

A Botanical Excursion to the Big Cypress

By

JOHN KUNKEL SMALL

Head Curator of the Museums and Herbariums of the New York Botanical Garden

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THE most extensive physiographic trinity or the largest prairie-marsh-swamp region, and at the same time the least known area in the eastern United States, is in southern Florida. The "Big Cypress," or the Big Cypress Swamp, lies south of the Caloosahatchee River between the Everglades and the Gulf of Mexico. The greater part of our population is ignorant even of this geographic designation. To the few who have seen it printed on maps the name signifies nothing, or conveys but a vague idea. Only a score or two of surveyors, hunters, and prospectors, out of the hundred million inhabitants of the United States, have any definite knowledge of its physical geography.

The second week of May, 1917, we were on the very edge of the Big Cypress when we navigated Lake Hiepochee during a cruise to Lake Okeechobee. The day we returned from that cruise, which was described in former papers,¹ an opportunity to explore some of the mysteries of the Big Cypress unexpectedly presented itself. Mr. W. Stanley Hanson, a bird inspector with the United States Biological Survey, and a naturalist well acquainted with the Big Cypress, had come to Miami across country from Fort Myers, whence he was about to retrace his course. The opportunity to accompany him on a trip through largely unknown territory was a temptation too great to be resisted. Consequently, we prepared a Ford for a week's run, and the next day set out for Fort Myers. Miami and Fort Myers are about 120 miles distant from each other, in a direct line, but the intervening area could have been conveniently, or at least expeditiously, traveled only in an aeroplane. The shortest course possible for us followed a curve more than 250 miles in length.

In order to bring us to our most distant objective which lay across the Everglades only about sixty miles from Miami, we had to make a detour around the Everglades

and Lake Okeechobee at their head. The facilities for making an examination of the country and a collection of specimens of its vegetation were generously furnished by Mr. Charles Deering, of Miami.

The first stage of our course lay along the eastern coast of Florida between Miami and Fort Pierce. Miami, Fort Pierce, and Fort Myers are about equidistant one from the other, or, straight lines connecting the three places would form an equilateral triangle. The territory included in the triangle, made up mostly of everglades, prairies, cypress swamp, and pineland, together with Lake Okeechobee situated near one side of the triangle, was essentially uninhabited, except for the scattered settlements in the Caloosahatchee River region. Between Miami and Fort Pierce pinelands and sand dunes (scrub²) predominate; between Fort Pierce and Fort Myers are pinelands and prairies; while between Fort Myers and Miami lie prairies, cypress swamps, and the Everglades.

Mr. Hanson preceded us to West Palm Beach, where we overtook him. It was late in the evening when we reached Stuart, where we had to spend the night because of a high wind which made the ferryman hesitate to carry us across the Saint Lucie River. An early start the next morning brought us to Fort Pierce in time for breakfast. Thence we started on the second leg of the triangle, proceeding in a southwesterly direction.

Between Miami and Fort Pierce our course took us through not fewer than forty towns.³ After leaving Fort Pierce only four settlements were encountered, two established settlements and two embryonic colonies.

After Fort Pierce disappeared from view we sped westward through pinelands and across the Halpatiokee Swamp, where countless turtles and snakes basked in the sun about the water pools that lined the road.

² These are quiescent inland dunes of snow-white sand.

³ These lie outside of the triangle of uninhabited territory referred to in a previous paragraph.

¹ *Journal of the New York Botanical Garden*, Vol. XIX, 1918, pp. 279-90. *THE AMERICAN MUSEUM JOURNAL*, Vol. XVIII, 1918, pp. 684-700.



A TRANQUIL JUNGLE STREAM ON THE INDIAN PRAIRIE

Fishing Creek, or, in less commonplace parlance, "Thlathtopskahatchee," is still little known, because it runs through nearly uninhabited country. It rises as a drain for a greatly elongated (twenty-five miles) slough which lies near or forms the western boundary of the southern extension of the lake region of Florida. The creek is almost equal in length to the slough it drains. It meanders through pine woods and through prairies, ultimately reaching Lake Okeechobee. Its banks are often hammock clad. Live oaks, sweet hays, and red maples predominate on the shores, and in some places cinders—pine or cypress—or cabbage trees replace the hammock. Occasionally long stretches of water are completely concealed by floating carpets of water hyacinth, and others, clear of all aquatic plants, sharply mirror the bordering vegetation.

