Palm Beach Palm & Cycad Society

Affiliate of the International Palm Society

Monthly Update July 2013

UPCOMING MEETINGS

July 3, 2013

7:30 p.m. General Meeting
Speaker: Craig Morrell
Subject: Fixing Palm Culture Problems - In Ground and In Containers

Please bring problem plants and damaged fronds for discussion.

JULY FEATURED AUCTION PLANTS

Arenga westerhoutii
Allagoptera caudescens
(formerly *Polyandrococos caudescens*)
Licuala grandis
(See photos on page 8)

INSIDE THIS ISSUE

Palm Beach Palm & Cycad Society
2013 Officers & Executive Committee

Tom Ramiccio, President (561) 582-5915
Don Bittel, Vice President (772) 521-4601
Ruth Lynch, Secretary (561) 312-5046
Ingrid Dewey, Treasurer (561) 3300
Charlie Beck, Director & Editor (561) 963-5511
Steve Garland, Director (561) 478-0120
Terry Lynch, Director (561) 582-7378
Tom Whisler, Director (561) 627-8328
Betty Ahlborn, Immediate Past President
(561) 798-4562

Appointees

Charlie Beck, Librarian
Ruth Lynch, Refreshment Chairman
Brenda Beck, Web Master and Historian

JUNE THANK YOU

Food:	Robin C., Susan Cioci, Ingrid Dewey, Ruth Lynch, Ed Napoli, Tom Ramiccio, Bonnie Wilburn
Plant Donations:	Benjamin Crosby, Steve Garland
Door:	Doyle Cochran

DOOR PRIZE WINNER

Linda Walker	Betrocks Essential Guide to Palms

FEATURED THIS MONTH: *Zamia splendens*

by Charlie Beck

Zamia splendens is a small cycad native to eastern Chiapas, Mexico. It grows in heavy shade at elevations of 2,000 – 4,900'. Rainfall in its native habitat averages 79" annually with most of the precipitation falling in the summer months. It was officially described in 1984 by Dr. Bart Schutzman. The species name splendens means shining or brilliant.

Zamia splendens does not take up much space in the garden. It typically holds only one or two leaves. Occasionally some plants may produce side shoots and plants then hold many more leaves and are much more impressive. But don't let the low leaf count deter you from adding this gem to your garden. Even plants with two leaves can be very attractive. Most leaves emerge with a red-brown color that really stands out in the garden (some specimen plants have green emergent leaves). The leaflets slowly harden off and turn a glossy green and become quite stiff. I recommend grouping many *Z. splendens* together to increase the visual impact. The stems are subterranean and typically grow 10' long and have a 2' diameter. Obviously this cycad will never outgrow its space in the garden.

In cultivation vigorous plants can have fronds which measure up to 44" long including 20" long armed petioles. Typically plants are not quite as large. Each frond can hold 4-10 pairs of leaflets which measure up to 10" long and 3" wide. Female plants usually grow 1 or 2 cones which are shaped almost round or cylindrical. Male plants grow 2-7 cylindrical cones per crown. Tom Broome, President of the Cycad Society, reported that pollinating more than one cone per plant may be too stressful to the plant. He once hand pollinated 3 female cones on a plant. The energy demands of producing seeds on three cones depleted the plant to such an extent that the parent plant died. Tom recommends removing all but one cone when pollinating this species. Dale Holton echoes this advice.

We planted eight *Z. splendens* in our garden. Plants are 7-17 years old and all have flourished. Plants have survived winter low temperatures and periodic flooding. Two female plants have a cluster of seedlings growing below them. Obviously there is a pollinator in our garden helping out with reproduction. Dale Holton reported that *Z. splendens* readily crosses with *Z. variegata*. If so, the foliage will have the characteristic speckling of *Z. variegata*.

