Renew your membership! Send check *immediamente* to Membership Chair at address on p. 31. Don't miss the March issue!

The Palmateer

Volume 20, Number 4 | *Central Florida Palm & Cycad Society* | *December, 2000*

Miami Meeting: Montgomery Botanical Center, January 20

The Central Florida Palm and Cycad Society will have a winter meeting at Montgomery Botanical Center (MBC) on Saturday, January 20. This should be an especially nice event, as we invited the Palm Beach Palm and Cycad Society to join us at MBC. The group will meet at MBC at 10 a.m. and tour the grounds with palm taxonomist Dr. Larry Noblick. Lunch will be "bring your own" and we have been

(Continued on page 3)

SEPTEMBER MEETING: see page 5

VOTE For President (CFPACS)

One candidate, no chads
See pages 34, 35 for details, form

Happy Christmas
Joyous Kwanzaa
Merry Hanukkah
A Healthy, Happy New Year to Us All
May the Winter Be Warm, the Rains Come Soon

Groveland Meeting Brings 60+ Members to Tour and Sale

Look familiar, all those folks peering at pots and tags? It's the palms, cycads, and a few other tropicals for sale that attract the interest of visitors to the October meeting in Groveland at Hersh and Jackie Womble's house.

Groveland, October: Palms, BBQ

By John Kennedy

More than 60 members took advantage of a beautiful day with temperatures in the 80s to visit Hersh and Jackie Womble's 10 acres of palms (and lots of other plants, too) on October 28. The setting is slightly rolling hills, in semi-rural country just beyond Grove-

(Continued on page 2)

Mark and Diane Grabowski give scale to a largish Sabal*, of unknown species, probably a hybrid, growing in front of the Wombles' house in Groveland.*

Groveland Meeting

(Continued from page 1)

land, about 20 miles northwest of Orlando, in Lake County. Groveland is typical of those tiny north-central Florida towns, complete with a blinking light and two blocks of assorted small businesses, that has-n't yet been reached by the tentacles of the big city not far off.

Given the relatively chilly locale, it is a show place of palms, and some cycads, that can handle some winter cold. Hersh mentioned the Great Christmas Freeze of '89, when temperatures dropped to 17 degrees. As might be expected, an assortment of *Butia* species—of various sizes--are on view, together with lush needle palms.

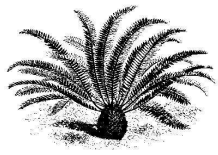
An interesting contrast is provided along the front of the house, where *Rhapis humilis*, rare in Florida, is planted side by side with the more familiar, and more rampant, *Rhapis excelsa*. Those from more southerly parts who have not had much success with *Chamaedorea radicalis* were surprised at how good-looking it can be under obviously more favorable circumstances.

A pleasant sheltered walk behind and to one side of the house revealed, among other plantings, several husky *Syagrus romanzoffiana* leading a (so far) charmed life in this setting.

A screened porch, brick-floored, on the back of the

(Continued on page 33)

Contents



Montgomery

(Continued from page 1)

invited to enjoy our picnics under the shade of the palms on the property. Please note that parking will be very limited, so please share a ride and carpool with your fellow society members.

—Neil Yorio

Directions

South on I-95 until it terminates into US-1. Take US-1 south about 5 more miles until LeJeune Road (I think this is also SW 42nd, but you'll have to check on a map). Left on LeJeune to the traffic circle and take the second right off the circle onto Old Cutler Road. Continue on Old Cutler Road and just after FTG on the right will be Monty (provide address). It's that easy. I Don't think anyone will be coming from the west or south, and if they do, then they would likely be those who already know how to get there.

—Neil Yorio

[The Central Florida Palm & Cycad Society33visited Montgomery Botanical Center in February, 1999. Reprinted below is the sober, non-delirious account of that memorable occasion, which appeared in the March, 1999 issue of The Palmateer. *Those who have never been there should know that the long, long drive ends with the pot of gold. Those on the 1999 visit probably know that many more palms and cycads have since been planted. — Editor]*

40 CFPACSers Tour Montgomery Botanical Center

By John Kennedy

A lush, 120-acre private estate in Coral Gables, a mile or so south of Fairchild Tropical Garden, filled with thousands of palms and cycads. A dream? No, the reality of Montgomery Botanical Center (formerly the Montgomery Foundation).

Forty Central Floridians travelled to Miami on Saturday, February 6, to visit this palm-lovers' (and cycad-lovers') paradise. Dr. Terrence Walters, the executive director, took the group on a two-hour tour , with special attention paid to the plantings of cycads and palms made since our last visit two years ago. After the tour, Terrence told us to go where we liked on the property, to stay as long as we wished.

Montgomery Botanical Center is not open to the public. However, special groups like ours are made welcome. Montgomery's primary purpose is the scientific study of palms and cycads. Scientists come from all over the world to conduct research here. All plants are grown from seed that is documented, wild-collected, that is, from habitat.

Rather than a palm or two of each species, which is often the case in botanical gardens, Montgomery has numerous individuals of the same species planted together at some distance from other species. This diminishes the possibility of genetic contamination.

Each plant is examined once a month and its condition noted in a huge computer database. Since there are about 1,000 cycads and 4,000 palms (450 species of each), this is no small task. And—7,000 more palms remain to be planted. Montgomery offers a training course in computer databases for botanical gardens.

Montgomery originated as the estate of Col. Robert Montgomery, a founding partner in the accounting firm now known as Coopers & Lybrand. His collection of palms was called "Coconut Grove Palmetum." Montgomery and his wife, Nell, donated the 83 acres now occupied by Fairchild Tropical Garden and were instrumental in its founding in 1936.

Mrs. Montgomery inherited the estate on her husband's death in 1953. In 1959 she set up the Montgomery Foundation to advance the science of tropical botany. On her death in 1990, she left the foundation a $10 million endowment. The name was changed in 1998 to reflect more clearly its purpose. Although devoted to scientific ends, Montgomery is beautiful, "science and landscape together," says Terrence Walters. Its layout is reminiscent of Fairchild, but with longer vistas.

Visitors find it hard to believe that the property was devastated by Hurricane Andrew in August, 1992, when 877 palms were destroyed. Since then, mostly

(Continued on page 4)

40 CFPACSers Tour Montgomery

(Continued from page 3)

from 1995 onward, thousands of palms and cycads have been planted. Miami-Dade County's thin soil, with limestone a few inches down, makes planting very difficult. All the plants seen by the visitors, whether in the ground or in the greenhouses, were vigorous, in beautiful condition.

Seed production is a by-product rather than a goal. However, much of seed has been made available, free of charge, to botanical gardens and to plant societies, including our own chapter.

A few tantalizing tidbits:

- Montgomery has a new, unnamed *Syagrus* that is fast-growing and does not need the usual micronutrients. With Larry Noblick as collections manager, it may be assumed that a name will be found.
- A method has been discovered to pollinate *Nypa fruticans*, notoriously difficult, if not impossible, outside of habitat.
- Male cycad pollen from rare species is collected and stored for application to female cones, sometimes more than a year later.

At the end of the walkabout, Neil Yorio presented a chapter donation to Montgomery. All the dazzled visitors expressed great willingness to take up housekeeping in any of the property's nine houses. Only two are lived in; the others are guesthouse and conference facilities.

Montgomery Botanical Center, 11901 Old Cutler Rd., Miami, Florida 33156
montgome@fiu.edu

-

The Archontophoenix *grove at Montgomery Botanical Center being enjoyed here by Neil Yorio and Larry Noblick. MBC donated palms and cycads to CFPACS's September auction. Neil and Jerry Hooper traveled down to Miami to pick up the donations.*

Right, moving big palms at Monty: a Copernicia sp. *is settled in its new home, in late summer during Neil's and Jerry's visit.*

Another big Copernicia sp. is planted at MBC. *Below, horticulturalist Barbara Judd shows the donated palms to Jerry Hooper and Neil Yorio.*

No pictures, alas, of September meeting. The usual picture-takers were absent and the Editor failed to note this in time to appoint substitutes. The meeting must exist vividly in our memories—unfortunately. If anyone took pictures, the Editor will be happy to publish these belatedly in March.

"A Bunch of the boys were hoopin' it up at the malemute saloon…" *Well, actually, at Jerry and Mary Ann Hooper's in West Melbourne in mid-September, at Jerry's and Richard Lundstedt's private sale. The celebrants—sarsaparilla in the cooler—are, from left, Bud Wideman (standing) and (seated) Neil Yorio, the Editor—not wearing notorious pink shirt—and B. J. Sutphin.*

September Meeting in Brevard

Sixty members of the Central Florida Palm & Cycad Society trekked to Valkaria and to West Melbourne on September 9 for the kind of activity they like best: gawking at palms (and other plants) while talking to each other.

Valkaria Tropical Garden was the first stop. After so much drought, it was a real adventure to go somewhere where it had just rained and where water stood in very large puddles waiting to interact with formerly dry shoes (and feet).

Dr. Frank Brown, the owner of Valkaria Tropical Garden, escorted groups around the establishment. His account of where and how he acquired some of the plants in the lushly landscaped garden kept his listeners laughing. Palm species number about 15, while there are more species of bamboos and gingers.

Lunch at various locally recommended silver spoons was followed by a tour of Richard and Linda Lundstedt's garden in West Melbourne. Richard is a nurseryman and visitors were interested to note that the number of palm species in his greenhouses, and their quantity, had increased appreciably over the last year.

Parking next to the property was on Lois Lane. We should have asked if Richard is aka Clark Kent.

The annual auction took place at the Lundstedts'. The auctioneer was our prez, Neil Yorio. An account of the auction appears on page 33 of this issue.

--John Kennedy

Reflections on the Genus *Attalea*: Glassman vs. Henderson

By Mike Dahme

Useful features of the 1995 *Field Guide to the Palms of the Americas* [Henderson, Galeano, and Bernal] are the two appendices [species checklist by country and list of accepted names] and the index of scientific names that follows. This last, in alphabetic order, presents all of the names ever proposed for New World palms, and I've often used it to determine whether a species was considered by the authors to be valid [and, if not, what the current name might be].

This listing had never disappointed til recently, when I was reviewing a list of palm species that were donated for the chapter auction. By enquiry I learned that several new species had been established via a 1998 work titled *A Taxonomic Treatment of the Palm Subtribe Attaleinae* [Tribe Cocoeae] by Sydney Glassman, and obtained a copy from the Fairchild bookstore.

The differences between the two books' views on the species and genera of the *Attaleinae* could scarcely be greater, and following I hope to provide some explanation for why they differ and, more importantly, correlate the species of the Glassman book [which includes 14 new species] with those of *Palms of the Americas*. In the case of the new species, of course, it is necessary to infer, when possible, what the Henderson, et al, book might have concluded based upon Glassman's comments regarding alliances.

While the "Field Guide" is in no way a monograph of any genus it did propose many changes in botanical nomenclature, some of which seem to have been more accepted than others. While still early days, it appears that reducing the genera *Orbignya*, *Scheelea* and *Maximiliana* to synonyms of *Attalea* has been well accepted by the palm-growing [and vending] community, if not by all palm botanists. [Henderson, et al, were not the first to propose such a combination, Dr. J. G. Wessels Boer first did so in his 1965 PHD thesis, Flora of Surinam, Vol 5 Part 1.] However, this view has been explicitly rejected by Glassman. Following, in their own words, are the authors' explanations.

From Glassman [P 2]: "I recognize a total of 66 species [including 13 new species] and several interspecific and intergeneric hybrids within the 4 different genera. I disagree with this lumping concept. As long as I can recognize 4 distinct genera based mainly on differences in the staminate flowers, I cannot accept 1 genus to cover all taxa in the Attaleinae."

The key to distinguishing the four genera [from the Glassman book but in abbreviated form] is this:

1. Anthers coiled
. . . *Orbignya*

1. Anthers usually straight
2. Petals of staminate flowers more or less linear
. . . *Scheelea*
2. Petals of staminate flowers lanceolate {tapering at ends}

3. Petals usually longer than stamens
. . . *Attalea*
3. Petals usually much shorter than stamens
. . . *Maximiliana*

From Henderson, et al, P 154, this: "Attalea is a large and complex genus of twenty-nine species that is still incompletely understood. Although the species form a natural group, they have been divided, quite unnaturally, into at least six genera . . . distinguished from one another only by their male flowers . . . . " After detailing the generic distinctions the authors proceed: "There are many intermediate types, however, and separating the genera on this basis is unwarranted."

So there you have it, take your pick as to whether the Attaleinae are comprised of one genus or four. But this [to my thinking] is not a matter of lumping or splitting since the number of species is unaffected, just a disagreement as to what the first name is. Where the authors really diverge in substantive manner is in their concepts of species - even before Glassman added species he recognized 21 more than Henderson, et al, and now the number is 35. Following are the species of the Attaleinae according to Glassman and Henderson, et al.