After crossing the swamp another stretch of sandy pine woods was traversed with difficulty, as the combined power of the engine and the pushing ability of the occupants of the car were necessary to get through the twelve miles of loose sand. Finally the Onoshohatchee River and the first habitation in about forty miles came into view. We soon reached Okeechobee City—then a settlement of several scores of houses. In the fall of 1913 when we went up the Onoshohatchee River from Lake Okeechobee this place had been indicated on the map and staked out by the surveyors, but had not yet been colonized.

At this point we again left civilization behind. From Okeechobee City to Fisheating Creek the country was devoid even of roads, and we took to an old trail dating back perhaps to a period before the Seminole wars. By degrees Okeechobee City disappeared as we hurried around the curves, not to say coils, in the trail, and after passing some miles of pinelands we suddenly came into the bottoms or prairies of the Kissimmee River. These bottom lands are like immense lawns, perfectly level, carpeted with a turf of various grasses, and often extending as far as the eye can see. There were thousands of semiwild cattle grazing on the broad green prairies.

All had gone well thus far, but at the Kissimmee River a series of apparently predestinated troubles began. The trails on either side of the river were connected by a ferry which consisted of a flatboat large enough to hold a car, and a small motor boat of barely sufficient capacity to drag the flatboat around the bends and over the sand bars in the river. In order to cross the river, which there is less than a hundred feet wide, it was necessary to go about a half mile down stream because of the erosion of the banks. Once in the stream the current of the river—say, three miles an hour—carried the ferryboat along at a greater speed than the motor boat could maintain. Time and again the ferryboat would bump into the river banks, first on one side, then on the other, and would, in turn, bump against the stern of the little motor boat and knock off the rudder. Even after the ferryboat drifted out of sight, we who were left behind for the second trip could hear the ferryman nailing the rudder on his disabled boat.

We lost several hours of valuable daylight while waiting for the ferryman to replace dead batteries with live ones. As the short twilight deepened we ran up a slight incline through a strip of pine woods, making all haste compatible with the innumerable curves in the trail and the proximity of pine stumps, and found ourselves on the great Indian Prairie. This comprises a large part of an immense region lying west of Lake Okeechobee, north of the Caloosahatchee River, and east of Peace River. The prairie is high and dry all the year round and is uninterrupted, except by a single stream, Fisheating Creek, one of the larger feeders of Okeechobee. Up to a short time ago it was practically uninhabited, except by wandering Indians. At the present time a half dozen or more “—ports,” “—dales,” “—monts,” “—burgs,” and even “—Cities” have been put on the map, and a railroad bisects the region,—so, farewell to its natural features.

In order to save time, we decided to cross the prairie that night, and we certainly had a weird ride. The trail at times was distinct, but at other times almost blind. Although the prairie was a dead level, the optical illusion created in the darkness was that of running down hill and jumping off the earth. We had some obstructions to progress in the form of forks in the trail which would, we knew, either come together farther on or diverge indefinitely and thus lead to some other part of the state. At each fork, the four in our party would hold a council, and in each instance consult the stars. The stars always put us on the right trail, and toward midnight, after passing several half-discerned Indian camps, we saw a few faint lights of human habitation appear, and finally we reached the recently established colony of Palmdale on Fisheating Creek, or, in Seminole, “Thlathtopopkahatchee.”

We did not hesitate to disturb the peaceful slumbers of the inhabitants, who were as glad to see us as we were to see them, which fact they showed in a substantial manner by arising from their slumbers and preparing a midnight meal. After a few hours' rest we made an early start for Labelle, which is an old settlement situated at about the head of natural navigation on the Caloosahatchee River.

The Indian Prairie extends nearly or quite

to the Caloosahatchee. Unfortunately, a road had been laid out to connect Palmdale with Labelle. It is well we decided to stop at Palmdale until daylight, for although we could travel the almost trackless prairie in the dark with ease, we could barely traverse this new road in broad daylight. The deep sand had become very loose, and it took more than the engine to get the cars over a good many miles of the road.

Just south of Palmdale we crossed Fish-eating Creek, which is an exceedingly picturesque stream meandering through the almost uninhabited prairie, between banks either exposed to the sun, or clothed with shrubs and bright-colored asters or hammocks of oaks, ash, and maple, which in some places give way to groves of palmettos that often lean far over the water's edge. After leaving the hammocks which border the creek we drove out on the prairie again, and few trees came into view for a distance of about eighteen miles, until the hammocks bordering the Caloosahatchee appeared.

