

Indigenous Royal Palms in the Bahamas

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"*Roystonea regia* (H. B. K.) O. F. Cook, Royal palm, recorded from the Bahamas, is known to us in the archipelago only as a planted tree." This is the reference to royal palm in the Bahamas from Britton and Millspaugh's *Bahama Flora* (1920). Until now, the statement was thought to be true. Recently, a population of royal palms was discovered on Little Inagua, a rhombic island about seven miles on a side off the northeast tip of Great Inagua (Fig. 1). The island was never inhabited, and was cultivated only to the extent of grazing goats and donkeys by residents of the northeastern tip of Inagua in the last century. With the development of the solar salt industry on Inagua, all settlements disappeared but the main one at the southwest corner of the island at Matthew Town, and Little Inagua became once again isolated from the activities of man.

The third author spotted the royal palms on Little Inagua during an overflight in February 1973. Their presence was confirmed by all three authors in June 1974, again from a plane (Fig. 2). The palms are restricted to the northwest quadrant of the island, and number between 30 and 40 individuals. They are restricted to sinkholes which presumably are somewhat moist as contrasted to the surrounding exceedingly dry scrub. Rainfall records for Little Inagua are unknown, but parts of Inagua for which records are maintained receive generally

less than 20 inches per year. That the sinkholes are refugia for moisture-requiring plants is evident from the associated *Sabal* species in the sinkholes with the *Roystonea*: sabals are always indicators of somewhat wetter soils in the southern Bahamas. There are from one to eight royals per sinkhole.

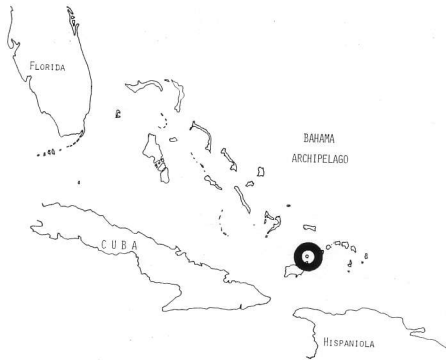
It was not possible, of course, to determine the species of *Roystonea* from the air, but we believe that they are *R. regia*, disjunct from Cuba which is 110 miles to the southwest. (All distances are checked according to "Tactical Pilotage Chart J-26B," an air pilot map covering the southern Bahamas.) We cannot account for the presence of royals on Little Inagua and their exclusion from other islands of the southern Bahamas and the Turks and Caicos Islands, especially Inagua itself. Until we are certain of the species, we cannot speculate on the point of origin. Hurricanes or birds are possible vectors (Guppy, 1917). They could, of course, be relics from wetter periods of the past, but there is no evidence presently available to suggest that these islands were ever more mesic.

How is it that these palms were not discovered before? Only two botanical expeditions have ever visited Little Inagua in the past, that of George V. Nash and Norman Taylor in October, 1904, and that of Percy Wilson in 1907. They landed by boat at the only good anchorage which is Moujean Harbor, two to three miles to the west of the southeast corner of the island. Nash (1905) reported that they then visited Northwest Point by boat, and also made a landing at the midpoint of the west shore to examine a *Coccothrinax*. He reported a

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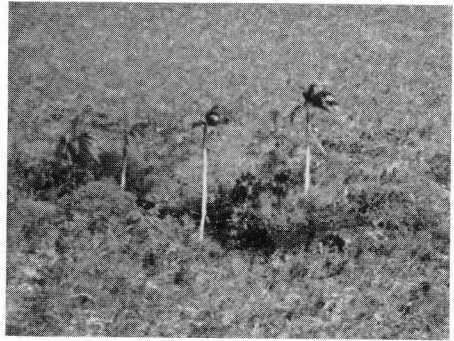
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1. Map of northern West Indies, showing Bahamas and adjacent lands. Circle denotes Little Inagua.

25-foot plateau beyond them. It is likely that this ridge interrupted his view to the interior or he might have seen the palms. The palms were surely present seventy years ago. Another possible obstruction to Nash, Taylor, and Wilson, is an east-west ridge which runs across the southern quarter of the island. Although we have no proof, we can surmise that they did not cross far beyond the ridge in the short time they were present on the southern shore of the island. Even if they had, it is doubtful whether they could have seen the palms four miles away across the scrub. Because of the droughty nature of the island, it was not wise for an explorer to venture too far into the interior without a substantial water supply. It remained for reconnaissance by air to locate the royal palms in Little Inagua.

We wish to thank Turks and Caicos Airways, its managers, and especially pilot Berkeley Barron for cooperation in making the flights referred to above. Research was sponsored in 1973 by a generous grant to the Arnold Arboretum of Harvard University by an anonymous



2. Royal palms in sinkhole on Little Inagua, Bahamas.

donor interested in the flora of the Bahamas. The visit in 1974 was underwritten by a grant to the first author by the National Geographic Society for botanical exploration in Inagua and the Turks and Caicos Islands.

Since this paper was submitted for publication, Mr. Donald Buden of Louisiana State University has visited Little Inagua for purposes of studying the vertebrate species present on the island. At our urging, he worked his way to the royal palm populations and shot some fruits out of one of the trees for verification purposes. Dr. Robert W. Read has graciously examined the specimens and confirmed that these trees are indeed *Roystonea*, and not exceedingly large examples of *Pseudophoenix*. These specimens are deposited at US and IJ.

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