Name per Glassman	Name per Henderson, et al
Attalea allenii	*Attalea allenii*
A amygdalina	*A amygdalina*
A apoda	*A speciosa*
A barreirensis [new - Brazil]	[1] [2]
A brasilensis [new - Brazil]	*A speciosa* [2]
A burretiana	*A oleifera*
A compta	*A oleifera*
A dubia	*A dubia*
A exigua	***A exigua***
A ferruginea	*A racemosa*

(Continued on page 7)

Attalea

(Continued from page 6)

A funifera	*A funifera*
A geraensis	*A geraensis*
A humilis	*A humilis*
A iguadummat	*A iguadummat*
A nucifera	*A nucifera*
A oleifera	*A oleifera*
A pindobassu	*A pindobassu*
A salvadorensis [new - Brazil]	[2] [3]
A seabrensis [new - Brazil]	*A pindobassu* or *A oleifera* [2]
A septuagenata	*A septuagenata*
A tessmannii	*A tessmannii*
Scheelea amylacea	*A phalerata*
S anisitsiana	*A phalerata*
S bassleriana	*A butyracea*
S butyracea	*A butyracea*
S camopiensis [new - Fr Gui]	*A attaleoides* [2]
S cephalotes	*A butyracea*
S degranvillei [new - Fr Gui]	*A attaleoides* [2]
S fairchildensis [new - FTG] [4]	? [2]
S guianensis [new - Fr Gui]	*A attaleoides* [2]
S huebneri	*A butyracea*
S insignis	*A insignis*
S kewensis	*A butyracea*
S lauromuelleriana	*A phalerata*
S leandroana	*A phalerata*
S liebmannii	*A butyracea*
S lundellii	*A butyracea*
S macrocarpa	*A butyracea*
S macrolepsis	*A butyracea*
S magdalenica	*A butyracea*
S maracaibensis	*A butyracea*
S maripensis [new - Fr Gui]	*A attaleoides* [2]
S moorei [new - Peru]	*A phalerata* [2]
S osmantha	*A butyracea*
S phalerata	*A phalerata*
S plowmanii [new - Peru]	*A phalerata* [2]
S princeps	*A phalerata*
S rostrata	*A butyracea*
S salazarii [new - Peru]	*A phalerata* [2]
S tessmannii	*A butyracea*
S weberbaueri	*A phalerata*
S wesselsboerii [new - Venez]	*A butyracea* [2]
Orbignya brejinhoensis [new - Bra]	*A speciosa* [2]
O cohune	*A cohune*
O crassispatha	*A crassispatha*
O cuatrecascana	*A cuatrecascana*
O eichleri	*A eichleri*
O guaycuyule	*A cohune*
O leutzelburgii	*A leutzelburgii*
O oleifera	*A speciosa*
O phalerata	*A speciosa*
O polysticha	*A microcarpa*
O sagotii	*A microcarpa*
Maximiliana maripa	*A maripa*

Notes

1 Per Glassman, close to *A allenii* and *A exigua.*

2. Reviewed by Henderson.

3. Per Glassman, possible hybrid between *A burretiana* and *A humilis.*

4. Named for cultivated specimen at Fairchild Tropical Garden that was destroyed in '92 by Hurricane Andrew.

No, not Central Florida, but Queensland, Australia. Daryl O'Connor sent this picture of an October fire approaching his back fence in the vicinity of Brisbane, in an extreme drought, the temperature at 101ºF and no rain forecast until January (summer in Australia). The frightening blaze was stopped before it got to Daryl's property.

It is easier to be wise for others than for ourselves.
--LaRochefoucauld, Maxim #132

Report to the Central Florida Chapter of The International Palm Society

Collection and Study of a Possible New Species *Synechanthus* (Palmae)

Submitted by: Andrew Henderson & Evandro Ferreira
New York Botanical Garden, Bronx, NY 10458
Phone 718 817 8973; email ahenderson@nybg.org

On a visit to Panama in May 1999, myself and my graduate student, Evandro Ferreira, were working in the Smithsonian Institution herbarium. We were shown several very unusual specimens of *Synechanthus*, originating from Cerro Campana, a site not far from Panama City. These appeared allied to *S. warscewiczianus*, but unlike that species they had procumbent stems less than 1 m long and small inflorescences with only 2-4 flowering branches. Unfortunately we only saw these unusual specimens one day before we were due to leave the country, so we had no time for further investigation.

Subsequent examination of these specimens (borrowed from the herbarium in Panama) in New York, and comparison of them with other material, convinced us that these unusual plants merited taxonomic recognition. We decided, however, to carry out a statistical analysis of variation in the whole genus in order to justify our decision.

Such research is desirable for the following reasons. Palm taxonomy has often been subjective in nature. Palm taxonomists have historically disagreed on the numbers of species in any particular genus. At least in the Neotropics, there has been a recent tendency for recognition of fewer species. Nevertheless, there still remains a dichotomy between the 'lumpers' and the 'splitters'. Finn Borchsenius' (1999) study of infraspecific variation in *Geonoma cuneata* from Ecuador represents the first attempt to delimit palm taxa using multivariate statistics. Such techniques have been widely used to investigate interspecific and infraspecific variation in other plants. In this project we are using similar methods to investigate variation within *Synechanthus*

***Synechanthus* is** one of six genera in the tribe Hyophorbeae, and is closely related to *Chamaedorea*. Harold Moore (1971) recognized two species, and this has been followed by all subsequent workers. *Synechanthus fibrosus* is found from its southern extreme in Costa Rica to its northern extreme in southern Veracruz, Mexico. It occurs in lowland to montane moist forests along the Atlantic slope of Costa Rica, Nicaragua, Honduras, Guatemala, Belize, and Mexico. *Synechanthus warscewiczianus* is found from its southern extreme in Ecuador to its northern extreme in Nicaragua. It occurs in lowland to montane moist forests along the Pacific slope of Ecuador and Colombia, and Atlantic and Pacific slopes of Panama, Costa Rica, and Nicaragua. Along the Atlantic coast of Costa Rica and Nicaragua it overlaps with *S. fibrosus*.

Our fieldwork took place in July. We arrived in Panama on Monday 17th July, 2000. We went immediately to the Smithsonian Institution Tropical Research Institute in Panama City to arrange for permits and transport. Our first study site was Cerro Campana, about one hour's drive west of Panama City. We spent most of Tuesday at this site. We were disappointed to find only three plants of *Synechanthus,* despite an intensive search. On Wednesday we visited Cerro Jefe, about 30 minutes north of Panama City. Here we again found only a very few plants of *Synechanthus*. Our search was impeded by torrential rain for most of the day. On Thursday we went to a site on the Caribbean coast of Panama, east of the Canal, near Fort Sherman. Here we found abundant populations of *Synechanthus warscewiczianus*. We measured numerous variables from a sample of 10 plants in this area. On Friday we visited Summit Gardens, near Panama City, and in the afternoon examined specimens in the herbarium. We were fortunate that there were many recent collections from Cerro Jefe. On Saturday we decided to return to Cerro Campana. We were accompanied by a student from the University of Panama, María Sánchez, who had worked at Cerro Campana on previous occasions. María was able to lead us to a site where we located numerous plants of the new taxon. We measured variables from 10 plants in this area. We returned to New York on Sunday 23 July.

We have begun using multivariate statistical techniques to investigate *Synechanthus*. We have meas-

(Continued on page 9)

The new Synechanthus sp. *found by Dr. Henderson and Evandro Ferreira on Cerro Campana in Panama..*

Synechanthus

(Continued from page 8)

ured 14 variables taken from 243 herbarium specimens, and have carried out preliminary analyses of this data. Our analysis has already turned up some surprises. It turns out that the range of *Synechanthus fibrosus* is divided into two distinct populations, a southern one and northern one, and these two are morphologically distinct. We have found that both Cerro Campana and Cerro Jefe contain distinct populations of *Synechanthus*, but also that another range to the west, Cerro Gaital, also appears to contain these distinct populations. Our study is proceeding and we plan to finish it this year and submit it for publication.

Literature cited

Borchsenius, F. 1999. Morphological variation in Geonoma cuneata in western Ecuador. Pp. 131-140 in:

Henderson, A. & F. Borchsenius (editors). Evolution, Variation, and Classification of Palms. Mem. New

York Bot. Gard. 83.

Moore, H. 1971. The genus *Synechanthus* (Palmae). Principes 15: 10-19.

[Dr. Henderson requested and received a $500 grant from CFPACS to help finance this project.—Editor]

A Garden Christmas

If you're anywhere in the vicinity of Fort Pierce between December 15th and 20th, Heathcote Botanical Gardens has a special event called "Christmas in the Gardens." This small and very pretty garden is illuminated every night between 6:00 and 9:00 p.m. Heathcote House, the historic original building, is beautifully decorated for the season. There's different music each night: dulcimers, singers, a string quartet, a jazz group, a harpist. Light refreshments are available and the gift shop will be open. Admission is $3.00; children 6-12, $1.00; under 6, free. Heathcote Botanical Gardens, 210 Savannah Road, Fort Pierce. (561) 462-4672 or hbg.ircc.net

—John Kennedy

Now, what is Tom Broome telling Marilyn Bachmann at the Wombles' in Groveland? On Tom's left is retiring CFPACS prez Neil Yorio, hands in pockets.
*Below, not Groveland, but Cairns, Australia:*Nypa fruticans *at Centenary Park.*

Peter Mayotte's Camera Eye: Palms Around the World

At top (left) Borassus aethiopum—*not in Central Florida, but on the Ghana-Togo border. At top (right),* Raphia hookeri *in the swamps of Ghana. Bottom left is a double-trunked* Colpothrinax wrightii*, or Cuban belly palm, "on the road to Pinar del Rio, Cuba." Above, the "pride of Ghana,"* Sclerosperma mannii*, in swamps near the Ghana-Côte d'Ivoire border. (Peter should look happier, no?)*

Palms of Morocco

By Peter Mayotte

Al-Maghreb, or Morocco, is a fabled ancient land shaped over millennia by African, Arabic, and European influences. Roman ruins at Volubilis near Rabat were 'old' when constructed in this land where the Berber people appeared thousands of years ago.

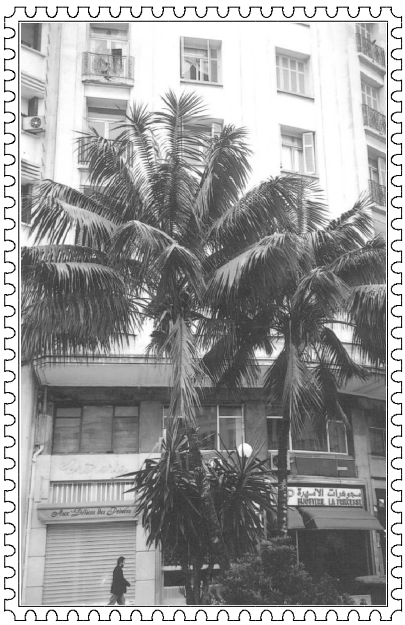
Palms form an integral part of the landscape in Morocco's cities. In the countryside one can see the only indigenous palm, *Chamaerops humilis*, in several varieties of leaf form and coloring. The so-called "European Fan Palm" long ago crossed the Straits of Gibraltar and is a common feature of the landscape in the triangle formed by the cities of Casablanca, Marrakesh, and Essaouira (aka Mogador). Heading south from the major gateway city of Casablanca, clumps of *Chamaerops* dot the highway to Essaouira which roughly hugs the Atlantic coast.

Casablanca itself is a huge, rather congested city with little of the exoticism or romance associated with its Hollywood celluloid namesake. Lying at roughly the same parallel as Charleston or San Diego, this great port has a typical Mediterranean climate. In the old French city, streets are lined with tall old *Washingtonia robusta* and *Phoenix canariensis* specimens, reminiscent of dated parts of Los Angeles. However, the occasional minaret rising above the noble palms immediately tells the traveler that "This ain't Beverly Hills." Several spectacular specimens of *Howea forsteriana* thrive in the morning fogs that roll off the cool Atlantic.

