Six hours of slow progress across a choppy sea then landfall in the port of Ambodifotatra which is the main town. 16000 people live on this old pirate island, the vast majority being of the Betsimisaraka tribe. As this is now a popular tourist destination there is no problem with accommodation. The island is a flat, narrow granite outcrop some 30 miles long with the highest point a fragmented forested hill some 350' asl. The roads are terrible. We encamped in picturesque tropical surroundings just a few yards from the sea, in a lodge called La Baleine. This being the only Malagasy owned tourist 'resort' on the island so named after the whales that give birth and occasionally mate in the seas between the island and Madagascar. Excellent place. For once we had separate beds and no night visitors…as far as I know!

But how do we get to Maroantsetra? There are no flights, only an occasional small cargo boat passes through en route. Every morning for the next four days we enquired at the port authority office for cargo boats to our destination. Then bad weather intervened, all shipping headed for the nearest port. So that was that!

The next day we decided to visit the aforementioned fragmented forest which is one of the two principal remaining forests left on the island. About 20 palm species have been recorded here and we sighted most of them and added a few more! This forest is called Kalalao and is reasonably accessible for those still capable of moving rapidly in an upright fashion up and down hill for a few hours. Finding a guide at the local ANGAP office (A Malagasy non-Govt. organisation responsible for most National Parks and Reserves) who knows the area is an essential prerequisite to any excursion.

We had a fascinating and learning experience. Our guide Marschal was fluent in English, French, German, Italian, Swahili and Betsimisaraka. We know because we had hilarious moments listening to this born actor going through his routine for various nationalities. Flamboyant hand gestures and precise melodic voice for Italians; sonorous guttural tones and much cold staring for Germans etc.! He also knew most of the palms and called Kalalao 'his garden'.

The bright green leaves frame an unusual Dypsis *seen at Mantadia.*

The first palms seen were *Dypsis boiviniana* just coming into flower. There were many of them and over the ensuing hours we recorded *D. fasciculata, D. fibrosa, D. lastelliana, D. lutescens, D. nodifera, D. pinnatifrons, D. sanctaemariae, D. thiryana, Ravenea robustior, R. sambiranensis* and *Orania longisquama*. From this group *D. thiryana* and *O. longisquama* are new records for the island. We looked for *Dypsis corniculata* but were unlucky. This palm is superficially similar to *D. thiryana* but, in the absence of flowers, can be separated by leaflet shape and depth of leaf apex dentation. There were a few other palm species here that baffled us and they remain for others to key out. A very interesting forest that deserves more detailed study.

It was here that we saw our first red *Ravenala*. Marschal told us that it has long been known that there are three forms of this monospecific genus. Long known to most Malagasy that is. Ivan, who is interested in this genus, was very doubtful until the first red type was shown to us. The leaf petioles are held in quite different fashion to the normal type and the seed is also at variance. The juveniles are dark maroon/red and this colour is retained until maturity when it fades slightly. The general size of the plant is also smaller than the norm. What a spectacular introduction to the landscaping world this plant would make! Perhaps it may even

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Coccothrinax alta on Culebra Island, Puerto Rico

By Mike Dahme

Coccothrinax alta was described by the early 20th century Italian botanist Beccari and is, aside from *Gaussia attenuata*, the only other endemic of the nine palms recorded for Puerto Rico [N. B.: Henderson, et. al., in *Palms of the Americas* treated it as a synonym of *C. barbadensis*, thus widening the range to include the chain of islands in the eastern Caribbean.] On Puerto Rico I know of only two places to see it and though once managed climb a mogote-like hill to view the crown of a tall specimen from slightly above, the specimens visible from roads are growing on such steep slopes that it's virtually impossible to search for seeds. Thus, I thought that this would be the only one of PR species [which might be the rarest on the island, the other candidates for this distinction being the *Gaussia* and *Aiphanes minima*] that I wouldn't be able to collect. So, when a friend mentioned that he knew of some growing accessibly, we were soon of on a day trip to the small, near-by island of Culebra.

Conveyance was by eight-seat prop plane, only slightly larger than Ed Carlson's flying golf cart, without co-pilot—someone should tell the FAA. These planes proceed at low elevation and at only twice the speed of a car, and are worth the fare for the sight-seeing value alone, never mind a destination. On arrival we quickly proceeded by jitney van perhaps a mile to the beginning of a track, a narrow cement road built long ago by the Navy to service observation and communication structures overlooking the sea. Though long abandoned, the road remains useable by even 2-wheel drive vehicles save for wash-out spots, so we quickly walked to the 350 foot crests of the hills, there noticing solitary or small groups of two or three palms widely separated from each other. None near to the track were mature, so we had to brave the thorny, bramble bush-like plant [perhaps *Zanthoxylum fagara*] that dominates the vegetation of this xeric zone [the whole island is dry and is far too small for rivers], as well as the large boulders that abound there. The second palm we approached proved mature, about 30 feet overall, just dried-up flower stalks below the sparse leaf crown, so no seeds. But a handful of seedlings from the past two or three flowerings were near to the base of the palm for, er, study.

Coccothrinax alta *on Culebra. Author (obscured) at bottom center of picture.*

Like that of many other species of this genus, habitat is barren and reproductive success rate likely exceedingly low. On the other hand, the utility of such bleak landscapes to man, aside from in this instance transient military purposes, appears nil, which works in favor of survival of a species that has adapted.

Richard Moyroud, far right, points the visitors toward the Mauritia*s at his nursery in Lake Worth on February 1.*

Growing Cycads in Central Florida

Cultivation of *Ceratozamia hildae*

By Tom Broome

Ceratozamia hildae is my favorite landscape cycad here in Florida. It has an upright habit that is different from most other cycads, which have more of a fountain form. It can be grown in a smaller spot so it makes a great accent plant in a larger landscape, but can also be a specimen plant in a smaller landscape. The leaflets are grouped in clusters that are shaped like bow ties, which makes this plant very unique. Typically they have green emergent leaves, but a few rare brown emergent individuals exist in collections.

Ceratozamia hildae is easily grown in all of Florida. The description of *Ceratozamia hildae* mentions that it grows at upper elevations at around 3000 feet above sea level. Because of this, it was thought that this species did not exist in habitat because people had not found it for decades. During a recent expedition, it was not found where it was said to be, but was found at an elevation around 200 to 300 feet.

It is now thought that there was a misprint in the description, and this new evidence tells us a lot about the plant. People in Florida were producing viable seeds, where people in California were not. *Ceratozamia hildae* grows much better in Florida as well, and shows that our climate is much better for this species. *Ceratozamia hildae* is very cold hardy, can survive in many different growing conditions and soil, and reacts well to fertilizer applications.

I have had four flushes of leaves in one year on several individuals. They also mature fairly fast with males maturing in less that 5 years and females coning in 5 to 6 years. *Ceratozamia hildae* is best grown in partial shade. A plant grown in full sun will actually grow very fast, but never looks very good. The sun seems to bleach out the leaves and makes them look either yellow or burned. If they are grown in deep shade, the leaves will look good, but plants will grow much slower and look a little thin.

Ceratozamias seem to prefer a little more water than some cycads, but good drainage is just as important as with other genera. This species has an underground stem, so drainage is important if it is grown in a wet area, mounding may be needed if the ground saturates very often. *Ceratozamia hildae* should be totally cold

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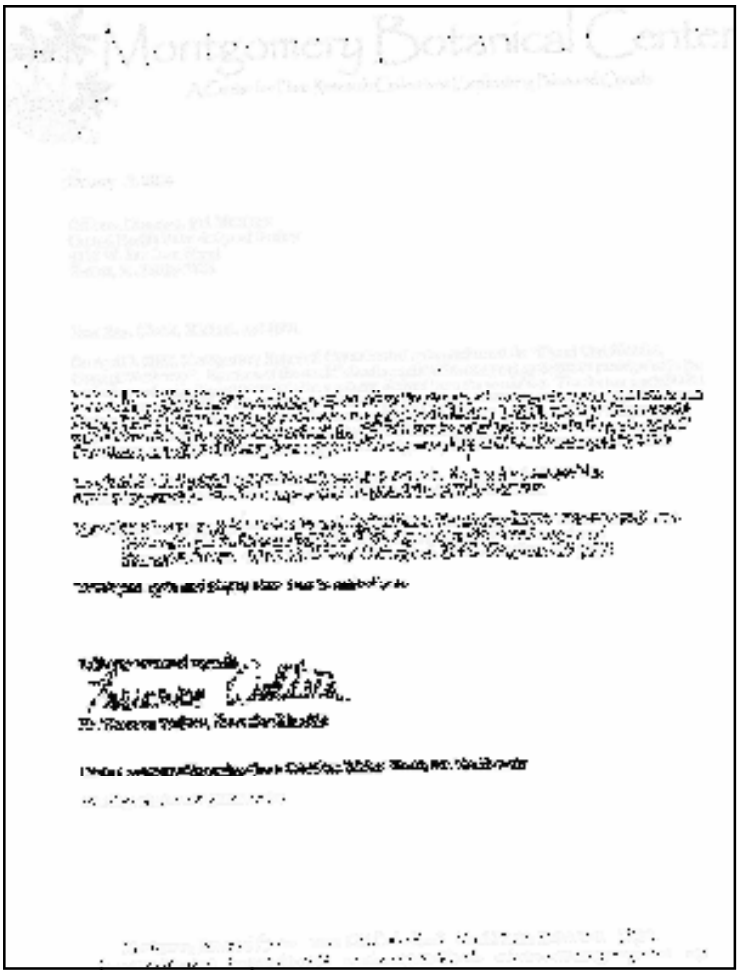
Above and below, Ceratozamia hildae*, a cold-hardy cycad that isn't grown as often as it should be in Florida.*

Andrew Palm, son of Charlene and Greg, stands next to a particularly fine specimen of Rhapidophyllum hystrix*, the Needle Palm, one of many at Homosassa Springs State Park.*
(Photo by Mom)

CENTRAL FLORIDA
PALM & CYCAD SOCIETY

A forest of Needle Palms at Homosassa Springs State Park.
(Photo by Charlene Palm)



Left, letter from Terrence Walter at MBC announcing the publication of the papers presented at a cycad symposium there nearly two years ago. The book is distributed by Oxford University Press; the price isn't given.

