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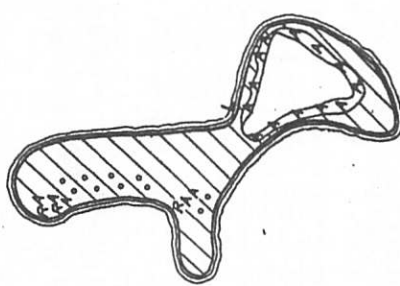
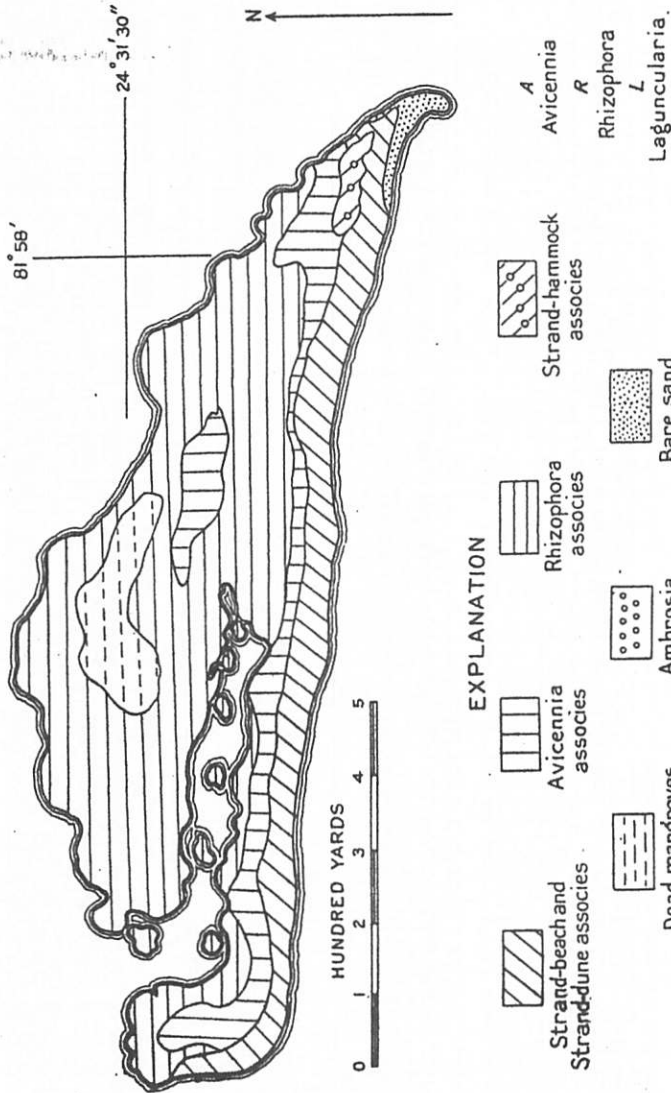
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*Woman Key*



*Ballast Key*

Fig. 4. Man Key and Ballast Key

*Man Key is Woman Key today.*

John H. DAVIS, 1942. The ecology  
of the Sand Keys of Florida.

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interior of the red mangrove forest given over to *Avicennia*. A few *Laguncularia* trees grow with the black and red mangroves. The shore parts of the swamp are of large *Rhizophora* trees, but there are large areas in the interior covered by a growth of low red mangrove bushes.

The narrowness of the strand-dune area, the nearly complete absence of strand-scrub and strand-hammock plants, and the large areas covered by the mangrove-swamp communities are distinctive features of this island. Peat is accumulating in the swamp, but the sand areas are either young or not being built up very rapidly.