Without doubt the most important palm imported to Al-Maghreb is *Phoenix dactilyfera* of the Near East. It thrives in "oueds" which are basically arroyos or dry riverbeds that flood with the spring meltdown of snow in the Atlas Mountains which rise near Marrakesh. This "pink city" of great boulevards and marketplaces is a true palm oasis, with tens of thousands of date palms punctuating the cityscape. The grounds of the Hotel Al-Mamounia are exquisitely landscaped, luring gullible visitors to shell out US $12 for cocktails to gawk at the much-visited gardens. Eighty-year old specimens of *Trachycarpus fortunei* and elaborately branched *Chamaerops* are presented in both formal and natural settings. However, the date palm is the "signature palm" of Marrakesh, with all manner of plantings of various ages presenting their greyish leaves to contrast the ochre-pink stucco of the build-

(Continued on page 16)

Left, Howea forsteriana *in front of a hotel in Casablanca, Morocco. Note the size of the passerby at the bottom of the photo. Below, scrubby foreground is* Chamaerops humilis. *Sheep in background keep it to this size.*



WINTERIZING??? PALMS

By Dave Witt

For the past two winters I have been experimenting a bit with various combinations of fertilizers in an effort to pump up the salt volume inside of the palms' cells, thus increase the cold tolerance of certain marginal species. The theory being that salt water takes longer to freeze than unsalted water and that this should decrease the chances of the palm cells exploding due to crystallizing from water expanding inside of them. This idea is certainly not an original thought on my part. The first time I had come across it was from a suggestion made via the Internet a few years ago by Henry Donselman. Also here in Florida most all of the golf course "greenskeepers" spray a solution of liquid urea on the turf just before any freeze is forecast. For the most part these experiments seemed to be successful with a few caveats. Keep in mind the cold my palms were subjected to were two separate one-time exposures but nevertheless the passing fronts provided enough cold for a long enough time to severely damage some of the same specimens in similar conditions/freezes previous to these tests.

1998 - 1999 Results

1/5/99 - The temperature reached 32F approximately 12 a.m., 30F by 4 a.m., 28F by 7 a.m., then hit 33 at 8:30 am. Time below freezing approximately 8 hours. A 5 M.P.H. wind kept the frost away until around 4 a. m. It began forming on lower leafs & grass shortly thereafter.

UNDAMAGED PALMS - that possibly could or in the past did suffer some damage

Aiphanes aculeata - 3 ft. – was damaged by slightest frost & lower temps in 2 previous winters
Archontophoenix alexandrae - 4 ft. – others of this species were always fried by any frost but this latest addition was sheltered under an oak
Arenga pinnata - 6 ft. – previous planting of nearly equal size was killed by similar cold
Chamaedorea cataractarum - 4 ft.- planted next to house
Chamaedorea glaucifolia - 1.5 ft. – planted under an oak
Chamaedorea metallica - 2.5 ft. – planted next to house
Chamaedorea stolonifera - 3.5 ft. – planted next to house
Copernicia gigas - sdlg. – new planting should be susceptible to cold
Copernicia glabrescens - sdlg. - new planting should be susceptible to cold
Copernicia yarey – sdlg. - surrounded by frost damaged grass yet no damage
Cryosophila stauracantha - 2 ft. – previously showed damage by similar cold
Dypsis decaryi - 14 ft. – previously showed damage by similar cold
Gaussia maya - 5.5 ft. – nearly 50% burned by similar cold
Kerriodoxa elegans - 1 ft. – nearly 50% burned by similar cold
Licuala spinosa - 1.5 ft. - nearly 50% burned by similar cold
Medemia argun - 1.5 ft. – cold hardiness basically unknown ???
Pseudophoenix sargentii - 4 ft. and 1 ft. – slightly damaged by similar cold
Ravenea rivularis - 6 ft. - slightly damaged by similar cold
Ravenea xerophylla - sdlg. - cold hardiness basically unknown ???
Roystonea regia – 10 ft. - nearly 50% burned by similar cold
Sabal mauritiiformis - 5.5 ft. - slightly damaged by similar cold
Sabal yapa (dwarf form) - 2.5 ft. - slightly damaged by similar cold
Schippia concolor - 3 ft. - slightly damaged by similar cold
Syagrus amara - 6.5 ft. - slightly damaged by similar cold
Syagrus sancona - 6 ft. – newer planting, possibility of suitable cold-hardiness may exist
Thrinax morrisii - 2 palms over 3 ft. – were undamaged by previous freezes w/ lower temps
Wodyetia bifurcata - 8.5 ft. - nearly 50% burned by similar cold

DAMAGED PALMS - APPROX. HGT. - NOTES

Attalea butyracea - 2.5 ft. - about 25% foliage damage @ worst; mostly lower leafs
Attalea speciosa - 2 plants w/ 2 leafs each; minor (less than 25% burn)
Caryota mitis - 9.5 ft. - foliage burn less than 50%; confined mostly to upper, exposed leafs but newest opened fronds (two

(Continued on page 13)

WINTERIZING

(Continued from page 12)

since Dec.) were undamaged
Chambeyronia macrocarpa - 3 ft.- less than 25% damage; confined to lower 2 leafs (out of 4)
Corypha utan - 6.5 ft. - at least 75% damaged; all leafs show burn except latest 2 (no damage)
Dypsis leptocheilos - 4.5 ft. - some spotting to nearly all leafs, foliage burn less than 25%
Elaeis guineensis - 7 ft. - a few leaf spots on most older fronds, new ones okay; no burn marks
Hyophorbe verschaffeltii - 9 ft. - foliage burn close to 50%; confined to oldest fronds only
Hyophorbe "hybrid" (bottle/spindle cross) - 2 ft. - no burn marks but cold spots on all 3 leafs
Roystonea oleracea - 3.5 ft. - foliage burn on 2 oldest leafs (less than 50%); spotting on new one
Syagrus coronata - 3 ft. - about 50% burn to exposed oldest leafs, 2 newest ones are okay
Syagrus X costae - 12 ft. - 50% at worst to most fronds; newest leafs okay
Thrinax parviflora - 3 ft. - about 50% at worst to all 3 fronds
Thrinax radiata - 3 ft. - very minor burn (less than 25%) to most fronds; newest 2 okay
Zombia antillarum - 2 ft. - planted under Bismarckia, very minor (10%) burn marks & spots

I fertilized all of the above plantings in mid November with a basic "landscape" fertilizer, a 17-3-11 polymer coated formula from Lesco. I also added in a 0-0-60 (straight potassium) to the mix in equal amounts. I followed the normal application rate for palms. During the month of December we had above average temperatures as well as an adequate supply of rain. Lots of my palms slowed down but continued to grow. At the time of the cold front that blew through (I had mid 30's for a low the day before the freeze) several palms were just beginning to open new fronds. These palms were: *Bismarckia, D.decaryi*, *S."costae", R. regia*, *C. mitis*, *R. rivularis*, *L. mariae*, *A. totai*, *C. prunifera*, *C. argentata*, *T. morrisii*, *E.guineensis*, *A. engleri*, *C. baileyana* and *A. arenaria.* All of these fronds are completely undamaged. A few of these I knew would be fine but the *Ravenea*, *Elaeis*, and the *Syagrus* hybrid are a bit surprising, especially since the *Syagrus* hybrid was one of the most damaged palms in previous freezes of similar duration and temperature. I truly believe the palms' ability to withstand the cold (and accompanying frost) was increased by fertilizing. I believe this because in 12/95 a 29F freeze had far more effect on my palms than this one did. Also a freeze in January 1996 w/ a low 27F and 5 hours below freezing did much more damage than this latest one.

1999 - 2000 Results
1/27/00 - Reached 32F degrees approx. 5:30 a.m., was back at 32F around 7:30 a.m. The low was under 30F, but not quite 29F. This was the 2nd day of a passing cold front; the previous night's low reading was about 33-34F. Weather forecasts had predicted the 2nd night to be warmer than the previous night. Okay...

DAMAGED PALMS
Satakentia liukiuensis - 3 – 4 ft. overall, badly scorched but never looked too good anyway
Actinorhytis calapparia - was 8 ft overall, now maybe 7 but it has always come back

NOTE: both palms have since died this following summer; this is the 2nd trial run for each species, neither of which appears to be a good subject for areas where freezing temperatures are an annual occurrence. While they manage to survive light freezes, each year they go into the next winter with less & less foliage, regressing to the point where they cannot make it another season.

Roystonea regia - 12 ft; well in excess of 50% green, probably closer to 75%.
Syagrus X costae (hybrid) - some spotting but only on the fronds that reached over the roof.
Elaeis - 10 ft; very minor spotting and some yellowing on a few fronds.
Syagrus amara – 7.5 ft. – seemed fine at the time but shortly some yellowing/spotting appeared.
Caryota mitis – approx.15 ft.; minor spotting, if anything - this is a first !!!
Chambeyronia - 3 ft. overall, a few spots on all the fronds.
Hyophorbe verschaffeltii – approx. 10 ft. – all fronds almost completely burned on the adaxial (upper sides) of the fronds while the abaxial (lower) sides were almost completely undamaged !
Corypha utan - approx.8 ft. – newest 3 fronds showed severe burn, most all of the older foliage was either undamaged or showed minor spotting/yellowing typical of this genus in cooler weather.

There are several important factors to consider re-

(Continued on page 14)

WINTERIZING

(Continued from page 13)

garding the above list of damaged palms. Although this freeze was less "severe" than in 1999 it was a true radiational freeze, the 2nd day of a passing cold front. The 1st day the lows reached to 33-34F, the 2nd day there was no cloud cover to trap heat accumulated during the day and no wind to keep the frost at bay during the night. Therefore the frost was able to form quickly and early on most all exposed vegetation in the vicinity. The frost alone is usually a death knell for the exposed palm foliage of the following species but this time around some pleasantly surprising results were in store:

Caryota mitis – this specimen was frozen to the ground from the winter of 95-96 and although suffering some damage each successive winter, this time around the palm was well in excess of 90% green. Normally this palm shows cold damage if the refrigerator door is left open too long. It is also planted in an open, unprotected spot on the NW corner of the house (right into the teeth of any oncoming cold front). For the past two winters it was not defoliated, the only two occasions this has ever happened out of six winters. The only change in routine from previous years is the fertilization application in mid November.

Corypha utan – another species that was/is basically defoliated on an annual basis until mid November fertilizing. This palm had suffered severe damage and/or total defoliation at the slightest frost and for the past two winters it was heavily damaged in each but managed to keep 3 to 4 healthy green fronds each time. Anyone growing this species outside of a tropical locale should be aware of the significance of any remaining, healthy foliage. This small amount of foliage has been more than enough to sustain it through the remaining cold days and once the temperatures rise it grows quick enough to completely recover and develop a full crown of leafs before summer's end, unlike the aforementioned Satakentia and Actinorhytis palms.

Roystonea regia – past experiments w/ palms under 8 ft. overall all ended in failure (= dead palm) so I decided to go "bigger is better". I planted a 10 ft. specimen in a full sun location during early Spring 1998 and the result from the past two winters is once again decidedly more positive than anything previously recorded here. The palm's size may have played a part in this but nevertheless it was covered w/ frost by daybreak. Past trials had resulted in near or total defoliation when this occurs but not this time (approx. 65-75% green overall).

Syagrus X "costae" – this hybrid of *coronata* and *oleracea* was planted as a large (over 10-ft.) specimen in Spring 1996. It has been severely damaged although never defoliated, during each subsequent winter. This palm is planted next to the south facing wall with no canopy and adjacent to the aforementioned *Roystonea.* After the winter of 98-99 the palm was well over 50% green, the best it had ever fared until 99-00 when the only damage was to the outer edges (tips) of several (but not all) fronds.

Palms that basically suffered the same damage as always despite fertilization:

Elaeis guineensis – this one showed "latent cold damage". It seemed just fine for about one week but as time passed I noticed several faded areas or scorched marks on each frond but mainly the oldest. Each frond including the most damaged were 90% green at worst.

Hyophorbe verschaffeltii – time exposed to frost was the main culprit here; no frost formed on the lower sides of each frond so no damage there, only to the more exposed upper sides.

Syagrus amara – another that exhibited latent cold damage with the same results as the *Elaeis.* Both palms are planted next to each other in an open area.

Several smaller species (under 3 ft. overall) -

Attalea butyracea, *Thrinax parviflora*, *Thrinax radiata* and *Zombia antillarum* were undamaged through the winter of 99-00 but damaged during the previous winter of 98-99. Each palm (except the *Zombia*) is planted in an open unprotected area. All four species are widely considered to be tender to any frost or freezing temperatures. I would attribute the undamaged *Zombia* from being planted underneath a *Bismarckia* palm but the remaining three I would consider as being yet another testament to the additional late season fertilizing.

