



PRINCIPES

Journal of The Palm Society

January, 1979
Vol. 23, No. 1

THE PALM SOCIETY

A nonprofit corporation engaged in the study of palms and the dissemination of information about them. The Palm Society is international in scope with world-wide membership. All persons interested in palms are eligible for membership, and the formation of regional or local chapters affiliated with The Palm Society is encouraged. Please address all inquiries regarding membership or information about the society to the Executive Secretary.

PRESIDENT: Mr. Donn W. Carlsmith, P. O. Box 686, Hilo, Hawaii 96720.

VICE PRESIDENT: Mr. Paul A. Drummond, 9540 Old Cutler Road, Miami, Florida 33156.

SECRETARY: Mrs. Pauleen Sullivan, 3616 Mound Avenue, Ventura, California 93003.

EXECUTIVE SECRETARY: Mrs. Theodore C. Buhler, 1320 S. Venetian Way, Miami, Florida 33139.

TREASURER: Mrs. Ruth Shatz, 5901 Maggiore St., Coral Gables, Florida 33146.

DIRECTORS: 1976-80: Mr. Donn W. Carlsmith, Hawaii; Dr. John Dransfield, England; Mr. Paul A. Drummond, Florida; Mr. Myron Kinnach, California; Mr. Melvin W. Sneed, Florida; Mrs. Pauleen Sullivan, California; Mr. Ralph Velez, California. 1978-82: Dr. Byron Besse, Florida; Mr. Ernie Chew, California; Dr. Ian Daly, Australia; Mr. DeArmand Hull, Florida; Mr. Warren Dolby, California; Mr. Dial Dunkin, Texas; Dr. Harold E. Moore, Jr., New York; Mrs. Ruth Shatz, Florida; Dr. Merrill Wilcox, Florida.

ADVISORY COUNCIL: Mr. Nat J. De Leon, Florida; Dr. Walter H. Hodge, New York; Mr. Eugene D. Kitzke, Wisconsin; Mr. Dent Smith, Florida; Dr. U. A. Young, Florida.

PRINCIPES

JOURNAL OF THE PALM SOCIETY

EDITOR: Harold E. Moore, Jr., 467 Mann Library, Ithaca, N.Y. 14853.

ASSOCIATE EDITORS: Dr. John Dransfield, The Herbarium, Royal Botanic Gardens, Kew, Richmond, Surrey, England. Dr. Natalie W. Uhl, 467 Mann Library, Ithaca, N.Y. 14853.

EDITORIAL BOARD: Walter H. Hodge, Eugene D. Kitzke, Nixon Smiley, Dent Smith, P. Barry Tomlinson.

Manuscript for PRINCIPES, including legends for figures and photographs, must be typed double-spaced on one side of 8½ × 11 bond paper and addressed to the Editor for receipt not later than 90 days before date of publication. Authors of one page or more of print will receive six copies of the issue in which their article appears. Additional copies of reprints can be furnished only at cost and by advance arrangement.

Contents for January

More Palms than Pyramids: Egypt Has a Garden in the Nile	
Melvin W. Sneed	3
An Amateur's Adventures With Palms	
Thomas C. Kelly	13
Notes on the Foraging Behavior of a Leaf-cutting Ant on <i>Oenocarpus bacaba</i> in the Northwest Amazon of Colombia	
Michael J. Balick	26
Live Storage of Palm Pollen	
Robert W. Read	33
Regular Features	
Palm Literature	12
Classified	25
Palm Research	32
Pollen Exchange	35
News of the Society	36
Palm Society Bookstore	41
Letters	43

Cover Picture

A species of *Licuala* adorns a protected portion of the Fairchild Tropical Garden. Photograph by M. V. Parthasarathy.

PRINCIPES

JOURNAL OF THE PALM SOCIETY

(ISSN 0032-8480)

An illustrated quarterly devoted to information about palms and published in January, April, July and October by The Palm Society, Inc.