Madagascar Adventure

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warrant the status of a separate species. We shall see. What then is the remaining 'different' form? Marschal showed us the giant of the genus…much larger in all respects. He also explained the different uses that each form has within the local community.

Once back down on the coastal plain we saw quite a few *Dypsis psammophila*, that most pretty and under-utilised palm. Why this species has not been taken up by landscapers anywhere is beyond belief….a miniature 'golden cane' but with shiny black stems.

Back to La Baleine and the news that we had 30 minutes to pack up, pay the bills and make it on board the 70' mv. Savannah. This we did with but seconds to spare. It was to be a nightmare journey.

Satranala decussilvae*, a palm frequently seen by the intrepid Madagascar travelers..*

The small cargo boat was packed with about 100 layered crates of beer and coca-cola. On top of some of these crates were various items of assembled furniture and components of the same. It was loaded down to about 18" of freeboard. There were 22 illegal 'passengers' each paying the skipper a bonus (we foreigners paid about $30 each) and as soon the mooring ropes were slipped the majority of them headed for'ard to find what shelter they could. A member of the crew took us below decks to a tiny cabin 4' high and 7' across furnished with two small bunks. It was hot and humid in there and the air trembled with diesel engine noise and fumes. Ventilation only through the tiny open door. Ivan and I squashed into one bunk while Peter luxuriated in the other. The lights went out, rain could be heard above and soon felt below! Ivan got soaked and moved into the dryness of Peter's bunk much in the manner of a dog growling for position. Curled into a small ball I soon fell asleep only to wake with a start, banged my head on the deck flooring and found that I was soaking wet in pitch darkness. In such stressful circumstances I calmed down by lighting a cigarette. My travelling companions reacted swiftly. Peter crawled out and headed topside swearing allegiance to many gods while Ivan loudly questioned my birth certification. I fled outside into the wind and rain and spent the long night hours perched on top of coke bottles. Peter, a few feet away, endured the furniture slats. He demonstrated a fine sense of humour by telling me that my situation was nothing to get anal about! Meanwhile the Savannah rolled and pitched through following seas and, just before dawn, I was punched in the chest by an unseen assailant. Fear greatly increases night vision and it was not long before I saw many flying fish doing exactly what they are famous for. One of them lay kicking beside me and soon vanished among the crates.

7 am found us grounded in the mouth of the main river at Maroantsetra. We waited for a lighter to come and take on the crates and us and by midday we were ensconced in our accommodation at the Relais du Masoala. This is a good place to stay after hard times 'on the road' and much remained to organise. The next phase of our journey was to repeat Peter's journey made earlier in the year. We had seen his series of excellent photos of many strange and beautiful palms down in the Masoala Peninsula. We were going back there to check them out and three days later arrived at our destination. The final few hours were by fast motorboat and any daylight sea journey along or across the Bay of Antongil is a fascinating and inspiring experience. Passing distant, densely forested hills with peaks reaching to 3000' and hour after hour with little visual evidence of human settlement! This bay can be treacherous with huge seas and storm winds but again we were lucky. A few huts placed between the shoreline and the rainforest were our homes for the next six days.

Ivan had decided that a $5 pair of bargain training

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Madagascar Adventure

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shoes purchased in a Maroantsetra store needed evaluating. He had often spoken of his purchasing skills. Ten minutes walking through a wet rainforest reduced his bargain buy to cardboard-like shreds. And this was on our first guided exploration of part of the forest nearby! Candles were not lit in remembrance and we continued on in jocular fashion. At this time and place our guide told us that botanists had never visited this part of the Masoala Peninsula. Sure, bird watchers and reptilian fans had been here often. The Peregrine Foundation were within one day's walking distance and are doing good work in the preservation of the Masoala Serpent Eagle, a bird that just a few years ago was on the believed extinct list. But the news that we might be the first botany-minded persons in this part of a vast primary rainforest added considerable impetus to our endeavours. We were not disappointed!

Our first real surprise was passing through hundreds of *Satranala decussilvae* and *Dypsis beentjei* which are very common palms in this region. *Satranala* leaves are regularly harvested for roofing material and most of the palms near the forest paths had been stripped of their leaves. A few individuals of this fan-leafed sp. had > 30' of trunk and *D. beentjei* grows to 6' here! Beautiful palms. *Ravenea dransfieldii* and *R. sambiranensis* are reasonably common also while *R. albicans* is quite rare. Added magic in this forest is the number of very large, buttressed rainforest trees. These are much used by the three more common *Lemur* sp. on the peninsula. One tree species with aerial roots is of particular interest to the local male Malagasy. Our guide explained to us the phallocentric significance of the roots growing only on the northern quadrant of the trunks. Many of these had been cut and portions carried away. Apparently a decoction drunk by men has a spectacular 'Viagra-like' effect!

Unfortunately we had no time or opportunity to test the validity of this belief. Our guide was quite adamant however! Gentlemen readers, girdeth thy loins and venture to these parts! We need experimentalists.

Over the next few days we went on many forays through swampy patches of *Pandanus* that tower to the canopy, forded many clear streams and climbed up and down many hills. We were in paradise! There were palms large and small everywhere. During one morning we saw hundreds of *Dypsis pachyramea* carpeting the forest floor. *Dypsis forficifolia, D. procera, D. hiarake, D. dransfieldii, D. lutea, D. mocquersiana, D. crinata, D. fibrosa, D. hovomantsina, D. pusilla* and *D. lastelliana* were all recorded. The latter extending to 100' tall in one site. *Orania longisquama* and *O. ravaka* tended to grow near streams. *O. ravaka* has leaves arranged in a distichous fashion just like *Ravenala* and the juveniles can be distinguished by patches of reddish scales on leaf sheaths and leaves.

We also found a number of large palms that we could not identify and do not appear in Dransfield and Beentje's *Palms of Madagascar*. One of these is so different and so spectacular that we spent some hours measuring plant parts and taking photos to send to Kew. In general terms, this palm averages about 60' in height with a grey, closely ringed trunk. The leaves are spirally arranged and held quite stiffly. The leaflets are regularly pinnate and held at a slight angle to the leaf rachis. From old infructescences we determined that flowering was 2/3 orders. What is really astonishing is the short, raised crownshaft that is glistening white and streaked with yellow. This is Peter's palm! At this point I should state that of the many truly beautiful palms that are found in Madagascar, this one sits top of my

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Below, an unidentified Dypsis *with a blue-grey crownshaft, described on the opposite page..*

Madagascar Adventure

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list!

Another oddity was a giant with a steel-grey almost blue crown shaft. Some of the leaves held at an odd angle to the trunk. Old seeds were 'tortoise.shell' in colour and quite large. The red *Ravenala* is here too and I began to think that it is time someone had a closer look at this genus.

Periodically, we came across small tenrecs scuttling about the forest floor. These insectivores are among the most primitive of living mammals and are represented in Madagascar by about 30 species ranging in size from 2" to 15" long. They fill the niches occupied in other countries by hedgehogs, moles and shrews. One of the most attractive is the yellow–streaked tenrec (*Hemicentetes semispinosus*) which, although no larger than an average sized human hand is more than capable of protecting itself by thrusting forwards a fan of detachable barbed quills. Some skill is required in picking these little animals up. Ivan knows, he found out the hard way!

The smallest chameleons in the world are found here. *Brookesia minima,* is a mere 1" long and much resembles a piece of twig. Only the sharpest eyes can locate them on the ground. Once our guide found two *Brookesia sp.* and in my enthusiasm to see them, I cleared away a few dead leaves and such and, yes, I succeeded in tossing them away! From that time on I became 'the man who throws away chameleons'.

Our days in this wonderful forest soon came to an end and it was time for Ivan and I to make the long journey home via Maroantsetra, Toamasina, Tana, Mauritius and Kuala Lumpur. Peter decided to stay on another week and visit forests south-east of Tana. Here, we parted company at 4.30am outside the Hotel de France agreeing to do the same thing again soon… in another part of extraordinary Madagascar.