Final notes: I choose the time frame of mid

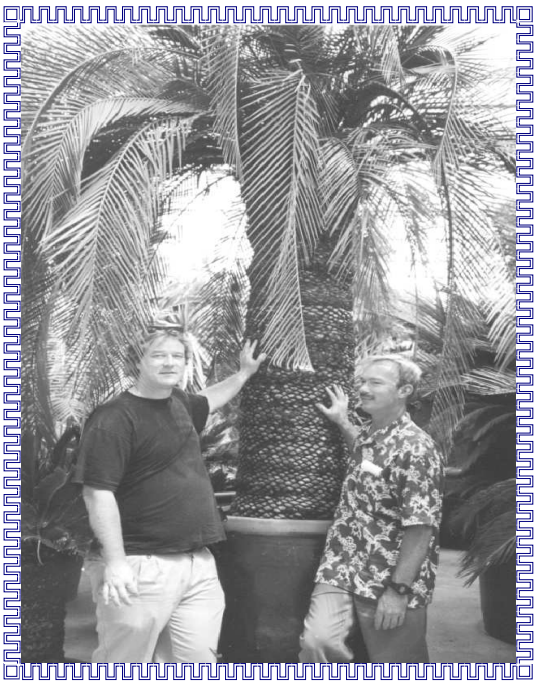
(Continued on page 15)

WINTERIZING

(Continued from page 14)

November for these applications because it takes a minimum of two weeks if not slightly longer for the granular fertilizer to initiate being absorbed by the palms. In the past most tests have indicated that palms generally stop feeding or lose the ability to process fertilizer once the mean temperature drops below 60F. Considering my location (Orlando, Fl.), I felt the time of application would be sufficient in case of an early cold front, (which if history is any indication are always among the worst). For this coming winter of 2000-01 I plan to continue these trials with granular products as well as applying some liquid mixtures to smaller palms and newer plantings a day or so before any freeze is forecast. As to the products themselves, I think the important idea is to fertilize without much regard to the brand or type of product applied (but preferably with something that can release slowly over the course of winter). Future tests may or may not reveal some variances caused by using different ratios or products. But the gist of this is to get some salt moving through the plant's system before the worst cold arrives – and if it doesn't arrive? Then you have a healthy, well-fertilized plant anyway. In the past our newsletter has published information from the University of Florida regarding the proper ratios for fertilizing cultivated palms in Florida. Their suggestions were, on a regular basis to increase the potassium levels to as much as if not twice the number of the nitrogen level. This recommendation was made mainly due to this mineral (K) quickly leaching through our sandy soils. Potassium is also well known to amplify a plant's ability to withstand stressful conditions including drought. I would suggest applying some "extra K" as a protective additive along with the regular granular fertilizer. Until next winter...

This little palm doesn't have to worry about winter. It's Mauritiella armata*, at Flecker Botanic Gardens, Cairns, Australia—in Queensland.*



That's a Macrozamia*, no species given (Tom,* M. moorei*?), growing in the wholesale nursery of René van der Arend in the Netherlands. Left is Dutch CFPACS member, Martin Sloos, who sent the photo. At right is Craig Haverstick, an IPS member from San Diego.*

Palms of Morocco

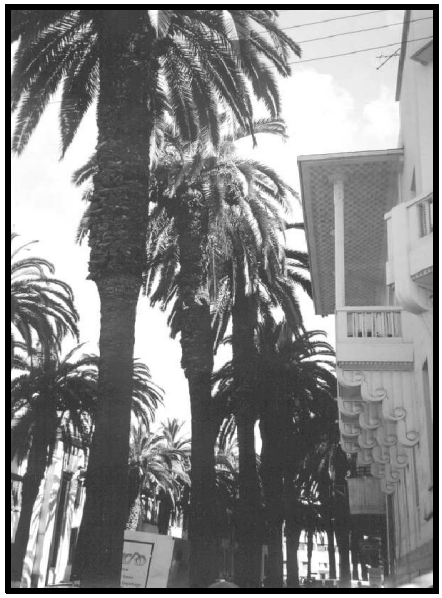
(Continued from page 11)

ings.

In the "New City," or Gueliz, which dates from the French period of the early 20th century, *Washingtonia*s predominate, co-existing with the often eccentric Moorish Art-Deco structures.

Heading south to Essaouira on the Atlantic, *Chamaerops humilis* is abundant, often nothing more than a scrub-like bush due to the predation of goats and asses who munch the young leaves enthusiastically. The blue leaf variant is seen along this road, but is less common as one approaches the coast. Few large wild specimens can be spotted thanks to the hungry livestock. Essaouira itself is the "Blue City" where doors, shutters, fabrics, and even lampposts are painted or dyed a pleasing rich blue. *Araucaria*s line the seafront and the ruins of an old Portuguese fort far down a sweep of beach tempt hikers and drifters. This "castle in the sand" inspired Jimi Hendrix's song of the same name. Apparently, Jimi spent time there enjoying other pleasures of the diverse botanical world.

To end, a friend related an old Moroccan proverb. "He who throws stones at date trees [for unripe fruits] risks punishment for impatience." Go figure. . .



Above, Phoenix canariensis *as a street tree in Casablanca.. Below,* Phoenix dactylifera*, in Morocco—happier than in Florida*

New Palm Book

Yes, another palm book has now been published in Australia. Its title is *Cultivated Palms of the World.* Authors are Anthony and Don Ellison, who live in Queensland. The electronically transmitted flyer says that there are 1300 color photographs of more than 800 palms in the 243-page book.

Dr. John Dransfield is quoted as saying "*Cultivated Palms of the World* provides the most comprehensive photographic reference ever published to palms in cultivation. With its excellent colour photographs and clear text this beautiful book will be an invaluable reference for all palm enthusiasts."

The format, as pictured on the flyer is four palm species to a page, with a paragraph or so of print beneath each picture. The price for US purchasers is $55 (regular, slow mail) or $70 airmail. It may be ordered from Don Ellison, 2 Braeside Crescent, Maudsland 4210 Qld, Australia. The e-mail contact is Anthony Ellison: ellisona@rocknet.net.au

Any CFPACSer who purchases this book is invited to review it for *The Palmateer.* **—John Kennedy**

An Update on Miami Cemetery…

The September issue reprinted a 1957 letter from Teddie Buhler to the 1957 Palm Society newsletter about exotic plants grown at the Miami City Cemetery by caretaker Alek Korsakoff. Mrs. Buhler responded to an editorial question about the present condition of the cemetery.

I noticed the 1957 article I had written about the Miami City Cemetery. I had just the day before been called by someone named Mike (no last name noted) who had called me about and told me there is a movement afoot to restore the Cemetery to its former glory.

Records had been found about the plants, and especially the old box had turned up (I was sure vandals had long ago thrown the contents to the wind) in which Alek Korsakoff had kept his meticulous records, all written in a tiny script and with great particulars, on large cards. I can remember his showing me the box and finding the name of a particular palm or tree.

Unfortunately, "Mike" called me just as I was running off to get to an appointment, but I asked him to please call me back as I was very interest ed in the project, apparently instituted by the Historical Association. I shall be able to tell him that I have seedlings of the *Pseudophoenix* I grew from seeds from the Cemetery back in the 1940s. Unfortunately, Hurricane Andrew had killed my original plants, but enough seeds had fallen that I have several of their seedlings.

…I can let you know how things turn out at a later date. I am delighted to know that someone is interested in this restoration, as many pioneers were buried there, including the Burdines.

There is much to restore as the Cemetery even had homeless sleeping in some of the more elaborate tombs at one point.

I knew Alek Korsakoff well as I [later] saw his plant-stand in the Tanners market across the street from the Cemetery and looked him up. I bougkinds of things from him from time to time, over the years, but now do not recall what they might have been and what happened to him.

--Teddie Buhler

Palm Wallpaper

Just in case you don't have enough palms outside (and your wife/husband/significant other isn't screaming, *enough!*), a palm wallpaper, very handsome, is available from Waverly wallpapers. The pattern is called Malaya Companion in Jute. There is a website to get a look at the wallpaper: www.waverly.com

Phil Stager spotted this in the *St. Petersburg Times* and sent the page with the pictured wallpaper to me. Lucille Grippo of Waverly was kind enough to send, at my request, a slide since no glossy was available.

However, the camera shop in Fort Pierce with which I have dealt refused to make a print of the slide without a letter on file expressly granting permission to do so. I also had a slide of a *Serenoa repens* flower sent to me by Dr. Mark Deyrup of Archbold Biological Center in Lake Wales; the same shop refused to make a glossy of this because the name of the scientist at Cornell who had taken the picture was on the slide. I would need a letter from him. We can all rest easy that rights of copyright are so zealously protected in Fort Pierce. I would, of course, have credited the source for each picture.

A friend Up North (in New Hampshire, to be exact) has a wife who is crazy about Early American furniture and décor. Stylized eagles were everywhere in the house. He put down his foot when he discovered eagle toilet paper in the bathroom. (If anyone has heard of palm toilet paper, do let me know. Maybe I can even get to, maybe, run a picture of it—with the appropriate permission, of course.)

-John Kennedy

Not a dead whale, but a Cuban Belly Palm trunk on the ground in Cuba, attracting the camera of Peter Mayotte.

Mysterious Mystery Palm

By John Kennedy

OK, *what* is it? I have driven past Coconuts, an upscale lawn and patio furniture store, many times. I noticed a palm out front that seemed unusual but I was always on my way somewhere else. Besides, it's sometimes imprudent to slow down on SR 60 in Vero Beach; drivers on one's bumper are unappreciative. Eventually I stopped to get a close-up look: the palm seemed familiar, as if I ought to know, but I couldn't name it. Central Floridians are often at a loss in identifying crownshaft palms since we have so few; they tend to be too tender to grow in this area beyond the next freeze. (OK, folks, it's been almost 11 years since the Great Christmas Freeze of 1989, but we fear every winter that our luck may run out.)

Noted palmophiles Ed Carlson and Mike Dahme admitted they were stumped. I think we all agree that it's a species—whatever it is-- more likely to have originated Down South (Palm Beach, Broward, or Miami-Dade Counties) and unlikely to be seen so far north as semi-Arctic Vero Beach.

Coconuts' co-owner Ann Clement doesn't know what it is ("But isn't it pretty!") and put me in contact with the landscaper. The landscaper didn't know the palm's identity either, but insisted that she had dug it up elsewhere on the property and re-planted it. Prior to renovation suitable for selling pretty things for the patio, I dimly recall a dismal building offering (I believe) lawnmower repairs. Ms. Clement thinks that there is another individual of the same species on the barrier island at a site where she's working on a decoration job and says she will find out what it is. We can hope that the property owner knows.

Now, all you palm nuts out there can feel free to contact me with <u>your</u> identification.

The Asian Cycad Scale

By Tom Broome

The Asian cycad scale, or *Aulacaspis yasumatsui***,** was brought into Miami in 1992. An expedition was funded by a well-known botanical garden in Miami to go to several habitats in China, and bring back cycads, as well as donate colonies of these species to botanical gardens in China. These scale insects can hide in the roots and in-between the leaf bases of cycads, so they were brought in undetected at the time. It wasn't long before these insects were detected, but no one knew what impact they would have on the south Florida cycads.

The only genus of cycads that is native to Asia is *Cycas*, which includes the well known "King Sago Palm", or *Cycas revoluta*. The plants most affected in south Florida were the king and queen sagos. This scale insect reproduces itself so rapidly, that a queen sago with a spread of over 20 feet, and 15 feet in height will be totally covered in a matter of a few months. The scale will cover the stems and leaves so thick that it looks as if snow has covered the plant. Scales suck juices out of the leaves of the host plant, so that if left uncontrolled, they will eventually kill the plant. The insects are not hard to kill, but because they reproduce so rapidly, homeowners have found that they have to continually spray their plants. Most homeowners don't take the time to do this, so many have let their plants die, and have had the plants removed. In the last 8 years, the loss of the queen sagos in Miami is very obvious. Another factor that has made the eradication of this insect difficult is that they can become airborne. Even though they don't fly with wings, anytime there is a strong wind, these insects can be carried as far as a half mile away from where they were before. This means that even if you have taken care of the problem in your yard, you can have the scale again the next time there is a storm.

Infected plants in Miami nurseries have been sent to many areas of the United States. People have seen infected plants in South Carolina, Texas, California, and Hawaii. From what I understand, there are parts of Hawaii that have infestations just as bad as it has been in Miami. The early reports suggested that this scale could not survive where temperatures got near or below freezing. During the last year I have performed experiments on plants that were kept separate from other cycads. I tested different chemicals for eradication, and survival of the insects under varying growing conditions. This cycad scale has survived on plants that were subjected to a freeze that had a low of 23F, and a duration of 9 hours below 32F. People have thought that the scale problem would be confined to areas that don't have regular freezes, but my findings show that most of the southern states, including Louisiana, are not safe from these insects.

The primary hosts of these insects are the Cy*cas* species that come from Asia. This includes *Cycas revoluta* (king sago), *C. rumphii* (queen sago), and *C. taitungensis* (emperor or prince sago). Botanical gardens in Miami have found that the Asian scale will also infect *Stangeria*s, and to a lesser extent, some of the Australian Cy*cas* species, and only the cones of a few *Ceratozamia* species.

The Asian scale looks very much like the scale that is commonly called " Magnolia scale". The Magnolia scale has a shape more like a pin, instead of round, like the scales people are more accustomed to seeing. Another common name for the Magnolia scale is " snow scale" because it is white, and covers the plant to the point that it looks like snow. It is the Magnolia scale that gets on some of our palm species. Unless you know what you're looking at, the only way to tell if you have the Asian scale or not is the speed in which it multiplies, and the thickness it covers the plant. The infestation usually starts on the petioles near the crown of the plant, and works out from there. Usually within a couple of months, the plant will be totally covered. Another concern that some people have is that this insect may end up adapting to other types of plants. It is so close to the Magnolia scale, that there could be a time that this scale could be a problem for palms, and trees.