#### Ballast Key

Topography. Ballast Key (fig. 4) is small, oddly shaped, almost completely built of sand, and considerably changed since it was described by Millspaugh. There are now 750 feet of water between Man and Ballast keys, whereas Millspaugh reported that "this small key is separated from Man Key by a channel so narrow that the branches of the mangroves of both nearly touch." The present wide gap between the two seems to be due to the erosion of a small part of the western side of Ballast Key and a larger part of the eastern end of Man Key; that is, if the black mangrove pond shown by Millspaugh was located where a dried pond with fringing black mangroves now occurs. Also this island has increased a great deal in size if Millspaugh's measurements were anywhere near correct. He considered the area of the island to be less than  $1\frac{1}{2}$  acres, whereas it is now about 10 acres. It seems entirely probable that the measurements given by Millspaugh in feet should have been given in yards. If this correction is made, the area figures are more nearly comparable. Some of the western part of the island has been eroded, leaving a steep wave-cut terrace, and the northern prong of the island has been extended.

The present island is a sand plateau with many parts 4 feet high, except for a dried-up pond in the southern triangular part of the island, a gently sloping beach along its eastern side, and a low shore with mangroves along the northwest point, extending into the shoal area near by. The average elevation of the sand plateau seems certainly to have increased since 1904, and the changes in shape indicate a shift of the island toward the north. The southern part of this island is the part described by Millspaugh, the northern part being more recent.

Vegetation. With the exception of the triangular dry pond and fringing *Avicennia* near the southern end, the colony of shore mangroves at the northwestern end, and a few mangrove bushes in a swale on the western side, the whole island is a strand-dune associates with a few strand-beach plants on the upper part of the gently sloping beach. This strand-dune associates is particularly notable because of the almost complete absence of *Chamaesyce*, the presence of large patches of *Ambrosia hispida* on the highest,

driest parts, and the relative abundance of *Tournefortia* near or on the dune terrace.

Both *Batis* and *Borrichia* form colonies near the dried pond, and grow among the few black mangroves that now remain around it. Stumps of *Avicennia* and an accumulation of peat and muck in the pond attest the former existence of a larger swamp there. All three mangroves grow on the extending shore at the northwest end of the island, and *Dondia* is associated with them.

A number of coconut palms have been planted in recent years around the edge of the strand plateau on the southern and eastern shores. This island is owned by Mr. N. B. Thompson, of Key West, and may be further planted with fruit or ornamental plants.

Woman Keys

*Topography.* The two largest parts of this group of islands and mangrove islets (fig. 5) are the eastern and western parts, now separated by a shallow but swiftly flowing 300-foot channel. This passage was there in 1904 but was very narrow. A storm in 1909 widened the passage, but it is now being closed again by the growth of a number of red mangrove colonies. The length of the eastern part is now 1650 feet along its southern shore, and its average width is about 600 feet. The length of the western part is 1850 feet along its southern shore, and its average width is 750 feet. The former has a beach and strand-dune plateau along its whole southern and most of its eastern shore, whereas the latter has only a small area of beach and open strand at its southeastern end, and nearly its whole southern shore is fringed by mangroves, back of which is a sand-plateau ridge. This long sand ridge was not noted by Millspaugh, and he thought that nearly the whole island was a mangrove swamp; but no doubt the ridge existed then and was hidden from view by the fringing mangroves.

Back of both the open sand plateau on the eastern part and the enclosed sand ridge on the western part are large inundated swamps. A shallow lagoon covers part of the eastern part. A fairly large mangrove colony forms an islet about 450 feet in diameter lying 150 feet north of the western part, to which it may soon become joined. This mangrove islet has been named by some persons Boy Key.

*Vegetation.* The eastern part has such a narrow beach that few communities or individuals of the strand-beach associates exist there. The strand plateau is very low, seldom over 2 feet above the tide, and its vegetation is an uncommon variant of the usual strand-dune associates, for here there is less than 5 per cent coverage by *Uniola*. *Spartina patens* and *Andropogon* sp. dominate the community. More community groups dominated by *Sesuvium*, *Borrichia*, *Dondia*, and *Batis* occur than is usually the case. The paucity of *Uniola* and the abundance of *Spartina* and other more halophytic plants,