Although not commonly found at nurseries, a limited number of plants are available at Holton Nursery. Dale Holton hand pollinates *Z. splendens* from his collection and usually stocks this cycad. If I were starting a cycad collection, I would start out obtaining several *Z. splendens*. The glossy wide leaflets are really distinctive and the plant flourishes in our sandy soil in Palm Beach County.

(See photos on page 3)

Zamia splendens

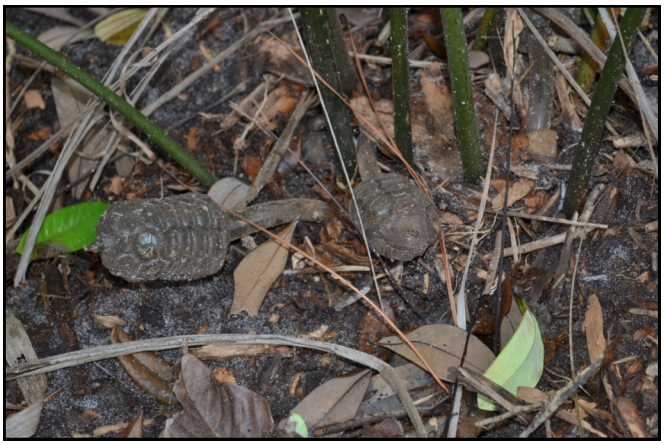
Zamia splendens with multiple offshoots
(Photo by Charlie Beck)

Zamia splendens seedlings beneath mother plant in the Beck garden.
(Photo by Charlie Beck)

Zamia splendens leaf detail
(*Photo by Charlie Beck)*

Zamia splendens typical sized plant
(Photo by Charlie Beck)

Zamia splendens with new growth growing in Dale Holton's garden.
(Photo by Dale Holton)



Zamia splendens female cone
(Photo by Charlie Beck)

Fabulous Finds at Fairchild


Licuala peltata var. sumawongii


Orania palindan


Archontophoenix tuckeri


Metroxylon warburgii


Neovetchia storckii


Pseudophoenix ekmanii


Livistona benthamii

Recent Fairchild Tropical Botanic Garden Trip

By Charlie Beck

On a recent trip to Fairchild Tropical Botanic Garden I discovered some interesting palms. Some of these palms were new finds for me and others were old favorites.

At the bottom of the rainforest area is one of my all time Fairchild favorites, *Orania palindan*. Every time I visit FTBG I always make time to visit this palm. This specimen nearly died after the record cold winters of 2009-2010 but it has fully recovered. It produces copious amounts of nonviable seed. I've wanted this palm for my garden for a long time but have not yet found one for sale. Kathy & Lew Burger has two specimens of this beautiful palm so I know it can be successfully grown in Palm Beach County.

I always marvel at the size of the *Licuala peltata var. sumawongii* at FTBG. The giant specimen pictured is located in the lowlands behind the amphitheater. I wish we could grow them to that size in sandy Palm Beach County soil.

A few years ago Marshal Dewey donated trays of *Archontophoenix tuckeri* at one of our meetings at the Mounts Building. At that point I never saw a mature specimen but now I discovered one growing at FTBG. What a beauty it is!

FTBG has been successfully growing *Metroxylon* species for many recent years. An example of *Metroxylon warburgii* is pictured growing in the lowland area.

Fairchild's staff has been recently planting many *Neovetchia storckii* in the garden. A grove of this species has been planted in the lowland area. One healthy example is shown in the photo.

Pseudophoenix ekmanii is a slow growing palm in Palm Beach County but at FTBG it grows at a moderate rate. They are located in the palmetum beside the grove of *Attalea crassispatha*.

The silver Copernicia fallaensis located in the Palmetum is starting to gain height at a rapid pace and a double coconut was recently planted in the Rare Plant House.

(See photos on page 4 and below.)

