

The Saw Palmetto—*Serenoa Repens*

JOHN K. SMALL

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When we consider the great abundance of the saw palmetto, and its wide geographic distribution—for it stands second among our palms in the extent of area it inhabits and first in abundance—it seems strange that the earliest botanical literature of America is so barren of references to it. The armament of its petioles, unique among our native palms, and the shape of the fruits particularly should have attracted the attention and interest of botanists and travelers. However this palm does receive notice in the annals of Florida as early as the end of the seventeenth century in a little book by Jonathan Dickenson. The following nine quoted paragraphs are from paragraph 5 of the preface and pages 6, 15, 16, 17, 37, 40, 46 and 79, respectively, of that work. There are, perhaps, references to the saw palmetto in early Spanish records to which we have not access.

"...Hunger had so far prevailed over them, that they could eat with an Appetite the Palmetto-Berries; the Taste whereof was once irksome, and ready to take away the breath;..."

"...but the Wilderness country looked very dismal, having no trees, but only Sand-hills covered with shrubby palmetto, the Stalks of which were prickly, so there was no walking amongst them;..."

"...After we had travelled about five miles along the deep Sand, ... on the other side whereof was the *Indian Town*, were little Wigwams made of small Poles stuck in the Ground, which they bend to one another, making an Arch, and covering them with Thatch of small *Palmetto Leaves*;..."

"...an *Indian* brought a Fish boiled, on a *Palmetto Leaf*, and set it down amongst us, making Signs for us to eat;..."

"The Cassekey [King] then went into his wigwam and seated himself on his Cabbin cross-legged, having a Basket of Palmetto Berries brought him, which he eat very greedily;..."

"About Noon some Fish were brought to us on small *Palmetto Leaves*, being boiled with Scales, Heads and Gills, and nothing taken from them but the Guts; but our Troubles and Exercises were such, that we cared not for Food?"

"...the *Cassekey* ordered the Master Joseph Kirle, Solomon Crosson, my Wife and me, to sit upon their Cabbin to eat our Fish, and they gave us some of their Berries to eat; we tasted them, but not one amongst us could suffer them to stay in our mouths, for we could compare the Taste of them to nothing else but rotten Cheese steep'd in Tobacco Juice."

"In some Time after we had been in the House came in *Indian Women*, loaded with Baskets of Berries, mostly of the *Palm*, some Sea-side *Coco Plums*, and Sea-side Grapes; Of the two latter we could eat, but of the *Palm Berries* we could not bear the Taste in our Mouthes..."

"...but having small *Palmetto*, which grew nigh, Joseph Kirle and I set to work and made a shelter..."

Sixty odd years later a book under the following title by William Stork was added to the annals of Florida

"AN ACCOUNT OF EAST FLORIDA; WITH A JOURNAL KEPT BY JOHN BARTRAM, OF PHILADELPHIA, BOTANIST TO HIS MAJESTY FOR THE FLORIDAS, UPON A JOURNEY FROM ST. AUGUSTINE UP THE RIVER ST. JOHNS. LONDON, 1765."

There it is recorded that:

"...the palmettos likewise grow pretty plentifully between these middle grounds and pinelands."

"...here was a patch of good swamp, but the pineland approached near the river, and generally a perch or more of Palmetto ground, gently rising between the swamp and pineland."

Although there was not very much written about the saw palmetto in the early days of exploration in the south, its botanical history did, however, begin shortly after the American Revolution. While the first description and naming of the species is usually attributed to André Michaux in 1803, it seems clear that in reality it should date from about a decade earlier. While William Bartram was on his way to Florida, he observed the palms growing on Saint Simon Island, Georgia. In his account of his observations on the island, he mentions four kinds of palms, all of them referred to under the genus *Corypha*—*Corypha palma* (cabbage tree), *Corypha pumila* (Dwarf palmetto), *Corypha repens*, with a description (Dwarf saw palmetto), and *Corypha obliqua*, with a description (saw palmetto). There are many forms of the saw palmetto. The plants vary much as a consequence of local conditions. Bartram evidently met with the two extreme forms growing in that region, just as may now be found on any of the sea islands along the coast.

The one is a small plant common in the poor soil of savannahs and low pine wood and growing closely appressed to the ground. The other grows in loose sand, is larger and the stem is often ascending or even erect.