Subscription price is \$7.00 per year to libraries and institutions. Membership dues of \$12.50 per year include a subscription to the Journal. Single copies are \$1.50 each. The business office is located at **1320 S. Venetian Way, Miami, Florida 33139**. Changes of address, undeliverable copies, orders for subscriptions, and membership dues are to be sent to the business office.

Second class postage paid at Miami, Florida and at additional mailing offices.

Mailed at Lawrence, Kansas
March 26, 1979

More Palms than Pyramids: Egypt Has a Garden in the Nile

MELVIN W. SNEED

8107 S.W. 72nd Avenue, 113E, Miami, Florida 33143

It was 2:30 A.M., 19 August, 1977, when our flight from Malta, which had been delayed, hit the runway in Cairo. Departing earlier from Miami, we had revisited Kew Gardens, then flew on to Malta to see some of our family and friends there, thence to Cairo to satisfy a longtime curiosity. The archaeological attractiveness of Egypt notwithstanding, we also wanted to see its palms, the progenitors of which antedate the tombs and pyramids.

Recovery of our modest traveling gear, and processing, in the unbelievable confusion of the Cairo air terminal, plus finding reliable transportation were time consuming, and we registered in the Nile Hilton downtown about 4:30 A.M., but not before a discussion at the desk regarding the validity of our advance reservation.

We were in our room, and travel-weary, when an unmistakable buzz zoomed in. It sounded exactly like the fly that had greeted us earlier in the Cairo terminal. This nemesis had accompanied us on into the hotel; it never left us in Egypt!

Later that day we contacted acquaintances whose helpfulness was indispensable to our exploration of Cairo and environs. The three Great Pyramids and Sphinx abut the edge of the desert, across the Nile in Giza about ten miles from Cairo, and are partially visible from the upper floors of the hotel. There are no palms at the immediate site. To us, the Sphinx was rather surprising. Instead

of the gigantic, half-human, half-lion eminence usually portrayed in traditional photographs, it is relatively small and could be obscured by a few clusters of *Phoenix dactylifera*, if grown there.

The Nile is Egypt, and very little vegetation is found beyond irrigated reaches of the river. Egypt's almost 400,000 square miles embrace an area larger than Texas and Oklahoma combined, but less than five percent of it (along the river all the way from Abu Simbel to Alexandria) is in cultivation; the rest of it is the Sahara. There is virtually no rain. Cairo gets less than one inch annually! After living and traveling in the tropics for over a decade, in warm, moist air, we had difficulty adjusting to a hot and very dry intake.

So we weren't expecting to find any tropical rain forests or palms, which thrive in such environment. In fact there are no forests of any kind in Egypt, although going along we saw individual trees, clumps, and larger cultivations of *Phoenix* (mostly *dactylifera*) that seemed to defy the idea that a forest couldn't exist in Egypt (see Fig. 1). Of course, all the palms were near the reaches of the river.

Next day, we cabbed across the Nile again to the 70-acre Orman Botanic Garden in Giza, adjoining the Cairo University, where we called at the headquarters and were not only welcomed but given expert assistance in viewing the garden. Our arrival had been expected, thanks to arrangements that had been



