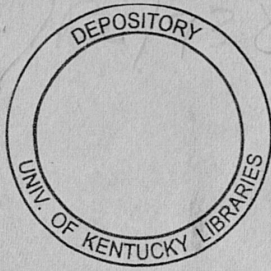




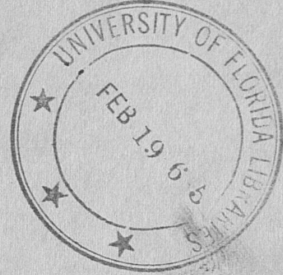
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S T O R I E S O F F L O R I D A



FLORIDA TREES, FLOWERS, FRUITS

BY

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by

William M. Duncan

To a naturalist, the State of Florida is one of the most complex and interesting regions in the world. The peninsula has a dry season that is wetter and a rainy season that is drier than the corresponding periods of the tropics. Temperate vegetation appears in the late winter and tropic vegetation in summer.

There are many different types of areas--flat pine woods, rolling woods, sand country, clay country, limestone, areas of bluish springs, lakes and caves. There are dense hardwood forests, sand dunes and fertile hammocks; narrow, slowly-moving streams, and a range of highland lakes. In the peninsular area, salt-water and fresh-water marshes, cypress swamps, open swamps, low hammocks and inundated prairies range southward to the great marshland of the Everglades. With every marked change of altitude and soil, are corresponding changes of the flora, or plant life.

The Trees

Hilly pinelands range from the Alabama line through middle-west Florida, with longleaf pine and occasional sandy tracts of blackjack oak. Spruce pine is near the coast, between Alabama and the Ocklocknee River. Diversified growth is seen in the limestone region of Holmes and Jackson Counties, with sandy, open pine forests, red clay hills, dense hardwoods, and cypress ponds that dry up in the spring.

An area linking west and central Florida, the middle Florida hammock belt extending from Liberty County to Marion County, contains pine woods, sandy hammocks, open prairies and hardwood forests. A region of rolling sandy pine woods extends from Georgia, through the heart of the peninsula

into south Florida. Along the Gulf coast, from St. Marks to Tarpon Springs, is the great Gulf Hammock, with many large hardwood forests and swamps. The lake region running through the heart of Florida from Clay County to Highlands County, is a ridge-like sandy area, with evergreen oaks, high pinelands and high hardwood hammocks.

Spreading over the northeast corner of the state, are the east Florida flat pinewoods, with countless shallow cypress ponds and swamps, slash, short-leaf, black and longleaf pine.

Joining with the east Florida flatwoods on the east, the hammock and lime-sink regions on the west, and divided in the middle by the lake region, progressing south toward the Everglades, are the south Florida flatwoods, closely resembling the forests of northeast Florida.

The Everglades, with its profuse tropical flora, ranges between the coasts, from below a belt of treeless prairies north of Lake Okeechobee to Florida Bay. Here are enormous stands of cypress and palm-covered islands encircled by open, inundated areas covered with sawgrass.

In the western part, the Gulf coast presents bulwarks of mangrove and buttonwood, and jungles of live oak, magnolia, mahogany, ash, maple and holly. Great hammocks of cypress and Caribbean pine lie to the north. The stately royal palm is found in abundance to the south.

Ranging inland from the east, are expanses of grass, lilies, and other aquatic plants, broken by jungles of cabbage palmetto. In the heart of the island jungles, almost inaccessible, are luxuriant growths of wild flowers, ferns, moss, orchids, and vines. Tropical palms and hardwoods are on the Florida Keys nearest the mainland, and Caribbean pines grow over the lower group south to Key West.

Florida's Northern Trees: Throughout the State, trees of temperate origin mingle with tropical flora. In west Florida the mountain laurel, which ranges up to Nova Scotia, grows a few miles from the cabbage palmetto.

Many of Florida's trees are quickly recognized by northerners. The sycamore, one of the largest hardwood trees in America and characterized by a thin bark that flakes off in large patches, is general over the State. The maple, with its light-brown/^{wood} and bright-green, three-lobed leaves, closely resembles the sugar-bearing maple in New England. The yellow poplar tree, which bears tulip-like flowers, and has a light, soft, wood, is valuable for interior and exterior trim, veneers and other special uses.