Copernicia fallaensis

Lodoicea maldivica (double coconut)

Editors Note: The Palm Beach Palm & Cycad Society received permission to reprint this article that was published in the November 2001 Palm Report, a publication of The South Florida Palm Society

Palm Conservation

by Chuck Hubbuch
Director of Collections, Fairchild Tropical Garden
1998

Worldwide, human development of natural environments is leading to the rapid loss of more and more plant and animal species. While this is widely discussed, the issues are not adequately expressed in the news media, our usual harbinger of bad news. Vast areas have been converted to pastures, homes and other human uses, leaving a patchwork of habitat fragments. At the same time, it is clear that we do not know enough about the natural world to understand where this will lead. No one fully understands the complex interactions between the natural plants and animals, even within a habitat. I know, for example, that many problems have arisen in African game parks with the struggle to balance forage plants, herbivores, predators, scavengers and needs of neighboring people. They cannot forget things that most of us would rather not think about, such diverse issues like fire, poaching and vultures. At some level, similar problems affect natural area managers of even the smallest properties.

Although about one-quarter of the palm species are considered to be threatened at some level, scientific efforts specifically designed to conserve rare palm species are few and far between. This is true of plants in general. Conservation professionals tell us that it is much easier to raise public sentiment and dollars for the conservation of active, warm-blooded, fuzzy or feathered critters than it is for things such as plants and insects. When plants are conserved, it is often because the plant is part of the habitat of threatened birds or mammals. A lot of field work is still needed in the world of palms. Over 400 species are listed as having an unknown conservation status in the WORLD CONSERVATION UNION'S palm conservation plan. Of course, many of these poorly known plants are native to remote areas of the world. Some species are not well understood. For example, should Mexico's rare *Coccothrinax readii* be included under the name of commoner species, *Coccothrinax argentata*, as suggested by one author? Resolving these issues could keep palm researchers busy for years.

Unfortunately, the status of some palms is very well known. Looking upon the very last *Hyophorbe amaricaulis* in the world, at the botanical garden in Curepipe, Mauritius, is a sad moment indeed. It is a wild plant that grew in that spot before the botanical garden was developed. Although the possibility of tissue culture is being investigated, this *Hyophorbe* species seems likely to follow the dodo into extinction. The last wild *Dictyosperma album variety conjungatum* on Round Island, Mauritius, has a brighter future because it produces viable seeds. Reportedly, the Mauritian Wildlife Foundation has about a thousand *Dictyosperma* seedlings slated for reintroduction onto Round Island. Despite a severe genetic bottleneck, it seems that this palm has a chance to survive in the wild for many more years.

Madagascar offers a situation similar to the one in Mauritius. The IUCN's Red List of Endangered Plants includes 18 *Dypsis* species which are critically endangered or may already be extinct in the wild. Many of the other 100 palm species in Madagascar are threatened because they have been reduced to small, remnant populations in disturbed forests and grasslands.

In this hemisphere, the rarest palm is probably Haiti's *Attalea crassispatha*. The last count of mature and nearly mature individuals was 24. Thanks to the efforts of New York Botanical Garden, Fairchild Tropical Garden and a handful of concerned individuals, approximately 100 young plants are growing in cultivation today and several have been returned to Haiti. For this palm, the greatest problem is that its wild habitat is now gone. These few remaining "wild" plants are limited to the edges of pastures and fence rows.

In the United States, we have the Florida Key's locally endangered *Pseudophoenix sargentii*. A population of fewer than 20 mature individuals on one of the Keys bloomed to a population of over 100 individuals because of a scientific reintroduction program by Fairchild Tropical Garden and Biscayne National Park. Although this

(Continued on page 7)

(Continued from page 6)

program is still young, it shows great promise for the conservation of the local population. It may serve also as a model for similar projects with threatened *Pseudophoenix sargentii* populations in Mexico, the Bahamas, and the western Caribbean. In Hawaii, the National Tropical Botanical Garden is helping with conservation efforts to protect 23 species of *Pritchardia*, including 8 highly endangered species. As an example, only one mature wild plant of *Pritchardia munroi* remains on Moloka'i.