There seems to be little doubt that all our forms of the saw palmetto will have to be grouped under the name *Serenoa repens* unless someone can prove that the assemblage really comprises more than a single species, which is unlikely.

In 1803 André Michaux described the same plant as *Chamaerops serrulata*, giving as its range the maritime parts of

Georgia and Florida. In 1817 William Baldwin, writing from Fernandina, Florida, said:

"Since I have mentioned some of the vegetable productions of this Island, and among others, the *Chamaerops serrulata*—I will make a few observations on this family of plants. Beside the one just mentioned I am acquainted with three others: viz., *Chamaerops Palmetto*, *C. hystrix*, and *C. acaulis*, Mx. which is the *Sabal minor* of Adanson... It is by no means generally known that the young shoots of the *Chamaerops serrulata* (Saw Palmetto) are also eatable—and are even more sweet and tender than the former [*Sabal Palmetto*]. My knowledge of this fact was derived from the late Mrs. Catherine Miller, of Dungeness on Cumberland Island. This is generally a humble plant, with a short, crooked, prostrate stem, from one to three feet in length: but in some situations—and particularly near the seashore—it attains to the height of 8 or 10 feet, and has an ornamental appearance. It is rarely found north of Savannah River."

The saw palmetto did not induce our early botanists to write as much concerning it as some of our other palms did. Perhaps this state of affairs is accounted for by the fact that the center of development of the species was inaccessible to these travelers. Most of them saw it only in the northern edge of its range. None of them saw it at its best.

The saw palmetto stands at the head of the list of our palms as far as abundance is concerned. It stands second in area of distribution. Its geographic range extends from extreme southern South Carolina to southern Florida and Mississippi. Like three of our other low growing palms—*Rhaphidophyllum*, *Sabal Etonia*, *S. minor*—it is now endemic in the southeastern United States. What its prehistoric distribution was and whence it



18. Fruits of the saw palmetto, *Serenoa repens*, are about the size and shape of medium-large olives. In the illustration the lighter fruits are still green and hard, the darker ones fully ripe, at which time they are black, soft and very juicy. Photograph by Dent Smith.

came are mysteries that will remain unsolved. It has no close relatives and it is quite different in its characters from the other armed-petioled palms of Florida and the West Indies. It evidently, however, came directly or indirectly from the West Indies. If its ancestors were Antillean or Floridian, these are lost. Southern Florida was evidently its seat of origin or landing place, for northward and westward its growth, both individual and *en masse*, generally tapers off.

In the stiff soils towards the extremities of its geographic range, especially where fire is frequent, the plants are often puny and limited; in the sandy soils they are robust and prolific. This condition has led to the temporary recognition of more than one species.

The saw palmetto is typically a prostrate plant. Ages ago it may have been erect. In its early existence it may have been a more tender plant and then for

the purpose of self-preservation it may have come to lay its stem prostrate and anchor it with numerous roots so as to be more immune from fire and other destroying conditions, just as many other plants seem to have done, particularly in fire-swept regions.

As intimated above, its stems are not always prostrate. In localities protected from fire, such as stream banks and barren coastal sand dunes, one often finds groups and even groves of these palms with erect stems growing up to twenty-five or thirty feet tall.

The saw palmetto has several unexplained peculiarities of growth. It seems to grow best in loose sand seemingly devoid of nourishment. It prefers dry soil, but it does grow in marshes throughout its range and in wet sink-holes on the lower Florida Keys. Further, the saw palmetto abounds in pineland, on prairie and in hammock. In the latter, being protected, the plants are often erect and sometimes much branched. In the pine-woods the plants are usually quite evenly distributed; in the prairies they are collected into irregular or circular islands ranging from a few square feet to many acres in extent.

The plant is one of the two most characteristic and abundant vegetable elements of the "scrub," the other conspicuous plant there being the spruce pine (*Pinus clausa*). Along the eastern coast of Florida the saw palmetto has, usually, light gray or nearly white foliage and is very prominent among the other vegetation, especially in contrast with the pine trees and the deep green rosemary (*Ceratiola ericoides*).

Like the cabbage tree, the saw palmetto is amphibious, and it also thrives in the various kinds of water within its range, which are represented by soft and hard, acid and alkali, and fresh and salt.