There are four hickories in north Florida. The bitternut, a tall, slender tree, with granite-gray trunk, faintly tinged with yellow, is found in low, moist soils. The short-limbed white hickory of rich soils has a dark-gray bark and takes its name from a white, tough wood that is exceptionally good fuel. Hammock hickory, common in hammocks north of the Everglades, is usually the smallest of the four trees, although its slender medium-gray trunk occasionally stretches to 80 feet.

Three ashes are found in river swamps. The river ash, with reddish-brown bark, and the small water ash, have oval-shaped leaves, slightly toothed at the margin. The great pumpkin ash, with slender trunk and enlarged base, sometimes attains heights of 80 feet.

Tropical Trees: The heaviest wood in the United States, black ironwood, is on the Keys. The lightest, corkwood, is in west Florida. The toughest, lignum vitae, and torchwood, one of the most resinous, are also on the Keys.

There is the buttonwood tree, considered without peer as fuel, because it throws off a great heat with little smoke. The soapberry tree produces seeds which contain a substance useful as a soap substitute. The horseradish tree

has a root that can be scraped and eaten like horseradish. The sausage tree has an inedible fruit resembling sausage. Poison wood, exudes a gum that raises blister almost immediately after contact. Mahogany, of a variety inferior to that in South America, appears in the Everglades and on the Keys.

One of the rarest of trees, the torreya, is found along the Apalachicola River. This, a variety of cedar, has a wood that, when bruised, exudes an unpleasant odor and for this reason is called "stinking cedar." The tall gumbo limbo, on the lower coasts, reaches great height and spreads its enormous roots on the surface of the ground.

In coastal regions, are several varieties of trees entangling in dense, spreading thickets. Strangest of these is the mahoe, in the Ten Thousand Islands. It suggests a huge strawberry plant, its limbs bending over, entering the ground, and taking root again, after the manner of the native East India Banyan. The mahoe, however, is a more sinister growth than the banyan, spreading at the rate of five or six feet a year. It is sometimes 135 feet across, though only 35 feet high. Beneath it is a small forest of roots, limbs and the rotting timber of trees killed in its path. Perhaps its only close rival as a menace to other plants is the strangler fig, of the dense tropical jungles in the Everglades, which tightens a thick trunk around the tree until it is dead. When the victim has rotted away, the vine remains a hollow tube.

In parts of west Florida, the small, crooked-trunked, branching titi forms dense growth. The bushy mangrove is found in deep thickets along the coasts.

The Pines: Commercialized pine, growing in open forests in nearly all regions, is the State's commonest evergreen, and the basis of lumbering, turpentine, and rosin industries. In northwest Florida is the tall, smooth-barked spruce pine. Slash and longleaf pine grow over the entire peninsula, and in north and east Florida, keep company with shortleaf and loblolly pine.

In south Florida there is a variety of slash pine, commonly called Caribbean or Cuban pine. Sand pine seeks the dunes of the coast and sand of the interior, and the pond or black pine, is found in swamps and on poor soils.

Most of these varieties can be easily identified--the spruce pine by its large trunk and great height; slash pine by the small branches at its round-topped head, and its glossy, prickly cones; longleaf by the lustrous, 10-inch needles. The loblolly pine, which is not very common, is characterized by its deeply furrowed barks. Shortleaf pine is readily distinguished by its short needles and small cones. Sand pine has a crooked trunk and scrubby appearance while black pine has darker bark and bears globular cones.

Hardwoods: Winding green tracts of hardwood trace the banks of the State's many small rivers and creeks. Here, water hickory, white bay, scarlet-leaved loblolly bay, sweet gum, water ash and others are found in dense and colorful growth.

Over high areas are the sandy Florida "hammocks", high and low, on hills and in ravines. Here prevail scrubby blackjack or turkey oaks, water laurel, willow oaks, cedar, and the red-berried holly. Here also grow the live oaks, with massive dome and spreading, almost horizontal limbs; the sturdy, trim-barked dogwood, with lovely flowers that are the forest feature of spring; and the tree that, to many, is the most beautiful of all--the magnolia, with its smooth, brown trunk sometimes four feet in diameter, large, leathery, green leaves, and cream-colored blossoms with purple center.