What can we do to eradicate these insects? The reports show that the most effective way to get rid of them is to use a combination of horticultural oil, and Diazinon. Mature scales have a hard shell that protects them from direct contact sprays. The immature scales are called crawlers, and do not have a hard shell yet. Crawlers will leave the protection of the parent scale, and will move to the new growth when possible. Horticultural oil is used to cover the entire plant, and this will smother the mature scales. If the plant is not totally covered with oil, the application will not be as effective. A week after an application of oil, the Diazinon is used to kill the crawlers. This process is repeated every two weeks until the infestation is no longer present. In cites like Miami where there is widespread infestation, this is a constant job because new scales can be blown onto uninfected plants at any time. Another approach is the use of systemic insecticides such as Orthene. Orthene is sprayed on the entire plant, and the leaves absorb the chemical. Any-

(Continued on page 20)

Asian Cycad Scale

(Continued from page 19)

thing that eats the plant will die because of the concentration of the chemical in the plant. Orthene will be effective on a plant for approximately three to four weeks. It is suggested to use this chemical every two weeks. Many people have found that Orthene is not a long-term solution to the problem. You can see why people have not been able to control these insects, and have decided to remove their cycads from their landscape, or replace them with cycads that are not affected by the scale.

Another approach has been the use of predatory insects that feed on this scale. These insects have been let loose in areas of Miami and have been found to be somewhat effective. A problem with this, like with other predatory insects, is that they leave once a problem is taken care of, or move on to somewhere else before the job is finished. People have found that the weather has also altered the effectiveness of these insects. I can see the use of these insects in an enclosed environment, but they are not the best answer when used out in the landscape.

I think I have found a better solution to the problem. There are products that are available to nursery owners that are not available to the average homeowner in retail stores. I have found that products with the active ingredient Imidacloprid are very effective for long term control. For those of you with pets, this is the same active ingredient that is used in the Advantage system for dogs and cats. These products are made by the Bayer chemical company and go by the names of Merit, Marathon, and Admire. Admire is labeled for use on crops, where the others are labeled for ornamentals. These products are applied to the soil, and then the roots draw the chemicals into the plant. These chemicals work best when they can concentrate in the new growth of the plant. Many people will cut off the leaves of the infected cycads to make it easier for them to control the insects. In most cases, they have found that when a new flush of leaves is produced, the scales are attached to the new leaves and the infestation continues. If a product with Imidacloprid has been used prior to the new flush of leaves, the newly hatched crawlers will move to the new leaves, and will die. In my tests I found that these chemicals have been effective for up to five months on containerized plants, and a little less on plants in the ground, depending on how fast the chemicals leach through the soil. I have observed a plant that had been sprayed with this chemical, where all the mature scales had died. A few weeks later, more scales hatched and started eating on the petioles of a new flush of leaves. I was amazed to watch them die and fall off over the next few days. Marathon comes in two forms, a liquid and a granular, where both are applied to the soil. Some people have used Merit and have found it not to be as effective as they would like. Some nursery owners have found that the amount of product used made all the difference in the world, and that a higher amount of product used in the same situation was very effective on scale. Bayer is making a new product that can be found in retail stores called Advanced Garden. It also comes in a liquid and granular form, and is expected to be very effective on scale. At this point in time, I have not tested this new product but will be sending some to people who have the Asian scale on their plants.

The Asian scale is a problem that is not going to go away any time soon. If nurseries continue to ship out plants that are infected by this scale, these insects will end up being a problem everywhere in the southern United States, yet alone the warmer locations around the world. If people are made aware of the problem and the use of the more long-term remedies, I think we have a good chance of getting rid of these pests in our landscapes.

Pholidocarpus macrocarpus *growing in Flecker Botanic Gardens, Cairns, Australia.*

An Earlier, Short-lived Version of *Palms*: For the Hobbyist

By John Kennedy

From March, 1969, to late in 1970, a newsletter containing no scientific articles was published. Seven issues appeared that were clearly aimed at ordinary members of The Palm Society. At the top of each front page was the legend Palms: Newsletter of The Palm Society. *The format was 8½ x 11, printed on coated white paper similar to that of high school newspapers and organizational newsletters.*

The first issue (March, 1969: Volume 1, No.1) has an introduction by Dent Smith. The new publication, he says, is the idea of Dr. Jerome Keuper, president of Florida Institute of Technology in Melbourne, who has agreed to be editor. *PALMS* is to be mailed free to members and is intended to be more "earthy" than *Principes* and would not compete nor aspire to that "high level." Instead, its "emphasis would be on the commoner aspects of palm-gardening, news of the reader's gardening activities, and all related subjects, humorous, humorless, brilliant or otherwise, of which there can be no end." Three members have agreed to assist Dr. Keuper: Ken Foster as Assistant Editor (with an account of a March, 1968, Western Chapter meeting at Huntington Gardens, with 72 attendees), Billings McArthur as Eastern Regional Reporter, and Burton Greenberg as Western Regional Reporter. There are two pages of pictures of the 7th Biennial in August, 1968, that took place at the Los Angeles State and County Arboretum. Prints of pictures, all taken by Ken Foster, may be obtained from him for $1.75 each.

A palm crossword puzzle is a feature, along with two cartoons. A message from the society president, Dr. John Popenoe, salutes the new newsletter. Joe Sullivan writes of how he caused two *Arecastrum romazoffianum* palm trunks to curve; a picture shows him next to them.

Dent Smith's apologia for the newsletter contains the following passage:

> Is there a necessity for this new publication? The answer depends on what one consider necessitous. To keep the Society alive and vigorous, it is necessary to maintain interest by one means or another. Better yet would be an effort to maintain it by various means instead of confining it in any way. The publication PALMS should fulfill a substantial part of such an ideal. Some members have felt themselves not up to the standards of PRINCIPES and have erected a mental barrier against it as something beyond their poor powers of comprehension. Whether this mental block is due to lack of schooling or some other cause matters little, for these people tend to consider themselves left out and too many leave the Society, which is not so affluent as to be in a position to say good riddance. If some of the dropout candidates prefer comic strips to the Harvard Classics, we still can cater to narrower interests by providing a compromise suspended like Mohammed's coffin half way between heaven and earth. In a word, the Society needs all the members it can get, and keep, just to stay alive.

* * * * *

PALMS
Newsletter of The Palm Society
Volume 1 Number 1 / March, 1969

Introducing ...

PALMS

by Dent Smith
Daytona Beach, Florida

The idea of publishing PALMS, which makes its first appearance with this issue, originated with Dr. Jerome P. Keuper, now Vice President of The Palm Society. He has been eager to contribute something of immediate benefit to the Society and its members, and it has seemed to him that a newsletter type of publication, such as this one, would best serve the purpose. Accordingly, he has proposed to produce it quarterly in the small but efficient printing plant at the Florida Institute of Technology, which he founded ten years ago and has since administered as President. PALMS would be produced at no cost to the Society and would be mailed free, moreover, to the individual members.

To help with the project, Dr. Keuper sought and obtained, Mr. Kenneth C. Foster's acquiescence to donate his services for typography and general make-up, including photographic and any other illustrations. Anyone who has seen a copy of the very mediocre Western NEWSLETTER, now no longer being published, must be aware of Mr. Foster's remarkable talent for making a printed production visually attractive. The know-how that can give PALMS enough eye appeal will compel the reader's attention in a way that nothing else can.

A staff of sorts had to be provided and various matters weighed and discussed, so over the last two months or so, Dr. Keuper and Mr. Foster threshed out these things and also the details of a general plan of publication, with the condition that PALMS should not compete in any way with PRINCIPES. The contents would be dissimilar; PALMS would be earthy, as a newsletter should be, and not aspire to the high level attained by PRINCIPES. In the main it would contain matter not suitable for PRINCIPES — even, for example, cartoons and crossword puzzles. Its emphasis would be on the commoner aspects of palm-gardening, news of the reader's gardening activities, and all related subjects, humorous, humorless, brilliant or otherwise, of which there can be no end.

If this writer could have his way, he would try to print any interesting letters or excerpts from them, which might include queries and

Continued on page 6

Meet Our Staff

DR. JEROME P. KEUPER, Editor

Dr. Jerome P. Keuper is a native of Ft. Thomas, Kentucky. His extensive education includes B.S. degree in Physics at the Massachusetts Institute of Technology, M.S. degree in Physics at Stanford University and his Ph.D. degree in Physics at the University of Virginia. He has worked as a Senior Research Physicist and in various managerial positions in advanced educational and scientific development. In 1958 Dr. Keuper founded, and serves as President of Florida Institute of Technology in Melbourne, Florida. The Institute serves the needs of the Cape Kennedy area. Dr. Keuper's extensive palm planting on the 85 acre campus includes over 200 species. The Dent Smith Trail, lined with palms, is being extended and is becoming one of the more extensive outdoor palm collections in the country. Dr. Keuper is the Vice President of The Palm Society and his vast energy and enthusiasm will bring PALMS an outstanding talent.

Continued on page 3

Page 1

The second issue (June, 1969) has on its front page a big picture of a *Jubaea chilensis*, growing in Queenstown, South Africa, with an accompanying explanation by John Avery, of Salisbury, Rhodesia, with the title "The Shaving Brush Palm." Inside is notice of the Biennial to be held July 30-August 2, 1969, on the Florida Tech campus in Melbourne. Mr. and Mrs. Toshihiko Satake have paid a brief visit to California; they are pictured, together with mention that Dr. Hal

(Continued on page 22)

PALMS newsletter

(Continued from page 21)

Moore has recently named *Satakentia liukiensis* in Mr. Satake's honor. "Palms and Cold Weather" recounts an interview with member J. D. Rowell (Sacramento, California), whose aunt in Lewiston, Idaho, raised *Trachycarpus fortunei* that survived (for how long?) -22° F. Mr. Rowell also has experimented, with mixed success, in planting several species in Eugene, Oregon.

Along with assorted snapshots of palms is a near full-page picture of a *Lodoicea maldivica* seed, the "double coconut," germinating in the possession of Mardy Darian, who provides a story on importing *Pigafetta filaris* seeds. (A few pages later, in a small classified ad, he offers seedlings of the latter palm for $25 each.) A great giveaway, by Joe and Pauleen Sullivan, is documented in pictures. They offered Western Chapter members any palms they wanted to be dug from the ground at their nursery, The Tropical Garden. The last item in the issue is pictures—one of the Dent Smith Trail--and a brief account of a Central Florida chapter meeting at FIT on June 21. About 50 people attended.

*****

The third issue (September, 1969) features a long and interesting article, "Surviving Palms of the Gillespie Estate" in the vicinity of Santa Barbara, California. Author Barry Osborne tells of a palm collection begun in the 1890s and virtually abandoned in the 1940s. A surprising number of species have survived, including *Parajubaea cocoides* which is recommended for wider use in California. "Foiling Jack Frost" describes basic protection of palms during freezes; president John Popenoe explains the differences between freezing weather in California and in Florida, and its effect on palms. Mrs. Lucita Wait, Executive Secretary of The Palm Society provides a sampler of letters received from members around the world; Dent Smith also comments, in "Palmographs," on items from his correspondence. Mrs. Wait, as operator of the society's seedbank, urges members to keep the list of species she sent out last fall. She is acquiring and shipping seeds right now.

A Western Chapter meeting took place on August 30, at "Dr. M. E. Darian's fabulous new hilltop home in Vista, California." Paul R. Weissich, Director of the Honolulu Botanical Gardens, spoke on palms in Hawaii, with particular emphasis on *Pritchardia.*

*****

The story on the front page of the fourth issue (December, 1969) is about the establishment of a palm garden at the Veterans Administration Hospital in West Los Angeles. A number of society members donated palms to this planting. Dent Smith contributes an account of a Central Florida chapter meeting at Dr. U. A. Young's in Tampa in October, as well as a picture and description of a *Sabal palmetto* growing through the trunk of a live oak. There is another reminder of the upcoming Biennial (and post-convention trips to Venezuela, Panama, and Costa Rica); National Airlines has direct flights from Los Angeles to Melbourne.

In an article reprinted from *Westways* magazine (March, 1933), Edward A. Howard tells of his adventures in Mexico and, especially Guatemala, in eight years as a plant collector for the Doheny Conservatory of Los Angles. The scope of his activities is evident, when he says "Fifty-seven car loads of cycads, palms, ferns, orchids, and other rare and beautiful specimens crossed Mexico en route to Los Angeles or sailed aboard coastwise steamers for southern California during this period." He mentions blasting cycads from solid rock. David Barry, Jr., describes the immense conservatory, its plants, and a meeting of the Western Chapter there in December, 1969.