Perhaps the most interesting creature on these prairies was the burrowing owl. This bird had honeycombed the prairie in many places with its burrows. These tunnels, often six to eight feet long, are about a foot beneath the surface of the sand. At one end is an opening approximately six inches in diameter, while at the other end is a nest. The old owls were so tame that one could almost pick them up, and often they would sit perfectly quiet while the automobiles passed them at a distance of not more than two feet.¹

On this same prairie many interesting

¹ Out of curiosity we decided to dig into one of the burrows. Starting at the opening, we began by lifting the sand out very carefully. Of a sudden we were startled by the rattle of a rattlesnake. After proceeding a few inches farther we heard two rattlesnakes; before going much farther into the burrow a third rattlesnake began to rattle. The digging became more exciting as we worked farther in and as the snakes rattled more loudly. When we neared the end of the burrow we cautioned one another to be careful not to get our hands too close to the snakes.

This seemed to be an excellent opportunity to get good photographs of living rattlesnakes. Consequently the camera was set up and everything prepared for the opening of the end of the burrow. As there was no woody growth on the prairie the question of getting sticks with which to fight the snakes arose. After considerable search several surveyor's stakes were found, and with these we prepared nooses for capturing the serpents alive. With extreme caution we approached the end of the burrow; the snakes began to rattle more viciously. Finally the sand was removed from the top of the end of

plants were observed and collected. Milkweeds were represented by species of *Asclepias* and *Asclepiodora*, while more conspicuous was the purple water willow (*Dianthera crassifolia*). Low milkworts (*Polygala*) with white and yellow flowers were prominent in the landscape, and clumps of the native beardtongue (*Pentstemon multiflorus*) towered above all the other herbaceous plants. There a white-flowered heliotrope replaced the common yellow-flowered heliotrope of the region lying east of the Okeechobee basin and the Everglades.

After contending with the sand for several hours we reached the Caloosahatchee River and came to the town of Labelle, where we did not delay, but went directly up the Caloosahatchee several miles to Fort Thompson. There we found a number of magnificent live oaks around the old barracks which date from the period of the Seminole wars. After making a number of photographs in that region we returned to Labelle and at once started down the south bank of the Caloosahatchee River for Fort Myers.

We now left the prairies behind and entered the flatwoods, where the arboreal vegetation is made up almost entirely of pine trees. Peninsular Florida, especially the southern part, lacks what is ordinarily understood as altitudes, in fact, most of it is decidedly flat. It might well be called a large sand bar. Notwithstanding this disadvantage, it reveals an astonishing number of surprises in the matter of diversity. The Big Cypress is one of the larger surprises. Its area is about half that of the

the burrow, and to our surprise we found four young owls, three large and one small, but—no snakes!

It was the three larger owls that were making the noise of a rattlesnake, and imitating it so well that all of us who had had personal experience with rattlesnakes were deceived. We decided that this experience proved that the stories we used to hear of owls, prairie dogs, and rattlesnakes living peacefully together in the same burrow were fantastic. Of course, a rattlesnake might enter an owl's burrow, either to seek shelter or food; but it is a difficult matter for any one well acquainted with the habits of rattlesnakes to believe that a husky rattler would be considerate and restrain his appetite, with such a tempting morsel as a young owl or young prairie dog lying about in his den. (For further notes on this subject see: *The American Naturalist*, Vol. XLI, pp. 725-726; Vol. XLIII, pp. 754-55; *Birds of the World*, pp. 536-37.) After photographing owls instead of rattlesnakes, we replaced them in their nest and rebuilt their burrow, as well as we could, by making a roof of brush over which we replaced the sand.



Palms and pine trees are often a favorite refuge for wild turkey and deer. A flock of turkeys took refuge in this particular grove just as we suddenly rounded a sharp curve in the trail. In the Big Cypress there may be prairies so extensive that woody vegetation can be seen merely as a dark line along the distant horizon, or again we may see at one time associations of palms and pines, pure pine woods, solid broad-leaved hammocks, cypress heads, and combinations of cypress head and hammock

Everglades, and although it abuts directly on the western side of them, it has but little in common with them. Instead of being a vast prairie-marsh like the Everglades, the Big Cypress exhibits a variety of conditions and plant associations. There are pinelands, prairie, sloughs, cypress heads, hardwood hammocks, palmetto hammocks, and lakes.