Festoons of Spanish moss add their gray beauty to the deep shade of all hammocks. Although its sprouts from tiny seeds lodging in the crevices of the trunk or bough, and sends out rootlets for attachment, the plant derives no sustenance from the tree; all of its food coming from the air and rain.

A most durable and valuable timber tree is the cypress, which lifts a fluted, silvery trunk above swamps and shallow ponds, over the entire State.

The largest, sometimes 100 feet in height, are hundreds of years old. Peculiar, knob-like cypress "knees" grow from the trees' roots, appearing around the base. Their function has not been determined, though some believe they gather air for the root system.

Ornamentals: One of the most popular ornamentals grown in cities in all parts of the State is the camphor tree. The wood of this luxuriant, smooth-trunked species contains camphor, useful as an antiseptic, and is grown for this purpose in China. Another native of China, the low china-berry tree is a common shade tree in rural areas. It bears lilac-colored flowers and yellow berries in April.

China also has given Florida a tree of growing commercial importance, the tung oil tree. This small, pink-blossoming species produces the tung nut. The oil from its seeds is used in the manufacture of varnishes, paints, oilcloth, linoleum, and a great variety of waterproofing materials. Introduced and developed in Florida by the State Agricultural Experiment Station, the tree is planted in large groves in the vicinity of Gainesville. In 1938 the State's total output of tung oil was estimated at approximately 1,000,000 pounds.

None is more decorative than the graceful Paradise tree, found in lower Florida. During the spring the low, rounded head of this tropical species is overspread with clusters of small, yellow flowers. West Florida has among others, the dainty redbud, with red-brown bark and pink flowers. The Australian pine, forming an excellent windbreak, and the silk oak are popular highway ornamentals in south Florida.

Palms: The palms of south Florida comprise a natural symbol of our nearness to the tropics. The most beautiful is the tall royal palm, with its light-gray trunk tapering upward from an enlarged base to an upper shaft of bright green. The leaves of the large, arching crown are deep green, and sometimes 12 feet in length.

The crooked-trunk coconut palm is highly favored both for its nuts and as an ornamental. The shaggy-headed cabbage palm or sabal palmetto is most common of all palms and found throughout the State. *Cocos Plumosa* is planted in many parks, being tall and straight, with arching fronds. The thatch palm is relatively small, with spreading fan-shaped leaves. The date palm is also grown, although here its fruit has no commercial value. The slow-growing sago, which has a maximum height of 10 feet, and the comptie, a small plant, are not true palms, but cycads. The comptie, resembling both a palm and a fern, yields a nutritious starch eaten by early pioneers and Florida Indians.

The saw palmetto, a dwarf palm, forms the most common undergrowth of the entire State, appearing wherever there is sand. The base of this strange plant puts out numerous strong roots on the underside of the stem. Advancing, its buds continue to grow, branching, dividing, and producing new plants as the parent dies.

Wild Flowers

Wild flowers differ in variety according to their location: dark or sandy soil, swamp or pineland, dry hills or marshes.

The common dandelion is seen on dry soil in spring and summer. Also in dry pinelands, in summer, is false foxglove, with large, pale-yellow flowers and jagged dark-green leaves. The wild lupine, its blue flowers resembling a sweet pea, appears in mid-winter and is present until early summer. This plant folds its leaves at night; it bears pods containing four or five seeds. The spreading stems of milk vetch, with heart-shaped leaflets and small, pale-purple flowers, form gray-green carpets from late winter until summer.

Other familiar members of the pine forest company include the small, six-pointed flowers of yellow star grass, found in winter and summer, and the minute blossoms of the diamond flower, spreading in mats close to the ground. Spring

and summer bring the button snakeroot, a stout plant, up to four feet tall, with blue or white globular heads. Goldenrod and milkwort bloom all year. The latter flower, with a clover-like head at the end of a smooth stem, varies in color from pink or red to greenish-white.

On sandy soil, from spring through fall, are numerous black-eyed susans, showing a bright-yellow ray with brown disk. This flower has abundant pollen, and is often attended by wasps, beetles and butterflies.

Toad flax, with blue and purple spikes from six inches to two feet in length, blossoms in sandy woods in winter and spring. The starry, five-lobed white and pink flowers of dogbane bloom in loose clusters all year. The name is derived from an old belief that the plant was poisonous to dogs. Another year-round sand-hill flower is Tread Softly, a low-growing nettle, with stinging hairs and small white blossoms.