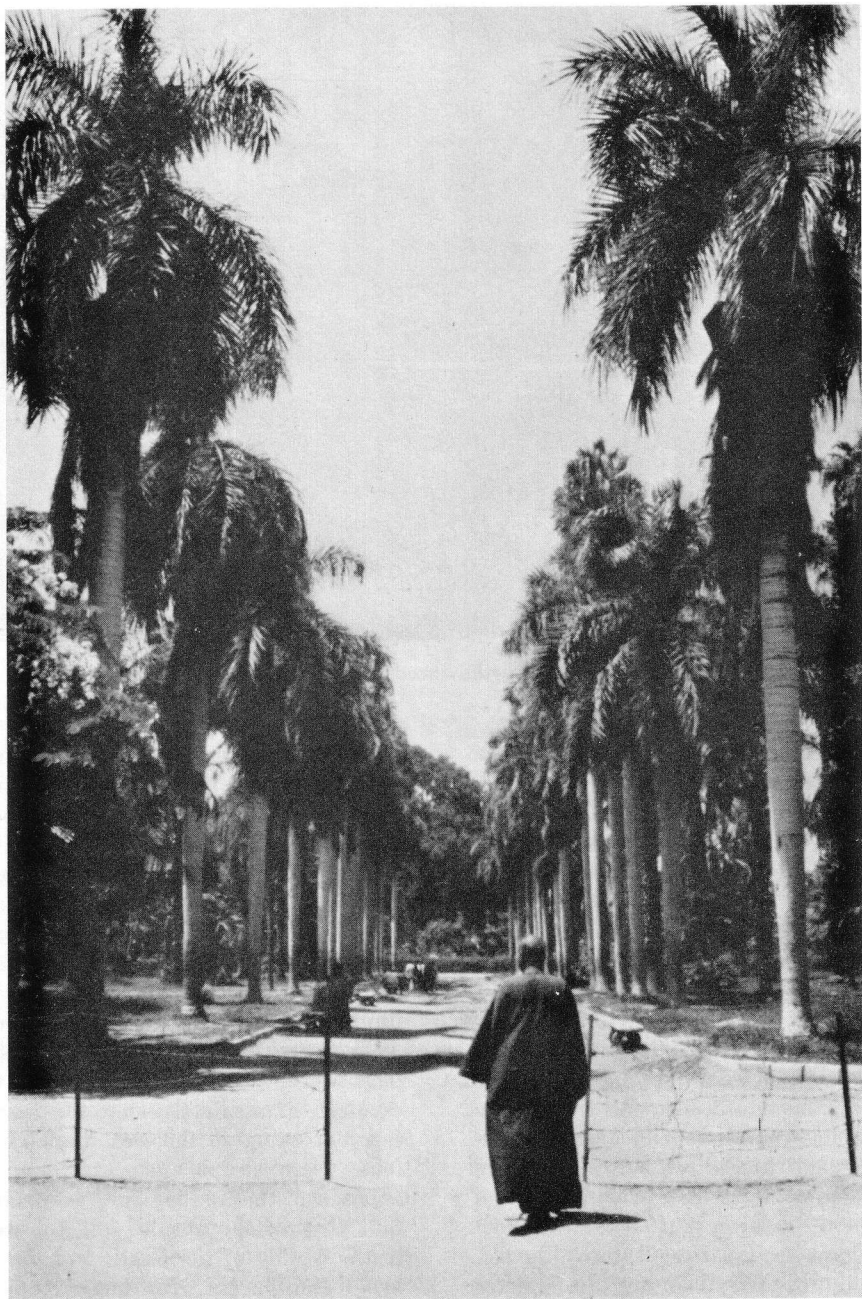
1. Dates galore! *Phoenix dactylifera* in Alexandria.

made by Professor Vivi Täckholm, of the University, with whom we had corresponded. Her works have been fundamental; her contributions and her interest in palms are treasured by members of The Palm Society (see *Flora of Egypt*, Vol. II, Bulletin of the Faculty of Science, No. 28, Cairo, 1950).

Unfortunately, Professor Täckholm had to be away from Egypt at the time of our visit, but Mr. Hosny Kamel, Director of the Herbarium, guided us on a tour of the Garden. There is a fine royal palm avenue (Fig. 2) as well as *Phoenix canariensis*, *Erythea*, *Washingtonia*, *Ptychosperma elegans*, *Latania*, and others (see Fig. 3). Returning to the Herbarium, we were given some coveted seeds, particularly *Hyphaene thebaica*, which we hoped could be established back in Florida, particularly in Fairchild Tropical Garden, where apparently this species has failed after earlier attempts.