You may have noticed that all of these palms are native to islands. Island populations of plants and animals are especially vulnerable to competition from exotic plant and animal introductions, human disturbance, and even natural occurrences like cyclones. In the mountainous tropics, the situation is similar. Isolated mountain tops serve as islands of cool temperatures in a sea of lowland, tropical heat. The deforestation of a single mountain top may result in the loss of many species. With currently high levels of habitat destruction, however, even palms in forests of the vast Amazon basin are threatened by over-harvesting and habitat destruction.

Unfortunately, the issues of conservation are not easy ones to resolve. The problems are as complex as nature itself. Conservation plans, reintroductions and habitat restorations require careful scientific evaluation, time, and considerable resources.

Palm hobbyists sometimes get caught up in conservation issues. The demand for exotic seeds may be a blessing or a curse for a plant. If the living plant has a commercial value, it is more likely to be protected by the local population. Hobbyists who distribute seeds of rare palms may reduce the collecting pressures on wild populations. If every single seed is collected from a small wild population, however, that population is doomed. On the other hand, most seeds do not germinate in the wild. Collecting 25 percent of the seeds in a population does relatively little harm to the environment and gives collectors a good chance to establish a species in cultivation. Collectors should never collect plants from the wild, however, unless this is a genuine rescue operation in which the plants are in immediate danger of destruction.

At this time, simply planting a rare palm in your garden usually cannot be justified as conservation. Common problems with palm collections include hybridization and inbreeding. Scientists use plants without scientific documentation and records for reintroductions or other research in only the worse cases. Botanical gardens maintain high standards in records and documentation, and usually are more permanent than private collections.

Some people are putting their faith in science for solutions. They hope tissue culture and genetic engineering will solve our problems in the future. Others have suggested that colonization of other planets will relieve Earth's population pressures. Maybe this will happen, but I learned long ago that I have no ability to tell the future. I believe that we must stop wishing for a brighter future and accept responsibility for our actions today.

If a rare species is extirpated in the wild, every plant of that species that survives in gardens will become much more valuable to science. A new dam or road may lead to widespread destruction of a relatively common species. A rare palm may become relatively common if a new population is discovered or a taxonomic change lumps it under the name of a common species. For now, the best advice is to stay updated with conservation issues by reading the International Palm Society's journal, Palms, and try to avoid supporting illegal or unethical palm collecting. Grow the palms that you enjoy and those that succeed in your area, and share the seeds with friends and neighbors. If you want to support palm conservation, support botanical gardens and conservation organizations that focus on palms.

2013 Palm Beach Palm and Cycad Society Annual Picnic

by Charlie Beck

Ruth and Terry Lynch hosted our picnic on Saturday June 8. Rain was forecast later that day, so the garden tour began at 8:00 AM. We had a nice crowd of early bird palm and cycad enthusiasts arrive for the tour. Ruth & Terry did a great job leading us through the garden. There was a large assortment of palms and cycads to admire. This garden was so much more than just a collection of palms and cycads. They had one of the largest collections of tropical fruit trees that I have ever seen in a private garden. They had an extensive collection of butterfly plants which attracted a wide array of butterflies to the garden. Flowering trees and shrubs added color all over the garden. Many colorful crotons, cordylines and bromeliads where strategically placed for maximum effect. What a GREAT garden!

Unfortunately rain forced all of the attendees on to their large screened porch for lunch. There was plenty of room for all to enjoy the various platters brought by the participants.

The giant plant auction started with our auctioneer, Tom Ramiccio and assistant Steve Garlane, braving the rain outside with all of the bidders still inside on the porch. The rain eventually subsided and everyone joined Tom and Steve outside to bid on the plants.

Thank you Ruth and Terry Lynch for your hospitality!

Photos of July featured auction plants as grown in Palm Beach County.
(Photos by Charlie Beck)

Arenga westerhoutii

Allagoptera caudescens
(formerly *Polyandrococos caudescens*)

Group of *Licuala grandis*