Spring brings to low pinelands the large, white Easter, or Atamasco lily. The wild red lily appears both in summer and occasionally in winter. False garlic, a small, white lily, growing from a bulb, is seen in winter and spring. The year-round pitcher plant or fly catcher, is of a carnivorous nature. This strange, trumpet-shaped plant has reddish tubular leaves that attract flies, beetles and ants. After the insects have fallen inside, they are unable to escape, and are dissolved into a nutrient solution absorbed by the leaf.

Many of the wild flowers in boggy pinelands and marshes bloom all year. Examples include St. Peter's wort, a four-petaled, yellow flower on a shrubby plant, up to three feet tall; St. John's wort, a similar flower, with five petals, and penny wort, with creeping stems, small round leaves and small, pink-tinged blossoms, also yellow-eyed grass, characterized by a leafless, flowering stem, and yellow, round heads at the end of a short spike; pipe wort, its small flowers forming a white, gray or brown button-like head at the top

of fluted stems; marsh pines, consisting of four to 12-lobed flowers of pink, white, or blue; and fog fruit, showing small, blue flowers on a low, compact, stalked head. Colic root, topped by small, tubular, yellow flowers, and with a rosette of yellow-green leaves at the base of the stem, blooms in spring.

Bedroot, showing a dull, yellow-green cluster of flowers at the head of a leafy stem, arrives in spring to remain all summer. A brilliant-red sap flows through its roots. The blue, five-lobed blossoms of the mana is another summer flower, as is deer grass, identified by a square stem, round, slightly heart-shaped leaves, and deep-colored, four-petaled flowers of pink, pale-purple and rose.

Many kinds of aquatic flowers and plants lend ornamental effect to Florida's lakes, streams and ditches. The water hyacinth, introduced from Brazil, propagates so rapidly and extensively that gangs of workmen are often required to clear it from navigable waterways. Its striking, blue flower is floated at the surface by air-filled stems.

Arrow-head is a white aquatic flower, in whorls of three. The beautiful spider lily, with a stalk one to two feet in height, has a slender, white flower of six lobes. Water lettuce floats thick, light-green wedge-shaped leaves, and its floating heart shows a white flower and heart-shaped leaves.

Spring in the swamps brings the lizard's tail, known by its small, white flowers on a spike that droops at the tip, and spoonflower, with a fleshy stalk, and a white flower resembling a pointed spoon. The many purple blossoms on the root-like stem of the thalia appear in summer and fall. Blueflag, a wild iris, with three petals and sword-shaped leaves, blooms in late winter and spring. Golden Club, its flowering stem covered with small, yellow flowers, blooms in swamps and shallow water from late winter into summer. Smilax is common through the year, intertwining prickly stems, and bearing clusters of black, yellow or red berries.

Ferns

Many kinds of ferns grow in Florida's pinelands, prairies, hammocks, marshes, and swamps. Throughout the State, the resurrection fern forms mats of green on the barks of trees. This abundant plant shrivels up in dry weather, but regains its color after rainfall. The maiden-hair fern is fairly extensive, carpeting the floors of lime-sinks and high pineland hammocks. The halberd fern, with large leaf-blades, grows best in lime-sinks and grottoes. Quillwort, a grass-like plant, is common along pineland streams, and in wet woods, marshes and hammocks.

Wet, moist grounds also produce the royal fern. When old, this familiar fern turns red or dark brown. A plant that grows best around the base of trees and in cypress knees is the chain-fern. Many tropical varieties are found in lower Florida, including the large-leaved fern of mangrove swamps and salt marshes; the old Boston fern, spreading over the trunks of cabbage palmettos, and the strap fern, found on the limbs of live oaks.

Orchids

Beautiful orchids are found in Florida, especially in the southern part. There are a number of epiphytic varieties (those growing in trees) but the most abundant are terrestrial, or rooted in the soil. One common epiphytic species, the butterfly orchid, is found in the hammocks and swamps of southern Florida in spring and summer, its green-brown flowers roundish and clustered. Terrestrial orchids can be seen in low grounds throughout the State. The small, greenish-white ladies' tresses bloom in winter and spring, and the small, pure-white, spurred orchid, as also the yellow-fringed orchid, in spring and summer. Fragrant rose pogonia blooms in marshes in late winter and spring.