Another unidentified Dypsis *on the Masoala Peninsula, this with a 'spectacular white/yellow crownshaft.'*

*A Yellow-Streaked Tenrec (*Hemicentetes semispinosus*), a resident of the palm forests. And, yes, it does look semi-spiny. See description above.*

Postscript: Following much correspondence with Dr. John Dransfield of the Royal Botanic Gardens, Kew…..it is likely that the unusual palm found in Mantadia is a form of Dypsis baronii. *The identification of the two 'new' large palms found on the Masoala Peninsula is unresolved. Further studies this year will be conducted on these and some other plant oddities by staff attached or affiliated to the Royal Botanic Gardens.*

CFPACS Tours Montgomery Botanical Center

By Neil Yorio

The CFPACS participated in a tour of Montgomery Botanical Center (MBC) on January 31, continuing our chapter's winter tradition of visiting this world-renowned research center specializing in the study of palms and cycads. Our tour began around 10 a.m. with a brief introduction to the garden by Dr. Larry Noblick (Palm Scientist) and Jody Haynes (Cycad Scientist) of MBC. The group of about 40 was given the option of the palm tour hosted by Larry or the cycad tour with Jody. I chose the cycad tour, as did about a dozen others, and we had Jody all to ourselves as we headed off towards the cycad plantings.

What was immediately evident was the remarkable increase in growth by all the cycads since our last visit about two years ago. Most of the plants were now mature and coning, including a number of the *Cycas panzhihuaensis*, which produced seed for the first time last year. This particular species is quite attractive and is purported to be quite cold hardy, being native to colder climes of China. This is an excellent species to be tried for central Florida gardens making a great replacement for the common *Cycas revoluta* (provided one is capable of keeping the Asian white scale at bay).

Some of the more rare species encountered included *Zamia* sp. "Jamaica" which is encountered at higher elevations and is reputed to be cold hardy in addition to being a spectacular large *pumila*-type *Zamia*. This plant has great potential for the central Florida area. Additionally, we encountered a group planting of *Zamia inermis* from Mexico. According to recent information, this plant may be extinct in the wild. However, the good number of plants at MBC are frequently pollinated and seeds distributed (several to our seedbank), so this plant should be more available in the near future. It is a spectacular plant with large cones and seeds that is generally easy to grow and makes a nice replacement for other prickly *Zamia* spp., as the Latin derivative of "inermis" means "un-armed".

The rare and large *Encephalartos whitelockii* is also present at MBC. A large female plant there had its main stem broken off in a wind storm-but not to fret--basal suckers were observed sprouting from the base of the broken stem. Many other beautiful palms and cycads were observed during the rest of the tour.

At around noon, those willing to get more cycad exposure attended a presentation by Jody on his recent trip (partially funded by CFPACS) to Honduras to study the populations of *Dioon mejiae*. This is a beautiful plant, not uncommon in collections, but impressive in the wild. Jody showed us photos of huge plants with many stems. Apparently, the populations of this species are quite secure, as noted by the thousands of plants Jody measured during his study. The prevalence of this plant is mainly due to the reverence the locals have for it. Called "Teocinte," the seeds are a significant part of the diet, in which tamales and tortillas are made from the "flour" produced from the grinding of the seeds. So, another great visit to MBC to see the many spectacular, rare, and interesting plants. For those who have not been to MBC, make a point of not missing the next opportunity.

Zamia *sp. "Jamaica" at Montgomery Botanical Center.*

For ice cream:*Mauritia flexuosa*

Aguaje Palm Agroforestry in the Peruvian Amazon

*A wild female aguaje palm (*Mauritia flexuosa*) in fruit, in Peru.*

The following is a portion of an article posted on the Rainforest Site (www.rainforest.org), reprinted here by permission of the authors..

By Jim Penn,
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One example of a modern, developed industry, which depends on a non-timber forest product, is the ice cream and cold drink business in the city of Iquitos. The most important non-timber forest product (NTFP) for this industry is the fruit from the aguaje palm (*Mauritia flexuosa*). When aguaje fruits are ripening on the trees, aguaje harvesters from all over the Peruvian Amazon race to cut down female palms that they know will be bearing fruit. Most of these are now located far from settled areas and are difficult to reach.

Several groups of people will compete for the same stands of the tall aguaje palms, and the first to arrive will often cut the palms before the aguaje is completely ripe, in order to prevent others from doing so. This poor quality fruit eventually arrives in the Iquitos market where it sells for $1.50 to $3 for a 40 kilo sack. The seller usually pays 40 to 60 cents a sack to ship it to market. This situation benefits neither the rainforest nor the rainforest people's economy.

Efforts to produce devices to climb the palms have been ineffective. However, when adequately spaced in a field (e.g., in an agroforestry system) aguaje palms grow relatively quickly (maturing in 12 to 18 years) and remain short. The huge fruit bunches hang two to five meters high and can easily be cut off without having to fell the palm. The palm can then produce year after year, providing a sustainable source of income. The owner can harvest the fruit bunch by bunch, at optimum ripeness, and select the best varieties in order to make the most money. Since 1991, RCF has funded agroforestry projects that plant aguaje palms.

In these projects, the people try to plant the highest quality aguaje on their land, such as a variety known as "shambo." True shambo has a red, oily pulp and is

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A close-up of the aguaje fruit. The mesocarp is eaten.

Aguaje Palm Agroforestry

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often hard to find. Iquitos ice cream and drink makers pay high prices for shambo or high quality aguaje. Depending on the aguaje's characteristics, shambo and high quality aguaje sells for 10 to over 20 dollars a sack! By planting aguaje palms in their gardens, the people can reduce and eliminate the need to destroy aguaje palms in the forest, and leave these important trees for animals to feed on. Indeed, aguaje will need to come from locations near Iquitos (less than 2 days travel by boat), as time invested in harvesting wild aguaje, the costs of transport, spoilage and damage will make it an increasingly labor-intense and risky activity.

The human competition for aguaje within the forest causes it to be harvested when unripe, fetching a low price. Each year the remaining palms are farther to reach. More labor, less income. We have named this self-defeating phenomenon "the race for aguaje." Numerous researchers have pointed out the high value of aguaje fruits to the Iquitos markets, but more attention must be given to the role of aguaje in regional conservation plans due to the ecosystem value of this species.

Conservation and management of palm species is crucial for the Peruvian Amazon. While discussions have historically focused on the need to further develop and export palm products from this region, the use of palm species must be managed before any increased demand for them is promoted. If this is not achieved, we will again see the local economic "booms" as extractors rush to harvest non-timber products until supplies are exhausted (such as rosewood in the 1960's). It is rarely mentioned that these activities can also negatively effect fauna populations. These commercially important species are also important food sources for terrestrial and aquatic fauna. The current, intense harvesting of camu-camu fruits (*Myrciaria* sp.) for export programs is a new example of this.

RCF supports programs in the Reserva Comunal Tamshiyacu-Tahuayo that aim to restrict extractors to the buffer zone areas, minimizing harvest pressure on flora and fauna within the reserve. This will in turn allow more food to be available for fauna, and raise the reserve's carrying capacity for important species. The termination of small-scale timber concessions in the then proposed Reserva Comunal Tamshiyacu-Tahuayo in 1988 by the Peruvian authorities reduced hunting pressure on the upper Tahuayo by one-half. Community efforts since then have helped minimize hunting in the reserve and in buffer zones. Meanwhile, RCF has funded a number of agroforestry projects that are designed to reduce extractive pressures on forests.

Update:

Since 1995, RCF has been funding Proyecto Aguaje, which helps the small farmers of the area to cultivate aguaje palms in their small gardens. Most of these farmers have also been extracting aguaje in the wild by felling the palms. Thus, Proyecto Aguaje aims to turn these extractors into producers of aguaje, leaving the aguaje swamps in the forest to regenerate and provide

Left and below are cultivated aguaje palms, on the home properties of local people..

Aguaje Palm Agroforestry

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food for fauna.

So far, more than 40 farmers are participating in the project. The palms take 7 to ten years to produce fruit in an agricultural setting. When cultivated in the open, the light-demanding palms mature when relatively short in height, and the fruit bunches hang just three to six meters off the ground. This makes it easy for farmers to cultivate the fruit year after year, and develop a sustainable source of high quality fruit. The goal of the program is to plant 150 palms on degraded lands with each extractor family, with at least 50 palms expected to become productive females. A single, productive palm can provide from 100 to 250 kilos annually of fruit. Production from 50 palms will result in over $1500 in annual income to these farmers from the sale of the fruit.

Four gardens are currently producing fruit, and many more are soon to follow. (See photos.)

For more information on the use and cultivation of aguaje (*Mauritia flexuosa*) and other palms in northeastern Peru, see the June issue of *The Palmateeer*.

[The Editor wishes to thank Pat Linley, of Harbor Branch Oceanographic Institution, Fort Pierce, for sending him the relevant article on the RCF website.]

Below, also growing in Richard Moyroud's Palm Beach County swamp is a handsome Cryosophila warscewiczii. *(Try saying the genus and species fast: reward to the intelligible.)*

(Photo by Mike Merritt)

The Only Florida *Mauritia*s?

By John Kennedy

If there are any other *Mauritia flexuosa* growing anywhere else in Florida, no one seems to have heard of them. Amazonian palm species are not plentiful in the ground, even in South Florida. Yet Richard Moyroud has 30 of these palms growing in a wet area of his property in suburban Lake Worth, well inland, west of the Turnpike. They were planted out of 3-gallon pots in 1991 and the tallest have about 8 feet of trunk. None has yet flowered. These palms have been through brief freezing temperatures without serious damage.

What's the secret? Not very clear, even to Richard, though the site—frequently covered with a foot of water and almost always damp—surely has much to do with the evident good health of the *Mauritia*s.

Fifteen visitors assembled on Sunday, February 1, at Mesozoic Landscapes, Richard's native plant nursery. While more of those who had toured Montgomery on the previous day had been expected, rain and generally threatening skies deterred all but the determined few. Two inches of rain the day before had flooded the area by the palms and the visitors were unable to get closer than about 50 feet away. Richard, in his rubber boots, waded out to the *Mauritia*s and is pictured on the front page standing by them.