Early in the afternoon we were prepared to strike into the wilderness. After leaving Fort Myers, roads disappeared and we took to mere trails through the pine woods in a southeasterly direction. As we proceeded, strange plants and strange birds began to appear. White terrestrial orchids (*Gymnadeniopsis nivalis*) and single-flowered spider lilies (*Hymenocallis humilis*) dotted the dry prairies, while uliginous creepers with various colored flowers formed encircling mats about all the shallow ponds. Ponds and pools were the favorite feeding places for the wood ibis, the white ibis, cranes, and herons. The hammocks hid many flocks of wild turkeys in their depths.

For some distance outside of Fort Myers we traveled through unbroken pine woods. As we went on, the pine trees became more scattered and areas of prairie came into view. Farther on, the prairie began to increase and the pines appeared only here and there as isolated colonies. A little farther on cypress trees appeared, and we were really in the Big Cypress. Here, too, the cabbage palm was much in evidence, and in some places it formed hammocks of almost pure growth. As we proceeded, the prairies grew larger and the cypress grew less, until there was open prairie in all directions almost as far as the eye could see. Then the hammocks clothing the Okaloacoochee Slough appeared in the distance as a mere line on the horizon. It is said that the Seminole word "Okaloacoochee" signifies "boggy-slough." Consequently the usually associated word "slough" is really superfluous.

As we approached the slough we observed immense flocks of ibis collecting at their rookery for the night. The confused sounds they made as they flew over the tops of the tall trees could be heard for a distance of a mile. The sight of the great flocks of ibis and the racket of their croaks or squawks as they collected in their rookery we shall long remember.

We drove into a small hammock within half a mile of the slough and prepared to camp there for the night. Many interesting plants were collected on the prairies near the slough before darkness drove us back to camp. Indian plantains (*Mesadenia*), foxgloves (*Agalinis*), and heliotropes (*Heliotropium*) grew nearly everywhere. Fully as interesting as the native plants was the climbing black-eyed Susan (*Thunbergia alata*), which we found extensively naturalized on the prairie near the Okaloacoochee. The plants now growing there may be the descendants of specimens introduced and cultivated in gardens the Seminoles maintained there fully a century ago.

The following morning we broke camp about daybreak and proceeded to cross the slough. We parked our cars in its midst on the very spot where, it is said, more than sixty years ago Lieutenant Harsuff's company of engineers had their sanguinary clash with Chief Billy Bowlegs—after they had destroyed the old chief's garden just to "see old Billy cut up."

The larger trees of this hammock consist of the bald cypress or river cypress (*Taxodium distichum*). It was a favorite spot for the Indians to obtain logs for making their dugout canoes. In the rainy season there is commonly about six feet of water in the slough. After the rainy season the water table is naturally lowered by seepage. The waters, evidently, find their way directly into the Everglade basin, and directly or indirectly into the Gulf of Mexico. In the dry season most of the slough can be traversed on foot. It was the custom of the Indians to go to the slough in the dry season, cut down the trees they selected for making the canoes, and then wait for the wet season and high water to float the logs out toward the western coast.

We went down the slough afoot just as the thousands of birds in the rookery were awakening. The birds mostly represented several species of ibis, and were present by the hundreds and thousands on the large cypress trees. In fact, they were so crowded on some of the giant cypresses that they were continually falling off for want of sufficient room to stand. As a consequence of not having been much disturbed by man, they were so tame that one could walk



In the Okaloacoochee Slough dead trees as well as living serve as part of the ibis rookery, for the birds are so numerous that any available space is used. Their nests are rude cradles of sticks in the trees or on ledges of rock. During the day the birds leave the rookery, traveling in more or less definite groups or companies. This photograph was taken in the morning, after the greater number of the birds had departed.



A NATURAL AMBUSCADE

From such beautiful coverts—perhaps from this very spot—commands of the United States Army fought the Indians during the Seminole wars. A riotous growth of shrubs whose stems are intertwined with woody vines form an almost impenetrable thicket extending back to a wood of river cypress in the lower part of the slough. The hammock floor is a mass of ferns and small herbs; Boston and sword ferns in particular are prevalent. There are at least fifty other kinds of ferns—many of them epiphytic—which display the greatest possible variety in structure and contour

toward them, set up a camera, and photograph them at short range.