Tropical Fruits

In lower Florida around Miami and the Keys, is a large variety of curious tropical fruits. Here thrive such delectable oddities as the papaya, which is cooked as a vegetable when green, and eaten as a fruit when ripe; breadfruit, which, baked, resembles bread; the crimson-pulped, agreeably acid pomegranate; and the mango, with its very large seed and subacid pulp. Also, the kumquat, the smallest of all citrus fruits; the butter-like avocado, one of the most nutritious fruits in the world; the guava, famed in the making of jelly; the spicy Surinam cherry; the extremely sugary tamarind; the refreshing Japanese loquat; besides the common coconuts, pineapples and bananas.

Citrus: A most important feature of Florida's plant life is citrus. Among the earliest reference to citrus fruit in Florida, is that of Jonathan Dickenson, who, in 1696, wrote of St. Augustine: "It is about three-quarters of a mile in length, not regularly built, the houses not very thick, they having large orchards, in which are plenty of oranges, lemons, pome-citrons, limes, figs and peaches."

It is known that oranges reached the West Indies as a part of Columbus' cargo on his second voyage in 1497, and that they were brought from there to the Florida mainland by early Spanish colonists and explorers. Wild groves were created in many places when Indians obtained the fruit and carried it about, dropping seeds on the shores of lakes and streams.

Various kinds of oranges grow from the east coast to the west, south from an area that begins at Mandarin in Duval County, and extends diagonally southwest across lower Alachua County to the Gulf coast near Brooksville. To the north and west, over the remainder of the State, are many groves of the hardy Satsuma orange. Besides oranges, grapefruit, lemons, limes, and tangerines are important sources of the fruit grower's income.

Both Central and South Florida begin citrus shipments in September, when early season grapefruit ripens, and continue to July. The vegetable season of the same regions begins in October, lasting until August. North Florida's vegetable shipments are made from December to August. West Florida's truck and staple harvest shows two distinct periods--September to January, and March to August. Fruits and vegetables are grown commercially every month.

BIBLIOGRAPHY

| | | | |
|----------------------|--|--------------------------------------|---------|
| | <u>Annual Report of the State Marketing Bureau</u> | | 1936-37 |
| Baker, Harry Lee | <u>Florida Forests and Forestry</u> | Nature Magazine | 1929 |
| Baker, Mary Francis | <u>Florida Wild Flowers</u> | Macmillan | 1938 |
| Baker, Mary Francis | <u>Florida's Wild Flowers</u> | Nature Magazine (December) | 1929 |
| Coe, Ernest F. | <u>Land of the Fountain of Youth, The</u> | Pamphlet | |
| | <u>Report on Peat Deposits</u> | Florida State Geo- logical Survey | 1914 |
| Gifford, John C. | <u>Florida Keys, with Special Reference to Soil Productivity</u> | Department of Agriculture | 1935 |
| Gifford, John C. | <u>List of Trees of the State of Florida</u> | Fla. Federation of Women's Club | 1909 |
| Mattoon, W. R. | <u>Common Forest Trees of Florida</u> | Florida Forestry Association | 1930 |
| Olmstead and Wharton | <u>Florida Everglades, The</u> | Pamphlet | |
| Rogers, Julia Ellen | <u>Tree Book, The</u> | Doubleday-Doran | 1931 |
| Simpson, C. T. | <u>Florida Wild Life</u> | | 1932 |
| Simpson, C. T. | <u>In Lower Florida's Wilds</u> | Putnam | 1920 |
| Simpson, C. T. | <u>Out of Doors in Florida</u> | Macmillan | 1923 |
| Small, J. K. | <u>Ferns of Florida</u> | Science Press | 1931 |
| Small, J. K. | <u>Florida Trees</u> | Small | 1913 |
| | <u>From Field to Market</u> | State Marketing Bureau | 1939 |
| Stevenson, Nellie I. | <u>Florida's Trees</u> | Nature Magazine (December) | 1929 |
| Stevenson, Nellie I. | <u>Pocket Guide to 60 Distinctive Tropical Trees</u> | Stevenson | 1933 |
| Swinehart, Gerry | <u>Strange Are They Fruits</u> | Nature Magazine (December) | 1929 |