The *Mauritia*s are not the only palm features of a nursery that also seems to be a collection. Flanking these South American palms are towering royals, 18 years old, grown from seed collected by permission in the Fakahatchee Strand, back in the days when the Florida natives were known as *Roystonea elata*. Since then, of course, the species has been merged with the Cuban royal, *Roystonea regia*. A small, handsome *Cryosophila warscewiczii* stands on the edge of the flooded area. And, a short tramp away is Richard's Caribbean palm collection. A prominent exception to this classification is a medium-size *Livistona saribus* that Richard wishes to remove. He offers it free to anyone who wishes to dig it out and threatens to cut it down if it's not gone "soon."

(**Would he** be so hard-hearted as to kill a nice, healthy palm?)

One of the remarkable sights of the nursery is landscape size *Serenoa repens* in large containers. All were saved, says Richard, from the bulldozer. As the group finished the tour, clouds dissipated and the sun appeared—a benevolent end to an enjoyable experience.

No, not a Sabal palmetto—*as a casual passerby might think—but a* Copernicia alba*, growing in Osceola County, near St. Cloud. Bill Black, who sent this picture, agrees with Dave Witt that the species is great for inland Central Florida. This particular individual, Bill says, was planted in the ground from a 3-gallon pot about 1992.*

Above, one of the giants of the Encephalartos *genus,* E. whitelockii *at MBC, with "young Dave Reed" providing scale. (Photo by Neil Yorio)*

Female Encephalartos ferox *"curly leaf form" with pollinated cone at Montgomery Botanical Center, Miami.*
(Photo by Neil Yorio)

Upcoming Sales

Leu Gardens, Orlando: March 27-28

University of South Florida, Tampa: April 10-11

Palm Beach Palm & Cycad Society, Boynton Beach: Calusa Park, April 17-18

FIT Botanical Garden

Revival To Involve CFPACS

By John Kennedy

Florida Tech (FIT) in Melbourne is reviving its moribund Botanical Garden. The announcement was made at a January 16th press conference on the campus by Dr. Anthony Catanese, the university president. The 30-acre site, including the remains of the Dent Smith Trail, has been cleared of exotics and is ready for the next stages preliminary to re-planting. The initial phase is funded to the amount of $75,000.

The Dent Smith Trail was planted with palms by FIT's founding president, Dr. Jerome Keuper, and named in honor of his friend, Dent Smith, who started The [International] Palm Society. Jerry Keuper later served as president of The Palm Society; the Biennial was held at FIT in 1970 and 1976.

As late as 1975, FIT's palm collection was exceeded in Florida only by the collections of Fairchild Tropical Garden and the Montgomery Foundation. At that time, 2,000 palms of more than 100 species were planted throughout the campus, not just in the Dent Smith Trail.

Following Jerry Keuper's retirement in 1986, the Dent Smith Trail and the campus palms fell into a long period of neglect. The Dent Smith Trail itself became a tangled jungle and eyesore that was partially cleared prior to a CFPACS meeting at FIT in 1996. Our chapter has returned to FIT periodically, most recently in March, 2002, when a sale was held.

The Botanical Garden, in its previous incarnation a dozen years ago, lasted a year or two before dissolving in the face of institutional and community lack of interest.

Dr. Juanita Baker, on the FIT faculty and a CFPACS member, arranged for me to attend the press conference, and introduced me to Dr. Catanese. I expressed to him the interest of our society in this project and mentioned, in particular, our more than 60 members in Brevard County. I also pointed out that re-planting palms and cycads would be necessary on the entire campus, not only in the area that is to be the Botanical Garden. He responded that the Botanical Garden was only a first step in a larger, long-range plan to be implemented incrementally.

As many knowledgeable visitors are aware, many palms on the 1975 plant list no longer exist, and the identity of existing palms is not always certain. A survey of the remaining palms is necessary.

The new president of Florida Tech was formerly president of Florida Atlantic University (FAU) in Boca Raton. Dr. Catanese is proud of transforming the FAU campus with heavy planting; previously a bleak and bare place, its origins as a World War II naval air station had been apparent. He clearly regards the revival of the Botanical Garden as a focus for the campus and as a benefit to the residents of Melbourne and Brevard County. The president has invited CFPACS to meet on the FIT campus.

After speaking with Dr. Catanese, I was able to talk with several administrators who will be handling many of the details of re-creating the Botanical Garden. I also spoke with the landscape architect, Susan Hall, of the Miami firm Hall Bell Aqüí Inc., whose office is in Merritt Island.

In early February, I e-mailed Dr. Catanese, conveying to him the positive reaction of the CFPACS Board and offering to give my palm presentation at FIT, if he thought this might be useful. In reply, he said he wished to appoint me to an advisory committee on the Botanical Garden. There, of course, I will represent the Central Florida Palm & Cycad Society.

Jerald Crawford sent this picture of his fruiting Foxtail Palm growing happily in north Tampa.

Growing Cycads in Central Flor-

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hardy for all of Florida. I have known of plants in Florida that went through a freeze of 14F without any damage to the leaves at all. I have known of other plants in Texas that had no leaf damage at 12F. Because of the underground stem, the plant should survive (with leaf damage) temperatures much lower than this, but I have never heard of this species being tested at temperatures lower than the low teens.

Most cycad species have a 3 to 4 week window each year where the females become receptive and the males shed pollen. *Ceratozamia*s in general are different. All the species I have worked with have an extended receptivity period. I have had receptive females as early as January and have had them as late as June, with everything in-between. This makes it a little harder to catch the exact time for each plant. I have to check all my plants every 2 or 3 days during a 4 month period to make sure I haven't missed any receptive female cones, or male cones shedding pollen.

Ceratozamia hildae is a very attractive cycad and is easy to grow. There is no reason why these should not be all over Florida. We have 6000 plants in our nursery, so availability is not a problem. They will not be infested with Asian scale, so this species will not have the same problems we have with king sagos. This plant should be on every new collector's list of cycads to try out. It can get to be 7 feet tall and grows fast compared to many cycads, which is very rewarding for anyone new to rare cycads.

Above, a leaf of Ceratozamia hildae.
Below, a female cone of this species.

POSITION AVAILABLE:
SEED BANK COORDINATOR
Interested? See requirements on page 32, then contact President Ray Hernández .

Below, B. J. Sutphin stands in the afternoon shade at his condo in Indialantic next to a Hydriastele wendlandiana*, grown from seed supplied by pal Mike Dahme in July, 1987. Extremely sensitive to cold, the palm is seldom seen in Central Florida. In habitat it can grow to 75 feet or more.*

Tom Broome, of Polk City, is now the Central Vice President of the Central Florida Palm & Cycad Society. Charlene Palm, who received the ballots, announced that all were in his favor.

Picture-taker Mike Dahme wished to mark what he called an "historic moment," John Kennedy's offer to contribute gas money to Ralph Love (right) in whose SUV he and the cameraman travelled to and from Richard Moyroud's Mesozoic Landscapes nursery in Lake Worth on February 1. The Editor offers the raspberry to this judgment. Ralph declined the contribution.

Notes on Cold Hardiness in North Florida

[This contribution arrived too late for inclusion in the December issue. The footnote legend for the tables is found on page 24.]

By Ed Brown

I thought I would add to some of the erudite commentary presented in these bulletins past issues. I write from Jacksonville much further north where the freeze was significantly colder (21 F) and still it falls within the parameters of Zone 9A (20-30°F average annual low minimum low during a 10-year period.) I have compared with a recent freeze (1999) where we had an identical low (see table 1). The most recent (2003) freeze was within the parameters of this zone but there was such a low dew point. These accomplished 2 things: 1) created a lot of alarm and. . .2) exacerbated freeze damage.

As there was a good chance of a freeze in the teens, my frost protection efforts were extraordinary. For this reason, many of the entries are blank, as I did not wish to risk an 8-foot palm and 11 years of growth. For this reason, I have compared it with the recent 1999 freeze.

The table details the freeze (comparatively) effects on the various species. As the table largely speaks for itself prose will be dispensed for information. The table will be supplemented with some of the more interesting observations and anomalies.

The table is supplemented with data from Matt Encinosa's garden. He lives less than ten miles from me in Fruitcove. This is a microclimate that enjoys protection from freezes by the St. Johns River and Julington Creek.

Bismarckia nobilis. Conventional wisdom is that the silver form is superior in cold hardiness than the green form. This has been the grist of many dialogues on the various forums. My experiences differ. Matt Encinosa provided me with several green forms which I planted with the silver. My silver form was killed by the '99 freeze. The green form survived both freezes ('99 and 2003). Matt reports the same findings with his green individuals. Certainly I don't doubt the veracity of the correspondents but I think the cold hardiness is independent of color. Probably other reasons are factors such as silver are more likely to be planted so larger numbers of individuals are available to select out the cold hardier ones.

I left out some *Livistona benthamii* seedlings (in a community pot) exposed with no canopy outside for the '99 freeze. They were undamaged. Similarly, individuals in pots under pine canopy survived the 2003 freeze unblemished. The seeds were collected from an adult tree mention in the CFPACS Bulletin that had survived all the '80's freezes (including lows of 20° F). /It evidently passed this on to its progeny. It is too early to tell if the seedlings have pure *L. benthamii* characteristics or have been hybridized.