Lucita Wait describes Members' Day at Fairchild Tropical Garden, when plants are given free to members; many Palm Society members (who are also members of Fairchild) are attracted by this annual event.

*****

The fifth issue (March, 1970) contains the conclusion of the Howard article; he is collecting in Cuba and has adventures in Chiapas, Mexico. The cover features an account of monkeys used for harvesting coconuts and other palm fruits in Asia by T. A. Davis, Indian Statistical Institute, Calcutta. James Wright of San Diego provides "A Short Tour of New Zealand's South Island." Society president John Popenoe says that this issue has been more widely distributed than those previously and has resulted in inquiries from Dublin to the Seychelles; he hopes that many members will attend the Biennial.

Mrs. Roland Queneau, a Palm Society member from St. Croix, the Virgin Islands, recounts—in a letter to the editor—of a visit to Thailand, where (among other adventures) she had tea in her palace with Princess Chumbot, a Palm Society member, before exploring the princess's palm collection.

*****

June, 1970, was the sixth issue of *PALMS*. Its cover contains Palmographs by Dent Smith, some discon-

(Continued on page 23)

PALMS newsletter

(Continued from page 22)

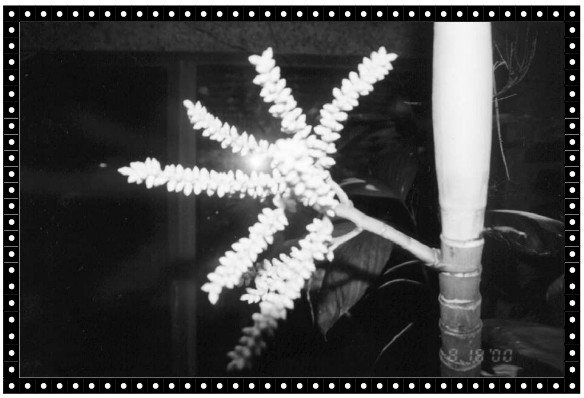
nected musings on palms, on cold-hardiness, on *Roystonea regia* growing like weeds in the lower Rio Grande Valley—at least until the next big freeze. Dr. U. A. Young documents the effects of three nights of freezing temperatures in January in Tampa; species and degree of damage are noted in detail. Elwood Bear writes of palms planted in a walled garden in Alexandria, Virginia: *Chamaerops humilis*, *Rhapidophyllum hystrix*, *Trachycarpus fortunei*. Perhaps significantly, two pages of the eight have full-page pictures—of a *Pigafetta filaris* and of an *Acoelorraphe wrightii*.

*****

The seventh and ultimate issue is undated but, from internal evidence, seems to have been published in the last quarter of 1970. Its major, almost the only, content is a long and interesting account by Lucita Wait of a post-Biennial trip in August, 1970, to Guyana and Venezuela. There is little more, other than a few pictures of the trip and one of Mrs. Wait working on seeds for the seedbank in the spare bedroom of her home. Dent Smith contributes a single-item Palmograph: Mr. William Manley's account, with picture, of a 25-foot *Washingtonia filifera* in Macon, Georgia.

*****

No eighth issue appears. The two final issues make clear how skimpy the content is. Except for a few regularly recurring names, there is little continuity. With a world-wide membership of, perhaps, more than a thousand, almost no one contributes cultural information. Such as there is, is usually provided by Dent Smith. These last issues have nearly nothing on California palm activities. PALMS *failed, in part, (I think) because it attempted something more logically done on the local or regional level, in chapter bulletins. Dent Smith's hopes for a down-to-earth, chatty, gardener's newsletter were never realized.*



Seedbank Report

By Mike Dahme

Donations for seeds of some 34 species, including those made at the September and October meetings, exceeded $1800 for the three months ended October 31. Special thanks go to first time seed donors Karen and Tom Barrese [for *Copernicia prunifera*], Arv Vaisnys [*Archontophoenix cunninghamiana*], Darin Yeatman [a variety of *Dioon edule* and *Archontophoenix alexandrae*], Sam Sweet [*Jubaea chilensis*], Steve and Cynthia Rael [*Dypsis decaryi* and Dictyos*perma album*] and Ruth Sallenbach for seeds of the clustering form of *Chamaedorea tepejilote* and the unique [for Florida, at least] form of *Caryota mitis* that grows in her Palm Beach area garden.

Continuing donors Scott Ward [seven species], Richard Lundstedt [t"Florida hybrid"], Greg Hodge [also for the "Triangle Palm" and *Acrocomia*], Lou Thomas [first time distribution of *Licuala grandis* and *Schippia*], Mark Grabowski [*Allagoptera* and single trunk form of *Chamaedorea tepejilote*], Bud Wideman [two species: see below] and Neil Yorio [*Carpentaria*] are likewise credited for supporting the chapter financially.

The Montgomery Botanical Center of Miami [host of the next chapter meeting, January 20] posted seeds of seven species to the chapter for distribution, which resulted in donations exceeding $250 for this quarter. The support of this institution has been extremely important to the success of the seedbank. Also, individuals such as Lou Thomas and Bud Wideman have had a significant impact, each of them contributing seeds that have greatly exceeded $1000 in donations. During this quarter Bud's *Arenga pinnata* plant showered the chapter with almost $500 [$1340 year to date, a record for distribution of a single species] worth of fruits, and they keep coming. Lou's seed donations for just the past year have exceeded $900, and since seed bank inception have been much more. Finally, Richard Lundstedt's continuing generosity with his hand-pollinated *Butia/Syagrus* cross seeds resulted in $430 in receipts this summer alone.

Left. Drymophleus beguinii *prior to anthesis.*

CYCAS TAITUNGENSIS: BEAUTIFUL AND FAST-GROWING

By Tom Broome

Cycas taitungensis, formerly known as *Cycas taiwaniana,* was originally described by Carruthers in 1893 and was based on a single specimen in the herbarium of Dr. Henry E. Hance. The only indication of a locality for the specimen was a label marked Formosa. This label was not in the handwriting of the man who collected the specimen. Because the type specimen of *C. taiwaniana* is housed in England, the taxonomists in Taiwan in the past have not had the chance to compare it with the plants growing in Taiwan. Ken Hill and C.J. Chen have found that the original plant is in a species group allied with C *hainenensis,* and comes from main land China. The plants that live on Taiwan are closely related to *C. revoluta.* According to the rules of nomenclature, the name of the mainland China plant is named *Cycas taiwaniana* and the name of the plants from Taiwan are called *Cycas taitungensis.* The main locality is in the Lu-yeh Valley, 19 km. northwest of Taitung City. This 300 hectare (741 acres) area has been turned into a nature reserve to protect the plants.

Cycas taitungensis is closely related to *Cycas revoluta,* but does not have leaflets with revolute (rolled back) margins. The leaf spread averages around ten feet wide, and has a reddish-brown fuzz on the stem apex. *Cycas revoluta* has on the average, a six foot leaf span, with more of a dark brown color to the stem. Both plants are very cold hardy. Tests have shown that the stems of the Taiwan cycad are more cold hardy, but the leaves are less frost tolerant than those of *C. revoluta.* One cycad owner, who lives in the panhandle of Florida, planted a colony several years ago. When a hurricane went though a few of years back, the entire colony was covered with two feet of salt water for three days, and no obvious damage has been seen, even after many vears.

If grown in the proper conditions *C. taitungensis* has to be the fastest growing cycad in the world. First, it is essential to grow these plants in full sun for fast growth. I have seen ten year old plants growing in the shade with no more than 4 inches of trunk. The owners say that these plants produce leaves once every other year. The second and most important trick is to realize that these plants crave fertilizer, more than any other cycad I have grown. When a high nitrogen fertilizer is applied three to four times a year, you can expect up to six flushes of leaves per year. I have turned a plant with a four inch caudex into a plant with 15 inches of clear trunk in 18 months. I have seen four month old seedlings, planted in the ground in a friend's nursery. In 4 1/2 years these plants had two feet of clear trunk, and male cones without the help of irrigation. One unique feature about this plant is that it produces leaves in January, unlike most cycads, which do not flush during winter months.

Cindy Broome stands next to prize Cycas taitungensis *growing right there in Polk City, Florida.*

Even though *C. taitungensis* is considered a rare plant, there are plants on the market. At least ten people in the world have more that 100 plants used for seed production. There is one nursery with more than a thousand female plants producing seeds each year. There are many nurseries selling these plants, and of course, there are usually plants available at the sales.

Cycas taitungensis is a plant that newcomers as

(Continued on page 25)

I have recently acquired about 120 offsets ranging in size from 2" stem to 7"stem. I have read your article "Never throw away a Cycad". And I have taken the steps of cleaning, soaking in Daconil, drying, and pruning tar. But on the base of most of the offsets, there is only a 1" hole where the stem attached. Will the roots only grow from there, or should I shave off a larger smooth area on the base to allow for a larger area of root growth. I also plan to plant them in pots with clean coarse sand. I am very interested in these plants doing well, and I would certainly appreciate any further advice. Thanks, Tim

My advice would depend on how good you are at rooting in offsets. By making a larger cut, you WILL produce more roots, and the offset will grow faster. You are also making a larger wound to get infected. With an easy species like Cycas revoluta *to root in, it is worth it to make the larger cuts. This procedure just makes the hardening in process more critical. Making sure that you don't give the offsets too much water will insure good success.*

Tom, I am wondering what is a *Z. Dominiquensis*? I have not seen the name in any literature or books or online. The one I have is a beautiful male plant, clumping about 4' high. It had that name when my wife purchased it in a 6 inch pot about 10 years ago.

This is a common name used in the trade for the Zamia*s that come from the Dominican Republic. This plant is the TRUE,* Zamia pumila*, and is the very first cycad ever to be described. There are some people who contend that all the* Zamia*s from the Caribbean area should all be* Z. pumila. *The name* Z. pumila *gets really confused because "coontie", the native cycad to Florida is also being called* Z. pumila. *In the trade here in Florida, this name is used by many people still, so the name Dominiquensis, or Domingensis is a way for people to know that the plant in question is the one from the Dominican Republic.*

CYCAS TAITUNGENSIS

(Continued from page 24)

well as experts can enjoy. With many cycad species, it's hard to tell if you are giving them proper care. This species will show even a novice, the results of proper care in a short period of time.

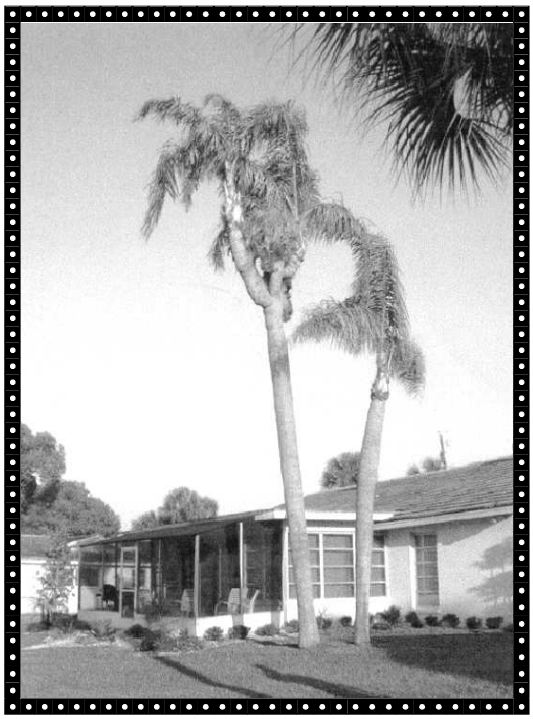
The U. S. F. Fall Sale

By Tom Broome

On October 14th and 15th, the CFPACS had their fall sale at the University of South Florida in Tampa. I think the fall sale was the best we have had since I first became in charge of the sales. After the first day, we all were looking at new records for first day sales. Many people came out to see the plants and just talk about palms and cycads. Some people just came out because they had questions about their plants that were already in their yard. We always have people helping to answer anyone's questions, and to give out information to new people. We handed out quite a few of our chapter applications that also have lists of palms and cycads that can be grown in our area, and the cultural specifics for all of these species. We also passed out many of the new IPS flyers.

I would like to thank Ray Hernandez for helping with the money on Saturday, and Mike Merritt for helping out on Sunday. I'd like to also thank Greg Hodge for helping Ray with the money and answering questions. Lastly I would like to thank all our vendors for making this a great sale. I would also like to welcome Steve Farnsworth, our newest vendor, who has just moved up from the Palm Beach area.

I think everyone who came out had a good time, and we look forward to the spring sale next year. If there is anyone who wants to be a vendor, try to get a hold of me before next spring.



Phil Stager sent these pictures of a distorted Queen Palm in St. Peter. What kind of injury could do this to a single trunked species? The palm is clearly healthy, although one (or more?) of the dwarfed crowns is not doing too well.