We left our very helpful friends at the garden headquarters to go across a busy intersection and on through turnstiles into the zoological garden, nearby. Despite the paucity of beasts, which we weren't looking for, anyway, the zoo is a "must" for plant lovers. One part of it houses nurseries that supply the botanical gardens, as well as some of the government's landscaping operations. Many palms are cultivated in the nursery, and we toured all the plots under the expert guidance of Mr. Mohamed Farid Allam, the nursery's agricultural engineer.

The zoological garden seemed to contain as many palms as the botanic garden and many of them looked healthier. Going along a walkway we passed a very black, burnt trunk in a row of *Phoenix*. What happened? Our escort explained, "Birds nest in the crowns of these trees. Snakes go up the trees looking for the birds and their eggs. We set fire to the



2. Section of the royal palm avenue in Orman Botanic Garden, Giza.



3. Mr. Hosny Kamel, Phyllis Sneed, and Palms, Orman Garden.

trunks, burning the dead leaf bases, to get rid of the snakes!"

Unlike many avid palm-seed collectors, gardeners and date pickers don't like to take chances. Dates ripen in Egypt in August and September, the time of our visit, and various methods are used, including gun shots into the crowns, to make date harvesting a less hazardous occupation.

A day's trip to Alexandria, about 135 miles north of Cairo, brought us to the Mediterranean seacoast, with rows of resort hotels reminiscent of Miami Beach, and greater humidity. We visited local parks, saw streets lined with palms, and toured the botanic garden there, which for Egypt has a fair collection (Fig. 4). Also in this area we saw the greatest concentration of commercially grown date trees. The fruit clusters, full and heavy in the tree tops, often were encased in bags.

Back in Cairo we made arrangements

to fly up the Nile to Luxor and Aswan, where (besides the monuments, tombs, and temples) we hoped to see *Hyphaene thebaica*, which is indigenous there, and a place in the Nile called "Plant Island."

Circumventing some of the perpetual chaos in the Cairo air terminal, we took a domestic flight on Egypt Air Lines to Luxor, a trip of an hour and a half with impressive views of the Nile and desert expanse. Upon arrival, our two small bags were whisked away and we were escorted immediately onto an ancient ferry crossing to the west bank of the Nile. Here, steeped in perspiration and exposed to the midday sun, we explored the "City of the Dead," and the tombs in the Valley of the Kings and the Valley of the Queens. Nothing we can say here would enhance the antique grandeur of this west bank region. Its environs, and beyond, are desert. There are few living palms to be seen, but one concerned enough about their early exis-



4. Typical view in botanic garden, Alexandria.

tence might find rewards in the diligent study of carvings and paintings in the tombs.

In late afternoon, back across the river, we relaxed in the old Winter Palace Hotel, after a considerable climb up very grand staircases. (The elevator was not in service.) We adored the view of the Nile there, where the cloudless sunset silhouetted palms and river craft and reflected the vast desert expanse beyond the west bank (Fig. 5).

Early next day we departed the hotel for visits to Temples of Luxor and Karnak, a magnificent and awesome group. One could walk the relatively short distance but it's far more interesting to be transported by the traditional horse-carriage, which not only allows one to proceed at a higher elevation, for better visibility, but also imparts the feeling of stepping back into history. Notwithstanding our regrettable lack of Arabic, we managed to stall the procession long

enough for the author to capture the grandeur of it all, which was enhanced by a fine, small group of *Phoenix* in the background (Fig. 6). Such clusters of *Phoenix* were typical of the landscape in the Luxor area, as well as other places visited in Egypt, all of which were close to the Nile.

Egypt Airlines, with an efficient jet flight, took us on to Aswan. The short trip was spectacular, following the Nile, where one can see fertile lands stretching inland from the river wherever irrigated waters flow, and absolutely barren desert abutting the stream where irrigation has not intervened. We registered in the New Cataract Hotel, which we enjoyed even though we were there in August and the place is geared for winter months.

We were privileged to visit the High Dam and some of its precincts, which mean so much to the economy of Egypt. Perhaps it was too much to expect that the landscapers would have made more