Relative to *Chuniophoenix hainensis*, it has purported cold hardiness, but this fails to live up to all expectations. It was severely injured by this year's [2003's] freeze. Though it grows well in Florida's climate, it can not be classified as hardy for North Florida.

Similarly, *Medemia argun* grows well in North Florida if the sunlight and drainage requirements are met. My experiences were promising during a 5-year window between freezes but it failed to hail the dawning of the millennium as it succumbed to a 21°F event in 1999. The experience with *Hyphaene coriacea* was comparable. During a similar window between freezes (pre-1999), it succumbed to a low of 21° F. Anomalously, Matt's specimen lives on.

During the course of the last 20 years, I have been experimenting with many species not commonly associated with Florida gardens. This included *Rhopalostylis*, *Ceroxylon, Linospadix, Laccospadix, Lepidorrhachis,* and *Parajubaea*. Recognizing they languish in Central and South Florida, I wanted to test them in North Florida. The hypothesis was that they would have a reprieve from Florida's exhaustive heat during North Florida's cool Falls and Springs. This would permit growht and vitality and hopefully prepare them for periodic minimums that this part of Florida sustains. To this end, I grew these plants fairly successfully for 5-15 years. In one case, *Ceroxylon*s had grown fairly well and had actually developed character leaves. It, like its African brethren, did not see the dawn of the new millennium.

No long term success was achieved with *Lepidorrhachis, Laccospadix, Oraniopsis,* and *Hedyscepe canterburyana.* I have had success with *Rhopalostylis* and *Linospadix*. *Rhopalostylis* will take lows into the lower 20s and perhaps the teens. The low dew point (during freezes) is problematic and causes extensive damage. *Linospadix* similarly will survive into the 20s. It has survived uncovered at Matt Encinosa's garden.

I can continue on with these anecdotes, insights, and anomalies. But this has been sufficient grist to discuss my table [opposite page]. For folks that have started gardening in Florida within the past decade, they have been blessed with warm weather and mild winters. Though it was cold this past winter, it pales in comparison to the decade of the '80's. It was a sobering event for the newcomers and is educational, as we must recognize that our gardens are not permanent but merely an installment to enjoy the wonder of the tropics.

Table 1

Species	1999 Freeze	2003 Freeze	Comments
Acrocomia aculeata	100 %	100 %	Seeds from Taxaco, Mexico
A. media	100 %	100 %	Seeds from Carolina, PR
Allagoptera arenaria	MD	25 %	Retarded flowering this year 2003
Archontophoenix cunninghamiana Lhwara [1]	100 %	100 %	Tree located in garden of M. Encinosa Flowered in 1999 and produced viable seed Spear emerging (May 2003)
Arenga caudata	100%	100%	Spear emerging (May 2003)
Arenga engleri	MD	25 %	Killed to roots in 1989
Bismarckia nobilis green	MD	100 %	Spear emerging (May 2003)
Bismarckia nobilis silver	K		
Ceroxylon alpinum	K		
Chuniophoenix hainensis		100 %	Spear emerging (May 2003)
Caryota mitis	25	100 %	Killed to roots in 1989
Caryota urens	25 %	100%	
Copernicia alba	25 %	C	
C. prunifera	25 %	C	
Dypsis decaryi [2]	100%	100%	Spear emerging (May 2003) [2]
Dypsis decipiens	MD		Plant died before 2003 freeze
Hedyscepe canterburyana			Died prior to 1999
Hyphaene coriacea [1]	K		Killed at my garden, survived at Matt's
Hyphaene coriacea [1]	K		Survived freezes at Matt's garden
Laccospadix australasica	K		
Lepidorrhachis mooreana	K		Survived 25 F unharmed.
Linospadix minor	MD	C	Survived freezes at Matt's garden
Linospadix monostachya[1]	MD	MD	
Livistona australis	MD		Under pine canopy
Livistona benthamii	ND		In open in 1999
L. chinensis			Older leaves senesce after the freezes
L. decipiens	10%	25%	Under pine canopy
L. drudei	100%	100%	Defoliates most winters but bud hardy
L. fulva [1]	ND	ND	Light pine canopy
L. muelleri	100 %	C	No bud damage, 100 % foliage damage most winters
L. saribus (green)	MD	25 %	Survived 1989 freeze
L. saribus (red)	100 %	100 %	
L. saribus x *rotundifolia*		MD	Under heavy canopy
Medemia argun	K		
Parajubaea torallyi	100 % *		* Spear emerged but bud died in wet September
Rhopalostylis sapida	100 %	100%	Spears beginning to emerge,
Sabal bermudana	MD	MD	Seeds from Glen St. Mary Nurseries
S. causiarum	25 %	50-75 %	Under canopy
S. domingensis	25 %	25 %	In the open
S. mauritiiformis	100 %	100 %	Defoliated most winters
S. mexicana	ND	ND	Survived 1989 freeze
Syagrus glaucescens			Killed by light freeze prior to 1999
Trithrinax acanthocoma	ND	ND	Not damaged by 89 freeze
Wodyetia bifurcata [1]	K		

Cycad	Table 2		
Bowenia serrulata	ND	ND	Under pine canopy
Ceratozamia hildae	ND	10 %	
C. kuesteriana	ND	C	
C. robusta [2]	ND	C	
Cycas media	100%	C	Defoliates most years
C. megocarpa		C	Defoliates most years
C. panzuahensis	ND	ND	
C. revoluta-taitugensis x *diannensis*		MD	Observations of seedlings under mother plant
Dioon edule	ND	C	
Dioon mejiae	100%	100%	Defoliates most years
D. spinulosum	100%	100%	Defoliates most years
Encephalartos ferox	100 %		Defoliates
Lepidozamia per-offskyana	100 %	C [1]	Specimen at Matt's house undamaged
Macrozamia communis	MD	C	
M. moorei [2]	ND	C [2]	Specimen at FCCJ not damaged
M. miqueliana	ND	C	
Stangeria eriopus	ND	C	
Zamia ambiphyllida	0	MD	Survived 1989 freeze
Z. loddigesii		MD	
Z. media/pumila	ND	10-25 %	Under canopy

Legend

C=covered by polyethylene plastic
K=killed
ND=no damage
MD=minor damage
[1]=specimen at Matt Encinosa's garden
[2]=specimen at Florida Community College at Jacksonville (FCCJ) Palm Garden
Percentage numbers= amount of damage

Eat your heart out, Central Florida! *Pig in Orocovis, Puerto Rico. Above,* Pigafetta filaris x elata *(or is it the other way around?), planted in the ground in December, 2002, from seed received in February, 2002.*

Above, the same palm pictured in December, 2003, now 7 feet tall overall! The age from seed: 22 months. Well-known palm vivant for scale. Maybe an annual for Tampa and Orlando?

Palmophile Dundee:
Exploring Australia's Palm Coast

By Rick Leitner

Australia has always fascinated me. A remote "island" with an interesting history of geology, peoples, and cultures. Above all, it is the biodiversity of the land that supports some of the finest native palms that I find most extraordinary. In fact, my first palm book was that of *Palms in Australia* by David Jones.

I had the opportunity to take about 10 days off, although not nearly enough, to travel Down Under to visit the places that I had only dreamed about seeing. I traveled during the month of November, since it is the southern hemisphere's springtime and the Australian summer rains typically don't begin until late December. I was traveling on the rewards of a frequent flier program, which is sometimes not the most direct route. I left Ft. Lauderdale for Houston for Honolulu for Guam for Cairns. After the longest day of my life, some shut eye, and 26 hours later, the runway lights of the Cairns International Airport were within view. Since it was about 1:30am Cairns time, I was more eager to sleep on a *bed* than I was in seeing palms from a taxicab ride to the hotel. I really wasn't sure what day it was…

The next morning, I awoke like a kid on Christmas morning. I opened the hotel windows overlooking downtown Cairns, the bay, and a beautiful morning. I had heard a lot about Cairns, the site of a past IPS Biennial, and how beautiful and tropical it was. Being in northern Queensland, it is very tropical at about 15 degrees southern latitude. This is where the rainforest meets the Great Barrier Reef…and I was planning on taking advantage of both.

I found Cairns to be quaint, friendly, and lush. Numerous downtown beautification projects have recently been completed including that of a vanishing public swimming pool and large cabana for picnicking

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Downton Cairns with boardwalk and 50-foot Dypsis lastelliana*, the Teddy Bear palm.*

Rick Leitner in front of Cyrtostachys renda *in a private Queensland garden.*

Exploring Australia's Palm Coast

(Continued from page 25)

and changing/showering. The pool visually falls off into the bay if viewed from the shallow end. I was informed that it is highly recommended to refrain from swimming in the bay or any ocean waters along the eastern Australian coasts during the summertime. This is due to the tradewinds pushing lethal jellyfish or "stingers" as the locals call them, into swimming waters. A tour guide informed us that after being stung, one has only 30 minutes to receive an antidote before paralysis begins. Therefore, most beaches are void of swimmers although some beaches are 'protected' by nets held afloat by floating tubes to keep back the stingers. Even this is not fool proof, as the choppy waters will lift the stingers up and over the nets.