Chalk up another amazing palm sight in Brevard County: a 5-foot Pritchardia thurstonii *that is actually flowering! The flowerstalk droops to the left; the flowers may be seen in the lower left section of the the picture. Owner of this palm is Scott Ward of Indialantic. The genus* Pritchardia *is not abundantly represented in Central Florida gardens. The identity of this particular palm was confirmed by Don Hodel.*

From the Editor's Desk

Well, you are now revealed! The membership roster, enclosed with this issue, lists everybody, almost…. 268 members. Only one person asked not to be included; the request was honored. I was struck by how many members have America Online as their Internet service provider. Is there some kind of discount offered to people in our chapter? If so, I haven't heard about it. The roster also makes clear, as has not always been apparent, just how many members we have in the Tampa-St. Pete area and in Brevard County. Orange County—Orlando—also figures large. We have a fair number of members elsewhere in Florida outside our service area, as well as some folks elsewhere in the United States and abroad.

Dave Witt supplied the membership roster and your Editor, in an idle moment or two, assembled it in the format as seen. Dave has continued to supply new members' addresses up to the cut-off date of 15 November. Undoubtedly, there are some mistakes; contact me or Dave to correct these. I've added an appendix at the back of the roster, where names are listed by counties. Who else, you may wish to know, in your county belongs to CFPACS? Hopefully, we can exchange information more easily than has been the case before.

Hurricane season, mercifully, proved to be a bust. Many of us, however, did not get a normal amount of rainfall because of the southeastern drought. Indian River County is only 6 inches down, largely because of heavy rains in early October but, at best, rain has been fitful and occasional, rather than predictable and reliable. As we now go into our "dry" season, we can't really expect rain in a regular way until next May, at earliest. I can recall wet winters, however, when the snowbirds liked the temps but were unable to hit beach and golf course as frequently as usual. If we're lucky (and believe in Tinker Belle), maybe, oh maybe, we'll have good winter rains.

Am I about to become a Radio Personality? Perhaps. Indian River Community College, where I labor as an English teacher, has a public radio station, WQCS. Several weeks back, on a Sunday morning, I heard an interviewer questioning a Master Gardener in St. Lucie County. The Master Gardener program, as many of you know, is run from the state's extension agents' offices: knowledgeable amateurs are put through a course so that they can provide answers to ordinary questions about gardening practices. I had never heard of the interviewer before, but I called up the station manager to offer myself for interview about palms (and, with Tom Broome assisting, to venture a few basics about cycads). The station manager, however, saw an opportunity for something more. How about if I would do some palm spots? I knew what he meant. A geography teacher has a spot, run several times daily, in which he gives clues, facts about a country or state, and asks the listener to identify it. The person who runs the college planetarium has regular daily spots about astronomy. One of my departmental colleagues does spots on film history. And, naturally, the business folks provide spots on how to have happy employees, etc.

Now, I'm always ready to proselytize for palms (and, with Tom's help, for cycads). The station manager wanted 30 spots—to begin with-- to make it worth his while. Each one, I found out, cannot run more than 42 seconds; the other 18 seconds are devoted to the preliminary announcement of who I am and a closing statement. What can you say in 42 seconds? Not a great deal. My first attempt at writing one, I timed at a minute and a half. It works out that whatever I can say, pretty fast, about a half page, gets just under the deadline. I've written 50 spots, now in the process of approval by three different administrators.

Another problem, not helpful to the ego: correctness. When I give my slide show to 49 ladies in a garden club, if I make some error, none of those present is likely to catch it. WQCS, however, is heard from West Palm Beach to just north of Melbourne, a distance of possibly 110 miles. Within that range, especially in Palm Beach County, are some very knowing listeners who will nail my hide to the wall should I make any slip whatsoever. If I'm wrong, some Beloved Members will let me know, right? I've recovered from my gaffe about the *Mauritia flexuosa* at Ruth Sallenbach's and am ready to meet the challenge of new errors. At the moment, I'm ready to roll. All the spots are very simple commonplaces aimed at those totally unknowing about palms.

Richard Moyroud, owner of Mesozoic Landscapes

From the Editor's Desk

(Continued from page 27)

in Palm Beach County (and a member of that chapter) gave an excellent presentation on "The Palms of Florida" at the Eugenia Chapter of the Florida Native Plant Society in Vero Beach on 16 November. Especially interesting was his point that palms with silver on the leaves (*Coccothrinax argentata* and *Thrinax morrisii*, in particular) use this coloration to deflect excessive heat and light.

Agricultural weather forecasters have been quoted in wire service reports in state newspapers as believing that an unusually bitter winter awaits us. They attribute this to the fact that *El Niño* and *La Niña* are no longer in effect to avert hurricanes and cold weather. Let us hope that they are as wrong as they have been in the past and that we are able to get through another winter without a bad freeze. Those of you in cold locations are accustomed to having brief freezes; your palm and cycad collections reflect this necessity. But, no, we don't need, don't want a hard freeze (either singular or plural).

Don't forget the visit to Montgomery Botanical Center in Miami, on January 20! Parking is very limited there, so carpooling and/or vanpooling is required. For more info, contact any Board member. (See your roster!) Of course, you can also look at the officer list in this issue.

MERRY WARM CHRISTMAS, WARM HANUKKAH, WARM KWANZAA! HAPPY WARM (WINTER) NEW YEAR! May we all, people and palms and cycads, be healthy and happy in 2001.

John Kennedy

A New Member

Add to your enclosed roster a new member who joined after the 15 November cutoff date.

He is **Dave Collins**
115 Buchanan Rd., S. E.
Winter Haven, FL 33884
(863) 326-1600
davecollins@villagerealtywh.com

Dave has become CFPACS's 268th member. And, of course, he goes on the county list under Polk.

Board Minutes, Valkaria, 9-29-2000

The third quarter board meeting was called to order at 9:00 at the residence of Frank Brown. All board members were present, except for Dave Witt.

No minutes were read from previous meeting, since it was at the Palmfest.

Upcoming meetings were discussed. The fourth quarter meeting is at Hersh Womble's Oct. 28.

Montgomery Botanical Center meeting as an out of area meeting, Jan. 20, 2001, with the Palm Beach chapter.

The tentative dates for the next meetings are March 10, June 9, September 8, with places to be named later.

The upcoming plant sale at the University of South Florida was discussed. It is Oct. 14-15.

The $500 grant to Dr. Henderson was discussed. He is back from a trip to Panama. He agreed to a talk to our society and seed donation from his trip.

The treasurer's report as done by Mike Merritt is as follows. Income for the period of March 11 to Sept. 9 which included seed sales, membership dues, donations, and plant sales totaled $5,928.12. Expenses from the same period, which included grants to Montgomery Botanical Center and Dr. Henderson, and publication of *The Palmateer*, were $3,955.49. A net income of $1,972.63. The endowment fund, which is a front load mutual fund of $10,000, had a $9,456 value at the time of purchase. It has now grown to $10,068.

The Editor's report was done by John Kennedy. He had some ideas for articles for the next *Palmateer*. They included articles on favorite palms, wrong palms, critters, and even the biggest mistakes.

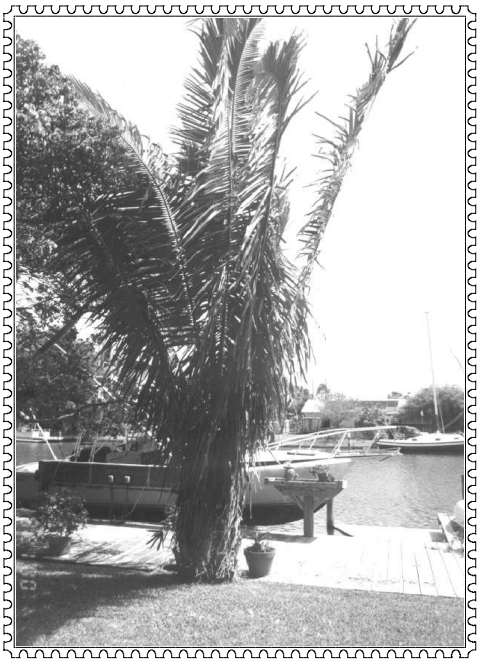
A published membership roster was also discussed. It was agreed to proceed with it. It was still undecided

(Continued on page 30)

Florida Exotic Pest Plant Council

No word yet on any further action by FLEPPC to de-list any of the three palm species placed in Category II as potential disrupters of the native ecology: *Livistona chinensis*, *Phoenix reclinata*, and *Ptychosperma elegans* . My attempt to discover the criteria and evidence presented for listing resulted in no firm information. I have heard, however, that the Florida Nurserymen & Growers Assn. (FNGA) is assisting FLEPPC in the development of standards in this area.

—John Kennedy



A pair of Brevard-oddities. . . Left, Attalea butyracea. *Right,* Corypha utan. *Both are growing in Cocoa Beach at the former residence of seedsman John Brudy. What is it about the barrier island in Brevard County? Obviously, it's a highly favorable microclimate. These two palms have clearly been in the ground for quite some time. Now, where's the* Pigafetta filaris*? (one at least 30 ft. high!)*

Majesty Palms in Fort Pierce

Downtown Fort Pierce is right on the Indian River. Over the last few years, the once decayed downtown has been gentrified. Numerous interesting and good restaurants have sprung up there, along with a recently built, large and handsome St. Lucie County Public Library. Paralleling the shore of the Indian River is a street, two blocks long, called Melody Lane.

A few years after the Great Christmas Freeze of 1989, someone in the city government (who?) had the great idea of installing Majesty Palms, *Ravenea rivularis*, along Melody Lane to take the place of the coconut palms that had died there. Roughly 30 were planted in the strip between the sidewalk and the street. The waters of the Indian River lagoon are about 8 feet away. At the time these palms were installed—in small landscape size—none of this species had been planted in public places anywhere in the area. *Ravenea rivularis* was just becoming available at Home Depot, Lowe's, and other such places.

A visitor, surveying the Majesty Palms maybe two years after their installation, wondered what was wrong. Few looked healthy. Their trunks seemed pitted with numerous small spots. Was something eating them? Was this caused by the brackish water of the Indian River splashing them? Was it nutritional, a lack of necessary trace elements? At this time, the palms were 6 to 8 feet tall, big enough to have visual impact.

Subsequent occasional visits to the palms over the next several years showed gaps in the long line: individuals had been removed. The survivors were larger but just as unhappy looking as before.

Just before Thanksgiving this year, while giving a tour of Fort Pierce palms to a local woman newly enthralled, we went to look at the Melody Lane Majesties. More than half were gone. While originally close to the same size when planted, only a few had put on height— to 10 feet of trunk—others seemed almost the same size as five years ago. The leaves of all the palms were a pale, pale green.

Even more dismaying is what had happened to the trunks. These were covered with gashes, initials, carved hearts, and other damage of the kind usually perpetrated by kids. And, of course, none of this would heal. The palms were not only sickly but also ugly and unsightly.

Now, of course, many area subdivision entrances and public buildings are graced with newly installed Majesty Palms. An unresolved question, aside from their maintenance and their ultimate cold hardiness, may be what future *Ravenea rivularis* has in public plantings.

--John Kennedy

September Board Minutes

(Continued from page 28)

how to do it, whether to do it in *The Palmateer* or separately.

A CFPACS insignia shirts, auto tags, hats, shirts, etc., was discussed. An artist will be asked to come up with a logo for the CFPACS. Prices and different items were also discussed.

A donation of palm and cycad books to libraries was also brought up. It was discussed on where to get the books. (Since that meeting Tom Broome has purchased nine books online, at a great price, for donations.)

The FLEPPC listing of palms was also brought up. It is the invasive plant list. It was found out that if the plant can reproduce in the wild, it is a potential invader. The list is only potential invaders, not prohibited plants. All palms are on category 2, which means potential.

Membership benefits were also talked about. The benefits of CFPACS should be clear. They include getting in the seedbank, the plant sales and auctions, and *The Palmateer*. It should be in the next *Palmateer*.

A motion was made and passed that only members of the CFPACS will be able to bid in the auction held on Sept. 9 in the Lundstedts' garden.

It was agreed to amend the by-laws to add clear membership benefits and let the board vote by e-mail.

A board of directors' calendar of events handbook was also brought up. It would be a record of what each board member did.

A motion was made and passed for $40 to get a file cabinet for the treasurer.

--Chuck Grieneisen, Secretary

With nothing are we so generous as advice.
--LaRochefoucauld, Maxim #110

Fourth Quarter Board Meeting Minutes, 10-28-2000

The fourth quarter board meeting was called to order at 9:00 at the residence of Hersh Womble. All board members were present except for Charlene Palm.

After reading of the third quarter meeting minutes the next meetings were discussed. The next meeting is the out of area meeting at Montgomery Botanical Center on January 20, 2001. The other meeting dates of March 10, June 9,and Sept 8 were agreed upon and assigned with places to be named later.

An informal treasurer's report was that we made $1,100 at the last meeting's auction and $400 at the USF plant sale with roughly a $14,000 balance. But the endowment fund is down to about $9,400.