There was water in the lower parts of the slough, but none was visible, for the surface was completely covered with a soft carpet of various small aquatics. These were distributed in patches of beautiful shades of green. In the higher parts of the slough ferns and flowering plants grew in about equal profusion and remarkable luxuriance. The growth reminded me of that in the hammocks of the eastern shore of Lake Okeechobee.¹ The large, straplike leaves of the spider lily and the paddle-like leaves of the golden club or bog torches (*Orontium*) were very conspicuous. The leaves of the golden club here at its most southern known station were fully three feet long, while the fruiting spadices lying around on the ground were thrice the size of any that I have ever observed at the north. The lizard's-tail (*Saururus*) was also there in great abundance.

Thus these typically northern plants, the lizard's-tail and golden club, are there intimately associated with such typically southern plants as the water hyacinth and the water lettuce. Other southern elements represented are the Boston fern (*Nephrolepis exaltata*) and the wild coffee (*Psychotria undata*).

After making a collection of all the plants observed and photographing the more interesting views, we returned to our cars, crossed the slough, and set out over the prairie in the direction of Rocky Lake, which lies in an uncharted spot in the Big Cypress between the Okaloacoochee Slough and the Everglades. As we proceeded, palmetto hammocks, hardwood hammocks, and cypress heads became more numerous on the prairie. At last we came to the hammock surrounding Rocky Lake, which is known to the Seminoles as Okeeh-yot-lochee, a word said to mean "wide-open-water," where we camped for lunch, and made collections of the plants. This lake is contained in a rock basin several acres in extent. It is said that it is fully seventy-five feet deep, and abounds in fish and alligators. Of course, it would be somewhat of an exaggeration to say that one could walk across the lake on the alligators'

backs; but they were more numerous than I have ever seen them elsewhere.

After lunch we set out for the ruins of an Indian mission² which some years before had been established near the site of the one-time Fort Shackleford, and then abandoned. After leaving Rocky Lake the trail wound in and out between hammocks and cypress heads until finally more open prairie was reached.

When we arrived at the Seminole mission we were now not more than four miles from the western edge of the Everglades. A unique specimen of the cabbage tree was observed—a five-fingered object, with five branches of about equal length arising from the trunk, just above the surface of the ground and all in one plane. Probably nowhere is this duplicated. Many interesting plants were found in the vicinity, especially several loosestrifes (*Lythrum*), and a false indigo (*Amorpha*) which is apparently different from any known species.

²The old Seminole mission thirty-five miles beyond Immokalee was established about 1910-11 through the instrumentality of William Crane Gray, then Bishop of southern Florida, for the Protestant Episcopal Church, the work being undertaken by Dr. William J. Godden, of Greenwich, England, who happened then to be touring the United States. Dr. Godden, a man of high connections and attainments, soon won the love of both red and white men. Originally, he started a small hospital and social center for the Seminoles at a point about seventy miles back from Fort Myers, near the historic site of old Fort Shackleford. He called this first settlement Glade Cross—because of its proximity to the Everglades and the large white cross he mounted against a cabbage palm. But when a couple of red patients died in the hospital no more Seminoles could be induced to come near the place. The mission was thereupon transferred to the lonely outpost called Boat Landing, on the edge of the Everglades, at that time the head of all the canoe trails of the region. It was not long, though, before the partial drainage of the Everglades dried the canoe trails, and Boat Landing ceased to be a port of call, or any port at all. So the doctor once more moved his mission, this time to about the center of the present Seminole Reservation, five or six miles from his former locations, right in the heart of the Big Cypress, where he hoped to establish an experimental farm. He put up a number of buildings—a store, a dispensary, various shelters. He employed the Seminoles to dig a couple of miles of drainage ditches about the place. He himself worked far harder than anyone else—without pay, mostly alone, always devoted, perfectly kind—while his people in England urged him to return to them. He died at the mission, suddenly, presumably of heart failure, in 1914. And now Glade Cross is jungle again; only a few broken canoes mark the site of Boat Landing; and the last site of all, still called "Godden's Mission," is merely a weedy, haunted ruin. The doctor's body was buried at Immokalee, a Seminole word which signifies "My Home."—Perley Poore Sheehan.