Being a Ft. Lauderdale native, Cairns reminded me of Ft. Lauderdale of the late 1960's. A bit naïve, a bit rural, a bit urban, and on the verge of something big. There was some building taking place, but the area remains so far removed from the "big cities" of the southeast coast, many Australians still think of Cairns as "that northern swampland." Nevertheless, I was in paradise. Downtown was palm rich with *Dypsis lastelliana* (Teddy Bear palm), some 40 foot tall, planted out along their embarcadero bayfront park. There were *Cyrtostachys renda* (Red Sealing Wax palm), *Veitchia montgomeryana*, *Dypsis lucubensis*, *Cocos nucifera* (Coconut), *Pelagodoxa henryana*, *Pritchardia* species (Fiji Island palm), and *Roystonea venezuelana* planted everywhere. In addition, walking along the residential sections, there were species of *Ptychosperma*, *Caryota*, *Copernicia*, and *Syagrus* towering over many second story tin roofs. But most fascinating to me were the "exotics" to an American, but native to an Australian, stands and stands of *Wodyetia* (Foxtail), *Carpentaria*, and *Livistona saribus*, *L. decipiens* (Ribbon palm), *L.chinensis* (Chinese Fan palm), and *L. fulva*. *Livistona decipiens* used as avenue plantings were magnificent. Interestingly enough, I noted that some of the *Wodyetia*s planted there were suffering some of the same nutritional deficiencies that we see here in South Florida. I smiled when I noted a roundabout planted with all Florida natives including *Sabal palmetto*s (Cabbage palm), *Sabal minor*, *Rhapidophyllum hystrix* (Needle palm), and *Zamia pumila* (Coontie).

With a very enthusiastic and informative guide, I visited the area called Cape Tribulation about 2 hours' drive north of Cairns. The drive north was through small towns, reminiscent of the Caribbean, with towering *Cocos*, *Livistona*, *Carpenteria*, *Pritchardia*, and *Caryota* species seen commonly in private residential gardens. Much of the architecture was also typical of the islands with tin roofs, wooden clapboard siding, screen doors, cyclone shutters, and tropical colors painted to reflect the rainforest and reef. Aside from palms, it was obvious sugar cane played an important economic role in North Queensland.

Cape Tribulation was a primary rainforest and of varied altitudes. Every place we stopped, it appeared that the flora was quite unique. I began to see stands of *Linospadix*, *Hydriastele*, and some interesting cycads I later learned were *Laccozamia*. The guide mentioned that one particular specimen cycad, some 40 foot tall, was estimated to be about 400 years old. It was a magnificent! I enjoyed a river boat tour, which enabled me to get very close to see a native stand of *Archontophoenix alexandrae* (King palm), *Arenga engleri* and *Carpenteria acuminata* by boat. We hiked and explored, although were not able to venture too far off of the path designated by the national park. Of course, I wanted to get many photographs of the palm and cycads that call Northern Queensland home, so the guide quickly learned I was one who had to be continually reprimanded. We were treated to a tasteful lunch in an outdoor chickee hut deep in the rainforest. A local cook had prepared a lunch of rice, beans, a variety of items I did not want to know what I was eating, and a fresh

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The author in a Licuala ramsayi *forest.*

Exploring Australia's Palm Coast

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selection of tropical fruits picked off of her farm.

Afterwards, I asked the guide to please stop anywhere where I could get a good look at a stand of any *Licuala* species. Whether the rest of the group wanted to, he drove us to a slice of heaven on earth called "Valley of the Palms" where some of the world's tallest *Licuala grandis* are growing. It was so dense from these palms that sunlight was not reaching the ground. Some of the mature species had trunks some 8 – 10 inches in diameter! Some of these *Licuala*s were over 50 foot tall and not damaged by the wind to the least. My entire tour group appeared to be as mesmerized about this palm forest as I was. I have never witnessed anything like it and will never forget it.

Later in the week, I took a ferry over to Green Island, a small island not far off of the Cairns coast, for a dive on the Great Barrier Reef. Unfortunately, it was a windy and therefore choppy day, but I did enjoy the reefs and the splendor of the underwater tropical magic. From the ferry I walked the deck to the island and hiked most of it within 1 hour. The beaches were beautiful with white sugar sand, clear turquoise waters, huge pieces of driftwood, and coconut palms swayed to provide some shade from the tropical springtime sun. The interior wooded areas consisted of melaleuca trees and *Arenga* species among many other ferns and philodendron.

I also had the good fortune of visiting the Flecker Botanical Gardens in Cairns. This garden is not large, but packed full of interesting palms, heliconias, gingers, philodendrons, and flowering trees. There were many trails which allowed a visitor to get up close to the foliage. Unfortunately, many tags describing the botanical names of the palms were illegible or missing. The café was full of visitors for Sunday brunch, many of whomwere international tourists. The grounds were well kept and most all palms looked to be on a regular schedule of irrigation and fertilization. The largest *Verschaffeltia splendida* I have ever seen was growing outdoors in full sun. It must have been over 25' tall! Across the street, and totally unrelated to the garden, is a native hammock of Australian trees, palms, and understory plants seen in North Queensland. A magnificent wooden walkway escorted visitors through huge stands of melaleuca opening to a vista with a small pond.

After three days, I headed off to Sydney, a 2.5 hour flight south from Cairns. I was eager to see the big, well respected city, founded centuries ago by the British Colonies' criminals. Of course, being at approximately 32 degrees southern latitude, Sydney is not nearly as tropical. However, I got the feeling of being a bit like San Diego with the water, climate, and architecture. It was warm during the day (72F) but cooler still at night dropping to about 55F. I was informed that all of Australia, particularly that of the eastern half of the country is suffering from a severe drought that has lasted 4 summers. Most all of the cities have water restrictions, which include irrigation, car washing, and drinking water on restaurant tables.

Sydney, I quickly recognized, is a clean, bustling, friendly, and culturally-rich city. Although not especially palmy, there were some areas that exhibited numerous species of mature palms. In residential gardens, I noted many specimens of *Phoenix*, *Rhopalostylis*, *Butia*, *Howea*, and even *Archontophoenix alexandrae*. (I was surprised to see a crownshaft palm this far south). The Sydney Royal Botanical Garden is a massive public garden (free!!!) that is well cared for and diverse in plantings. The palm collection is a small section containing some of the same palms seen around town. *Phoenix canariensis*, *P. sylvestris*, *P. dactylifera*, and *P. roebelenii* were common. Interestingly enough, all of the tallest *Archontophoenix* in the public garden were being completely defoliated by bats. The groundskeeper told me that although they were trying to persuade the bats to nest elsewhere, the bats have continued to multiply so much that their mere numbers is now a nuisance---feces, noise, and discarded food---poses a problem so much so that they are now trapping the bats. Numerous palms were dead or declining due to the bats.

I took a ferry across the Sydney Harbor to the Toponga Zoo. The zoo is perched high on a cliff overlooking the harbor and the city skyline. A beautiful and well-respected zoo, most exhibits of animals were clean, easily viewed, and educationally informative. In fact, there is a group of giraffes that have the best view of the Sydney harbor, Sydney Opera House, and skyline! Their real estate must be worth millions! I laughed because this is the one and only place I was able to see a kangaroo, wallaby, platypus, and the numerous species of lethal snakes that call Australia home!

I enjoyed Sydney very much. Although not very tropical in nature, it was perhaps the largest, cleanest, and friendliest city I have ever visited. In general, I found Australians to like Americans, and share many of the same philosophies and cultures. I found this to be true all along my travels.

I flew back to Cairns where I stayed at a quiet Bed and Breakfast about an hour north of Cairns. This secluded resort was beachside where the rainforest quickly descended into shore. About 15 acres of private prop-

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Palms Hooked on Crack

By Ray Hernández

Sabal palmetto pops up in the strangest of places. We see them growing in the harshest conditions next to interstates, underneath old broken down cars, between fences and in the smallest sidewalk cracks. We have all mowed over seedlings or juvenile plants, only to have them re-grow with a vengeance. Similarly, my favorite native exotic *Washingtonia robusta*, is making a run at competing for the "most outrageous place to grow and thrive" award. Rather than bore you with endless ramblings about these survivors, let's take a look at these palms in a different light. As plant lovers, let's admire these palms and focus on their ability to persevere. Some of these locations will surprise you and others will just make you chuckle. Enjoy.

Below, a Washingtonia. *The other two pictures are* Sabal palmetto*—all in Tampa.*

Four more of the Editor's innumerable palm spots broadcast over WQCS-FM (88.9), Indian River Community College's public radio station in Fort Pierce. Actually, there are 65—or is it 67? Enough, at five a pop, to last most members' lifetimes. None were published in the December issue because (amazingly enough) there was no room, space being very tight.

Palm Points #25
Books about Palms

The best palm reference book right now for the Treasure Coast is *Betrock's Guide to Landscape Palms.* Its emphasis is on palms grown in Florida.

However, the perspective is from Palm Beach County. This means that some species listed may be too tender for the Treasure Coast. On the other hand, some palms recommended only for Palm Beach County and south may actually grow in Vero Beach and farther north.

There are quite a few books on palms. The problem with most is that they are very selective. A particular species or genus of palm may be omitted.

[This commentary was written—and broadcast—before publication last year of the Riffle & Craft book, An Encyclopedia of Cultivated Palms*, which must also be recommended. –Editor]*

Palm Points #26
Little Palms

More than 100 species of small palms with pinnate leaves called *Chamaedorea*s grow in southern Mexico and Central America. Most can be kept in tubs or large pots indefinitely. As a group, *Chamaedorea*s are sometimes called "bamboo palms."

Two species are particularly attractive.