The membership roster was complete and should be in this issue of *The Palmateer*. Our editor, John Kennedy, is now preparing short radio spots (42 seconds) about palms and has written many.

The Florida Exotic Pest Plant Council (FLEPPC) is developing criteria for removing Chinese Fan Palm, which they have listed as a potential invader.

The CFPACS logo will be designed by member and artist Jerry Hooper. After selecting the design from a few samples, the insignia, bumper stickers, t-shirts, etc., will be available.

The first of our books for donation , *Palms Throughout the World*, was brought for distribution to local libraries. **The board** of directors' calendar of events handbook is still proceeding.

Nominations were made and passed that Jerry Hooper gets an honorary 1 year membership for his artwork. Also that Bud Wideman gets a lifetime membership for his extraordinary seed contributions.

The Cycad Society is also starting chapters soon and affiliation was discussed.

Dave Witt was nominated for the upcoming presidential election. Entering a display in the Florida State Fair was also discussed.

A motion was made and passed to send flowers to Jules and Betty Horwitz on learning of Betty's cancer.

Karina Veaudry, president of the Friends of the UCF Arboretum, made a presentation to the board. She said they are going to start building a state of the art facility with a world class collection of cycads. She asked us for our input on it. She asked for CFPACS financial support to participate in a cycad collecting trip to South Africa for the arboretum. The board expressed its informal support for the arboretum and requested Ms. Veaudry to submit a written proposal for financial assistance.

--Chuck Grieneisen, Secretary

Central florida palm & cycad society
The Board

RetiringPresident
Neil C. Yorio
211 Wimico Drive
Indian Harbour Beach, FL
32937
(407) 779-4347
neil.yorio-1@ksc.nasa.gov

Secretary
Chuck Grieneisen
2450 Simmons Road
Oviedo, FL 32765
(407) 359-6276
chuckfg@mpinet.net

Treasurer
Michael Merritt
1250 Bee Lane
Geneva, FL 32732-9172
(407) 349-1293
(407) 349-2924 FAX
mmerritt@iag.net

Immediate Past President
Tom Broome
9128 Golden Gate Blvd.
Polk City, FL 33868
(941)984-2739
cycadjungl@aol.com

East Vice President
Charlene Palm
220 Ocean Spray Avenue
Satellite Beach, FL 32937
(407) 777-2046
cgpalm@worldnet.att.net

Central Vice President
Marilyn Bachmann
9016 N.W. 64th Terrace
Gainesville, FL 32653
(352)378-6847
mdbach@aol.com

West Vice President
Ray Hernandez
4315 W. San Juan Street
Tampa, FL33629-7703
(813) 832-3561
SubTropicOfCancer@hotmail.com

Appointees

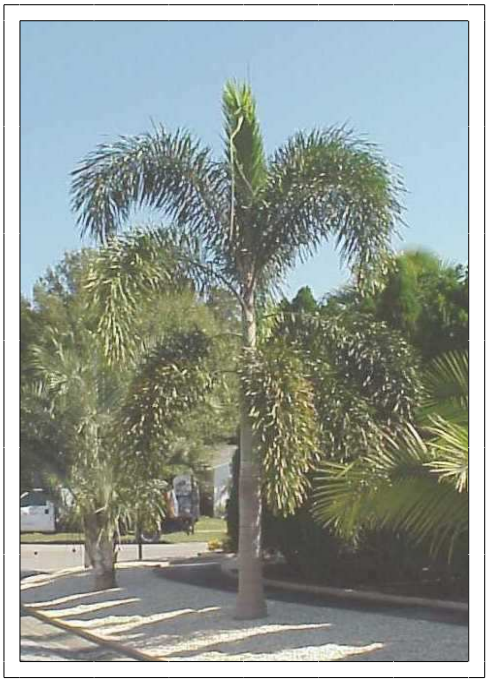
Acting Membership Chair
Mark Van Antwerp
4645 Canterbury Drive
Land O'Lakes, FL 34639
(813) 968-3003
mvanantw@parinc.com

Editor, *The Palmateer*
John D. Kennedy
3225 13th Street
Vero Beach, FL 32960-3825
(561) 567-9587
jkennedy@ircc.cc.fl.us

****

CFPACS Seedbank
Mike Dahme
Box 89
Grant, FL 32949
(321) 724-8417
(321) 724-8417 FAX
palmyra@brevard.net

"ZONE 9B JEWELS"



By Jerold Crawford

I have included several pictures of palms that I have taken in the Tampa area. I like to call these "Zone 9B Jewels."

These are palms we don't see that often here in western Florida, except at the beaches. I can present a little history of each palm.

The first one (at left) is a Foxtail Palm (*Wodyetia bifurcata*) on the parking area of my property in North Tampa. It is about four years old and has been in the ground for three years. It has been to 28 degrees two winters in a row with minimal leaf burn. It puts out a new leaf every month.

The second one (above, right) is a Teddy Bear Palm (*Dypsis lastelliana*) in a subdivision in North Tampa. The owner said it has been in the ground for two years with only minimal leaf burn.

The third picture (above, left) is a Royal Palm (*Roystonea regia*) located three houses away from the Teddy Bear Palm. There is another Royal with it that

(Continued on page 33)

Groveland meeting

(Continued from page 2)

house—and almost as big--was the site of the Board meeting. A local watercolorist, Ruth Wood, exhibited for sale lovely pictures and prints of palm details. She donated one large framed picture to an auction for benefit of our chapter. The highest bidder turned out to be Hersh Womble. Why are we not amazed?

The serving tables for lunch were set up in the garage. Treasurer Mike Merritt, of course, took the money. (The serving line was manned, you see, by luminaries of CFPACS.) The Editor offered slices of beef for sandwiches; to his right, our president, Neil Yorio, offered pork. Beyond Neil, secretary Chuck Grieneisen, presided over the fried chicken. At the end of the line, Central vice president Marilyn Bachmann dished up potato salad. Our hosts provided the beverages: iced tea, soda, beer. No one went hungry and a few (no names) came back for seconds and thirds.

Perhaps the central event of the day for many participants was the palm and cycad sale. Quite a few members brought plants, some as donations, others as splits with the chapter. Among the miscellaneous non-palm, non-cyad offerings was black bat flower: pretty, houseplant leaves, with a small oblong flat black flower that looked as if it had died.

As is usual on these occasions, all departing vehicles seemed to be full of swaying fronds. Needless to say, a good time was had by all. Good chat, good company, good palms.

Zone 9B Jewels

(Continued from page 32)

is not doing so well, but this one is growing great. They have been in the ground for about two years with minimal freeze damage.

We are starting to see a number of people getting brave and planting coocnut palms here in Tampa. I have seen several large ones which are bearing fruit.

No, you can't see who it is. But the Editor knows: noted Aussie palmperson, Dave Hopkins, investigates Arenga caudata *from very close up in Centenary Park, Cairns.*

Betty and Jules Horwitz were expected to return to their home in Lakewood Park, Fort Pierce, on December 2. If you'd like to send a card, consult your membership roster for their address.

AUCTION DETAILS

(as e-mailed by Mike Merritt, esteemed Treasurer)

CFPACS netted $1,305 at the auction. A rough count from the auction sheet tabulated during the event by Charlene Palm (using a form prepared by yours truly) suggests that 97 palms and cycads were sold (by auctioneer Neil Yorio), also several packets of seeds, about 100 items all told. There were 28 successful bidders (also from the auction sheet), buying from one to 10 items each. I accounted for two of the MBC items, one *Attalea brasiliensis* and a pot having two seedlings of the cycad *Dioon mejiae.* Your sharp-eyed critic was there and bought three items. The auction form, which separates bids out by names of individuals, was a success, and made possible a quick wrapup at the end.

One starring episode was John Bishock bidding against himself, them being "spanked" and ejected from the auction area by Faith. Would have made a beautiful photo. He was back at bidding moments later.

Dave Witt for President: Candidate's State-

My name is David Witt, I live in Orlando, Florida with my wife Cindy and our four school age sons. Most current members of CFPACS either know or know of me, and some of you don't, for now I'll bypass which side has the advantage.

Barring any missing ballot boxes I plan on becoming the next president of our local chapter. I have previously served as our central region's VP for two years (you guys all remember the fun we had watching Larry Noblick's slideshow and failing Scott Zona's nomenclature quiz, right ???) The past few years I have been our chapter's Membership Chairman, keeping our roster updated, recruiting unsuspecting or long lost palmaphiles into the fold, basically just spreading the gospel as it were. I can also be found on the Internet, adding items to our chapter's website (could use a little help there), answering some questions on the email lists or the I.P.S.'s website message board, and selling palms at the Leu Gardens sale in the Spring.

During the past four years our chapter has undergone a tremendously positive restructure and it is growing by leaps and bounds (we now can count nearly as many paid members as we had free members from back then).

The general public's fascination with palms & cycads is also growing exponentially something we as a chapter can be a big part of. With the explosion of the Internet and other mass communication tools it seems the world has shrunk a bit - more and more species and seeds are available than ever before, and if you think about it we are only on the cusp of this particular "hobby".

Hopefully, as the next President I can help lead our chapter into the coming times by organizing worldwide contacts and/or suppliers to cater to this "sickness" of ours, increase the central Florida public's awareness of our existence and, most importantly, demonstrate to them what wonderful additions to the landscape that palms and cycads can make.

Each member can truly be an ambassador for our chapter and the plants themselves. If you're ever in O'town, look me up.

[Dave doesn't mention, modestly (of course) , that he is the current president of the statewide umbrella organization, PACSOF. That's the Palm and Cycad Societies of Florida. What he is now in the process of organizing is next year's PalmFest, of which our chapter is the sponsor.
In addition, he has a particular interest in cold hardiness and has written articles for The Palmateer *about palms in*

That's a grove *of* Normanbya *growing at Scott Ward's in Indialantic. Don't five qualify as a* grove*? It's these barrier-island Brevardian show-offs, again. We won't mention Scott's flowering* Pritchardia, *which is pictured elsewhere in this issue. Folks who live on the mainland 60 or 70 miles south, we aren't going to be jealous because we can't grow palms that are happy, maybe in Hawaii or Dade County, or somewhere. Right?*

The Central Florida Palm & Cycad Society
Requests the honour of your membership
Only $10 for one year, $25 for three years
We won't think you're strange if you wish to talk to like-minded folks crazy about palms and cycads.
We believe, unlike many others, that lawns are made to be minimal, the space filled more interestingly.
Just fill out the form below.

Please print

Name_____
Street_____
City_____
State,
Zip_____
Email_____

Mail check made out to CFPACS to:
Acting Membership Chair
4645 Canterbury Drive
Land O'Lakes, FL 34639

Do you know someone interested in joining
THE INTERNATIONAL PALM SOCIETY?

The International Palm Society
P.O. BOX 1897
Lawrence, Kansas 66044-8897, U.S.A.
Fax: 785-843-1274

Membership is accepted on a calendar year basis. New members' dues received after October 1 will be applied toward the following year unless otherwise specified by the applicant. Members for the current year will receive all issues of the year's *PALMS*, formerly known as *PRINCIPES*. Please indicate your preference below:

☐ Current Year ☐ Next Year ☐ Both Years

NAME _____ DATE _____
ADDRESS _____
CITY _____ STATE _____ ZIP _____
COUNTRY _____ TELEPHONE _____
—PLEASE PRINT—

2000 MEMBERSHIP CATEGORIES

	One Year Membership
☐ Individual	$35.00
☐ Family	45.00
☐ Library	40.00
☐ Commercial	45.00
☐ Friend	45.00–99.00
☐ Supporting	100.00–499.00 a year
☐ Life	500.00
☐ Benefactor	2500.00

☐ DIRECT AIRMAIL DELIVERY
to non-USA addresses is an extra $28 per year
(Note: Airlift delivery to most non-USA addresses is included in dues and is faster than surface delivery, but slower than Direct Airmail.)

☐ Payment Enclosed ☐ VISA ☐ MasterCard
Card # _ _ _ _ - _ _ _ _ - _ _ _ _ - _ _ _ _
Expiration Date __/__ Signature _____
NOTICE: Except for credit card charges, payment must be in USA dollars and payable on a USA bank.
Dues may be paid on the IPS website: www.palms.org

CFPACS BALLOT

For President (January, 2001-December, 2002)

Check One:

_____ **David E. Witt**

_____ (**Write-in candidate, print name**)_____

Mail to:
Mike Dahme
Box 89
Grant, FL 32949

Must be received by January 10, 2001

A dramatic picture of wind-sculpted Chamaerops humilis *on the road to Marrakesh, Morocco. This clump has escaped the attentions of sheep that have kept most other palms of this native species as mere scrub plants. (Photo by Peter Maycotte)*

The Palmateer
Central Florida Palm & Cycad Society
3225 13th Street
Vero Beach, Florida 32960-3825