The first is *Chamaedorea microspadix,* a clumping palm with thin stems, grows to about 12 feet. *Chamaedorea*

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microspadix does well in shade and will not take full sun.
A second species, *Chamaedorea seifrizii,* also clumps and grows to the same size. It has thinner stems and more

Palm Points #27
An Overplanted Palm

Queen Palms are planted everywhere in the state from Orlando south.
Queen Palms can be beautiful when they receive regular applications of specially-formulated palm fertilizer. A small individual, perhaps three feet high, can get to 20 feet in four or five years when given proper care.
But Queen Palms don't always get proper care. This species requires magnesium and manganese, which are not included in ordinary fertilizers, such as 6-6-6 or 8-8-8.
Without these necessary mineral trace elements, Queen Palms develop what's called "frizzletop." The leaves get progressively smaller and crinkled. It's possible to remedy this, but if the condition is far advanced, the affected palm dies.

Palm Points #28
Another Overplanted Palm

Up to about 15 feet in height, the Washingtonia Palm is good-looking, with glossy green, fan leaves.
However, Washingtonia can grow as high as 80 feet. The trunk does not expand in width as height increases. A 6-story palm may have a trunk not much more than 12 inches in diameter. The crown remains the same size as when smaller: perhaps 5 or 6 feet across.
This palm rapidly outgrows its place in the landscape and can make a small house and yard look even smaller.
Dead leaves don't fall off, but must be clipped off.
As the Washingtonia soars skyward, on its way to 80 feet, how do you get those dead leaves off?

Seed Bank Report
November-January

The Seed Bank offers seeds to CFPACS members via e-mail. If you are not on the list but would like to be or if you've changed your e-mail address, please advise Karen Barrese at cfpacsmbrship@aol.com.
17 species of palms and one cycad were distributed during the quarter. Joseph Prabhaker donated a half dozen species, including first-time offerings of two *Parajubaea*, the beautiful tropical *Iriartea deltoidea* [seeds of which were already germinated], and *Syagrus sancona*. Although *Parajubaea* has long been "known" to be undoable in the climate of the American Southeast, this "knowledge" didn't deter 14 Floridians from attempting to reinvent the wheel. Joseph's gifts sold out, and resulted in $250 in donations to the chapter's treasury.
Lou Thomas is thanked once again, for a donation this time of the Belizian *Reinhardtia latisecta*, as is Lyle Niswander for *Carpentaria.* Other species from central Florida gardens included *Hyphaene*, *Arenga caudata*, and, from FIT in Melbourne came *Sabal mauritiiformis* and *Livistona decipiens*. From the Río Piedras garden in Puerto Rico, seeds of *Euterpe oleracea*, *Livistona rotundifolia*, and *Cryosophila warscewiczii* were again available. Finally, Glen Sheldon of Miami donated several hundred seeds of the Florida *Zamia* to fill a special request.
Distributions for the quarter came to $700.

--Mike Dahme

Exploring Australia's Palm Coast

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erty, I was fortunate enough to stay in an oceanfront room overlooking tall coconuts and *Archontophoenix* palms. Around the property, there were huge specimens of *Cyrtostachys renda*, *Livistona rotundifolia* and L. *robinsoniana*, *Licuala grandis*, *Caryota urens* (Solitary fishtail palm), *C. no*, and *C. mitis* (Fishtail palm), and *Wodyetia bifurcata* along with various species of philodendron, ginger, heliconia, and bromeliads.
Australia is a wonderful land. Its people, flora, and fauna are interesting and rich in history and diversity. The country is about the same square miles as the United States, but the entire country has a population of only 20 million residents. I told one new Australian friend, we have as many residents in our state of Florida! If given the opportunity, I will return to explore other cities, coasts, and slices of palm paradise. Only next time, I plan to stay a bit longer….

From the Editor's Desk

By John Kennedy

Well, just as I thought it would be, the Cocoa Beach sociable on December 13th was great! The weather cooperated, mid-70s and mostly sunny, the wind off the ocean not reaching gale force. The locale, as ever, was a lovely place for a party, the lanai—or is it just a patio, Diana?—with lots of room for chairs and many, many pots of Montgomery palms. The beach just a step away, the surf pounding.

Our hosts, Diana and Mark Grabowski, made everyone comfortably welcome. Diana, our East Coast vp, also printer-in-chief of this publication, numbers among her numerous other talents, the ability to cook toothsome viands, particularly seafood. She prepared baked salmon with béarnaise sauce, Manhattan clam chowder, steamed veggies, and her own special key lime pie, as well a few more mundane items. Of course, everyone attending brought something else to eat beyond the six or seven edibles concocted by our hostess. Despite the earnest and conscientious efforts of the 50 people attending, there was actually food left over.

Two years ago, when last we were here, Diana and Mark had hand-painted Christmas balls each decorated with a palm; every family attending was invited to take one. This time, it was other handmade holiday ornaments, mine a 6-inch wooden cutout silhouette of a palm, green leaves, orange trunk, sprinkled with glitter dust and nano-pasta.

The highlight of the day for the serious-minded was the palms to be auctioned off that had been donated by Montgomery Botanical Center. These included two "pretty large" *Bactris coloradonis*—not formerly on anyone's yard list—and a passel of *Chamaedorea pinnatifrons*, "must be 50" (according to Charlene Palm, at whose house all the Montgomery palms were kept until meeting day), at least 18 inches high, each in a 1-gallon pot. So many, in fact, that every member got **one** as a door prize, still leaving 21 to be auctioned off. A sly comment—whose?—that two were needed for seeds resulted in a spirited bidding by those who wished to carry away <u>two</u> of these palms. Then there were three *Corypha utan*, one described as "jumbo," the others merely as "large." And a few *Chamaedorea plumosa, Copernicia macroglossa, Licuala spinosa, Roystonea regia, Chamaedorea ernesti-augustii, Livistona* 'Cooktown" seeds, *Sabal causiarum* seeds and community pots. Also on sale were packs of seeds of five additional species, and a community pot of *Chamaedorea tepejilote.*

The auction itself brought in $628. Not yet figured into the total was the percentage of sales from the six or seven small vendors. About 25 of our new CFPACS T-shirts were sold, only a few of which were juniors ($10), the adult large and XL priced at $15.

As usual, all departing vehicles seemed to have waving fronds inside. Mercifully, everyone got across A-1-A to his or her car, SUV, truck, van without adverse connection with the traffic speeding toward the center of Cocoa Beach.

Where shall we celebrate <u>next December</u>? Ray. . .?

* * * * *

Planning the March 13th meeting, all by my lonesome as the soul representative of CFPACS in this locale, required that I find somewhere to go between Fort Pierce and the palm treats a little farther north in and around Vero Beach. It would be around lunchtime when we finish at Heathcote. So, a scenic drive along the Indian River from Heathcote into the newly renovated downtown seemed a good idea. Saturday morning, in the season, there's a farmers' market here on a beautiful patio right on the river. Don't know how many farmers but lots of produce, baked goods, plants, and things to eat. Downtown Fort Pierce is perhaps four or five blocks, most of it between U. S. #1 and the Indian River. It's a pleasant place to walk around, with shops and—probably—at least 15 restaurants. Not all are open on Saturday and some are open only for dinner. Not mentioned on the list on page 2 (ran out of room) is Max & Meg's Grill, 122 2nd Street (between Orange Avenue and Avenue A) that is open for lunch and Gately's Grill at the corner of 2nd Street and Orange Avenue that is open for dinner on Friday night, closed on Saturday. I include this information for those who might come to stay over Friday night and need a restaurant for dinner.

* * * * *

So, I am to be appointed member of an advisory committee for the revived Botanical Garden at Florida Tech in Melbourne. I will be representing CFPACS, as well as the remnant palm trees on the campus. If anyone has any ideas about re-planting, contact me and I will relay these to the folks who are doing the planning. A member asked me a question already: what happened to the *Copernicia* standing at the corner of the Administration Building. It's gone. Planted somewhere else? Died a quick death, followed by quick removal? Any FIT readers kindly provide the answer.

* * * * *

Tom Broome has just joined the CFPACS Board and we welcome him back. Tom was our president, 1998-2000, and was succeeded by Dave Witt, who was suc-

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PRESIDENT'S MESSAGE

It appears at the time that I write this that winter has dealt us a mere passing blow. At least here on Tampa's Interbay Peninsula, freezing temperatures were non-existent this winter. Points further north may not have been as lucky but either way, this winter was significantly warmer than last year's. The "warmer and gentler" Florida has remained true to form with no significant widespread hard freezes since those dreaded Christmas days of 1989. Spring, albeit usually dry in central Florida, will be a welcome sight as it always is.

In light of President Bush's state of the union address recently, this president will now provide you with a "State of the Society" message. In short, CFPACS is doing better financially than it has since its inception. This good financial standing has allowed us to keep yearly dues at $10 for yet another year. I see no reason for 2004 to be a letdown.

CFPACS is now offering T-Shirts!! After years of haggling, we can actually say that the world now has official CFPACS paraphernalia. The shirts come in Youth large, Adult large and Adult extra large in baby blue or yellow. Unfortunately, the cost of shipping the shirts can become a bit exorbitant so they will only be available at meetings and most sales. This is further incentive to come to a meeting if you have not done so before.

CFPACS is still in need of a new seedbank coordinator. After several years of dedicated service, Charlene Palm has stepped down due to other responsibilities. If interested, please contact John Kennedy or me for further information.

As for upcoming events, please do not miss the March 13 meeting in the Vero Beach area. Our own editor is putting together quite an itinerary including a rare opportunity to visit the Michaels' garden at Earring Point. Yes, this is the same place from which CFPACS has enjoyed a plethora of *Borassus aethiopum* seed over the years. I'm hoping this enormous palm bears seed again soon as my own plant seems to be expiring much too prematurely. This is the only *Borassus* bearing seed in Florida aside from the huge specimens at Fairchild Tropical Garden in Miami. If that was not enough, there is an enormous *Corypha* and quite possibly central Florida's tallest and oldest *Latania*. Our last visit was in March of 1999 so opportunities to visit such a historic garden do not present themselves everyday. I want to take this opportunity to thank Anne Michael for allowing us to visit again. Other destinations are in the works but stops at Heathcote Botanical Gardens and Ed Carlson's garden are also being planned. The meeting will of course conclude with a sale, so plan accordingly. If sales are your thing, plan on attending the huge March plant sale at Orlando's Leu Gardens and/or the USF Tampa sale in April. I hope to bump into some of you at one of our upcoming events.

—Ray Hernández

Fourth Quarter Board Meeting Minutes, 12/03

The fourth quarter meeting minutes were called to order at the residence of Mark and Diana Grabowski. One topic of discussion was where to have the next year's meetings. It was discussed when Jody Haynes would speak to our group about his trip to Honduras ;to which our society helped to buy a camera for his field work there.

A price of $15 was agreed upon to sell our T-shirts with the new logo. Hats and bumper stickers with our logo were also discussed. It was decided that our printing of our bulletin will continue as is.

Having *The Palmateer* for online subscription was also discussed. It was agreed to ask an informal survey to see if it is worth doing. It was agreed to have a roster of our members come out soon. The upcoming vacancy for the seedbank position also came up. Who to ask to fill that position was discussed.

It was also agreed that the board members would try to set up an internet discussion group on "yahoo" so communication between all board members would be made easier.

—Chuck Grieneisen, Secretary

From the Editor's Desk

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ceeded by our current president, Ray Hernández. Tom lives and breathes cycads, so we can expect more emphasis on cycads than has been true in the past.

* * * * *

Mary Locke, an administrator at Indian River Community College, has suggested a Fort Pierce motel not on my list on page 2: the Radisson on A1A on Fort Pierce North Beach (772) 465-5544. A little more distant from Heathcote, it is very clearly above the level of the budget motels that I instinctively look for. Mary also thought of the Hampton Inn and Suites in St. Lucie West, south of Fort Pierce (772) 878-5900.

—John Kennedy

Needed: Seed Bank Coordinator

The chapter needs someone to handle the Seed Bank. Charlene Palm has resigned, effective last December 31. Mike Dahme, who held the job most of the time before Charlene took it over, is handling the current seed bank offerings on a one-time basis. Mike returns this month to Puerto Rico, where he spends most of the year.

Income from donations for seed helps support the activities of the Central Florida Palm & Cycad Society and makes possible publication of *The Palmateer* and also the small grants CFPACS offers to scholar-researchers into palms and cycads.

Printed at right are the the Seed Bank policies that were added to the CFPACS bylaws almost two years ago. These are the rules that govern the receipt and distribution of seeds.

Numbered sections #7, #8, and #9 set forth the basic responsibilities/duties of the Seed Bank Coordinator. However, not all the necessities are fully explained here.

First, the Seed Bank Coordinator must be computer-literate, able to keep detailed records on the computer. These include the number of seeds donated (all are donated, none are purchased), names of individuals to whom seeds are mailed, and payments for seeds. Any candidate for the position must, as is obvious, be very detail-oriented. In addition, patience and a high threshold for frustration are necessary.

Seed arrives, not in an orderly fashion year-round, but in bursts. There are periods when little or nothing comes, then several hundred or several thousand seeds may appear, virtually at the same time. Many seeds have limited viability and must be packed and mailed off very quickly. The Seed Bank Coordinator becomes a well-known figure at the local post office.

Current policy requires the recipient to send the requested donation after receiving seeds (more record-keeping). Unfortunately, a few of those receiving seed are deadbeats. A change in policy requiring money upfront is being considered.

Perhaps the ideal candidate for Seed Bank Coordinator might be a computer-savvy retiree in good health who would rather do this than play golf. It's mostly a one-person job since the seed arrives irregularly and helpers (always desirable) usually want advance notice.

The Seed Bank Coordinator is an appointed member of the chapter's Board.

Anyone interested in assuming the duties of Seed Bank Coordinator should contact President Ray Hernández at SubTropicOfCancer@hotmail.com

—John Kennedy

Seed Bank Policy Guidelines

[By vote of the Board, the following guidelines were added to the chapter bylaws in 2002.—Editor]

1. **All CFPACS** members in good standing are eligible to participate in the seed bank.
2. **Seed offers** will be sent to our members only first, via e-mail notification. Seeds are distributed on a "first come/ first serve" basis. After a period of three days or so, any remaining seed will then be posted on the chatlines and non-members may request them.
3. **Seeds will** not be mailed internationally where laws (CITES) prohibit this. These include appendix 1& 2 cycad seeds. International mailing will have the proper postal customs form attached to the package. (Customs-CN 22 is usually sufficient). The sender will list all species on the form that are contained in the package.
4. **Since the** seed bank relies solely on donations not only from our Florida members, but also our international members as well as other individual around the globe, we cannot absolutely guarantee species is true to name, nor can we guarantee germination.
5. **Payment for** seed will be in the form of cash or check in US dollars. We do not accept credit cards or Pay Pal, etc. Foreign requestors may pay by having a check drawn on a US bank or wired in by Western Union, cash by mail is acceptable but discouraged.
6. **We reserve** the right to limit or cut down someone's request (no matter what the species) due to limited availability, when requests exceed quantities on hand. In the case of very rare seed, we shall state in the offer a limited number of seeds allowable per person so that many members may get a few rather than a few members getting most.
7. **Seed Bank** Coordinators will keep records of orders and payments received by indicating whether the payment was cash, check in his/her name or check in the society's name. In addition, seed coordinators should submit ledger sheets or a summary of sales per offer to the treasurer for accountability purposes. He/She will also save postal receipts, and other receipts for envelopes, tape, and other supplies, so that he/she can be reimbursed for those expenses.
8. **Seed Bank** Coordinators will keep their seed bank e-mail rosters up to date. This includes, changing e-mail addresses, adding new members, and deleting unpaid members when notified by the membership chair.
9. **Seed Bank** Coordinators will submit a quarterly statement to the editor by the deadline given by him for inclusion in *The Palmateer*.

TREASURER'S REPORT

September 13, 2003 to December 13, 2003

INCOME:

Seed sales……	1,551.04
Membership Dues……	240.00
Donations to CFPACS……..…..…...……..	0.00
Public Sales (USF Fall Sale and UCF sale) ……	565.79
Private Sales……..……...……...….	0.00
Back Issue Sales……	0.00
Total _____	2,356.83

EXPENSES:

Publications (v. 23, nos. 3 [part] and 4)……	2,391.04
Grants ……..….	0.00
Miscellaneous (T-shirts)…….	826.80
Total _____	3,217.84

INCOME - EXPENSES …….. –861.01

Bank balance 09/13/03…… 23,862.63
Bank balance 12/13/03…… 23,096.39 (after pending checks clear)

Net decrease…….. 766.24

(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)
…….	8,623.03 (current value, close of market 12/11/2003)
	(5,664.22 Washington, 2,958.81 banked from sale of Putnam shares)
Office equipment and tent……	1,595.00
Computers and software……..…	2,544.41 minus depreciation
Printer……..…	2,200.00 minus depreciation

Treasurer's comment:

We were negative again, roughly by about the amount of the T-shirt purchase. This is money that we will recover as the shirts are purchased by members. Also, we paid for almost half of our annual publication expense in this quarter. Income from the usual sources (seed and plant sales) was normal. Income from membership dues was seasonally low.

—Michael Merritt

[Note: the T-shirts went on sale at the Dec. 13th meeting; this report was prepared for the Board at that time. —Editor]

You are cordially invited to join The Central Florida Palm & Cycad Society—not exactly a secret society, but one in which the cognoscenti exchange privileged, insider information (not illegal) about these spectacular plants. Deepen your awareness and appreciation of palms and cycads. No previous experience is necessary: we will initiate you into the world of these often overlooked plants. Just fill out the application below and send, with your check, to Karen Barrese (address on opposite page) or go to our website, www.cfpacs.org to join.

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

Please print

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

Wish to be added to Seed Bank 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:

Karen Barrese
Membership Chair
5942 Ehren Cutoff
Land O Lakes, FL 34639

Know Your Board! *From left, Ray Hernández, Diana Grabowski, Mike Merritt, John Kennedy, Steve Wasula, Tom Broome, Chuck Grieneisen. Back to camera: Charlene Palm. Photo taken by Mark Grabowski on Dec. 13, Atlantic Ocean visible from the third floor o f house . Missing: Karen and Tom Barrese, who were unable to attend.*

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CFPACS Seed Bank
(Vacancy)
Anyone interested in taking this position, please contact Ray Hernández (above)

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Looking UP into the canopy of the Licuala ramsayi *forest in Queensland, Australia. Some of the palms are more than 50 feet high.* *See the story on page 25.* *(Photo by Rick Leitner)*

A huge multi-branched Hyphaene *sp. at MBC.*
(Photo by Neil Yorio)

The rare Zamia inermis *at Montgomery.*
(Photo by Neil Yorio)