¹See *Journal of the New York Botanical Garden*, Vol. XV, pp. 69-79; Vol. XIX, pp. 279-290. The AMERICAN MUSEUM JOURNAL, Vol. XVIII, pp. 684-700.



YOUNG OWLS AT THE FAR END OF A BURROW IN THE SAND

We sometimes find in the sand of the prairie a hole about six inches in diameter—the entrance to the home of the burrowing owl. Such holes occur in "towns" of from three to twelve or more; some parts of the prairie are so honeycombed with burrows that we marvel how they and the nests in them are preserved from destruction during heavy rains. The nest is built about six or eight feet from the opening of the burrow and commonly is only six or eight inches beneath the surface. The parent owls are rather tame and may be approached within a few feet, but the young birds are vicious in appearance, voice, and manner—at least when disturbed. How could anyone ever have believed that a rattlesnake and such tempting morsels of food as these young owls would be likely to live long in peace within the same burrow



A FLOATING MEADOW OF FLOWERS

The water hyacinth (which completely covers the water in this tributary of the Caloosahatchee) always impresses the landscape, and usually is not the impediment to navigation that it has the reputation of being. Moreover, the more or less extensive areas of bright blue flowers set above the deep green leaves are unique in our flora. Live oaks, laurel oaks, and water hickories line the banks of this stream, and the long growths of Florida moss reach from the spreading limbs of the trees to the water.



A GIANT TREE OF THE FLORIDA "BIG CYPRESS"

The brilliant green of the river cypress, which largely forests the sloughs, is intensified by contrast with the waving grayish white streamers of Florida moss and the gay pink and white plumage of the nesting ibis. In the widespread limbs of the giant trees hundreds of the birds roost and when they rise in their powerful flight the sun burnishes their outstretched wings with a metallic sheen that adds a further touch of the picturesque to the landscape. The birds covered the top of this tree when it was photographed, outlining it against the sky, but their colors on the light background failed to impress the photographic plate.



NATURE GIVES THEM A FORMAL ARRANGEMENT

Relatively slender and narrow-branched trunks are characteristic of the pond cypress so that it is not adapted to support rookeries. It harbors great quantities of air plants and, although it does not bear a copious growth of Florida moss, several other species of *Tillandsia* cling to its branches.—often through the accumulation of generations the plants form masses out of all proportion to the size of the tree. Pond cypresses are usually evenly spaced as if following an architectural plan, whether they are distant from one another, as here shown, or set so closely together that passage between their trunks is difficult.

Wild orange trees, some with sour fruits, others with sweet, occur in the hammocks of the Big Cypress. Of course, some of these are the remnants of trees planted by the Seminoles; but others may be derived from ancestors planted there by the aborigines of that region or by the Spanish adventurers themselves.

The cypress of the region outside of the large sloughs was the pond cypress (*Taxodium ascendens*). The prairies were showy flower gardens. Several species of *Polygala*, several of *Sabbatia*, three or four kinds of terrestrial orchids, and a number of other conspicuous plants, both monocotyledons and dicotyledons, often covered acres in extent. A yellow-flowered bladderwort grew copiously in extensive patches in the dry white sand! Many rare and little-known plants were collected for future study.

Rocky Lake proved to be the lunch station. While in a temporary camp near the shore the writer rescued two animals from living graves. On two different occasions, while going to the lake for a drink of water, he was startled by agonizing cries. In the first instance, a large water moccasin had caught a mocking bird and was attempting to swallow it. In the second instance, another moccasin had caught a frog which he was trying to slip down his throat. In each case the victim went free and, it is to be hoped, survived.

After recrossing the Okaloacoochee Slough, instead of retracing our former course we turned more to the westward and headed for the colony of Immokalee. After passing through stretches of forest and prairie we came in view of the scattered houses of the settlement. This colony, situated about thirty miles in a direct line from Fort Myers, comprises a general store and a few dwelling houses. We reached Fort Myers shortly after sunset, and early the following morning started up the Caloosahatchee River by the same course we had taken several days before. Numerous stops

were made along the way for collecting plants and taking photographs. Palmdale, where we took the trail over the great Indian Prairie, was reached early in the afternoon. The herbaceous vegetation and magnificent palmetto hammocks not visible in the dark gave an entirely different impression of the prairie region. Some of the same genera of plants were common to both the Indian Prairie and the Big Cypress but the species were usually different. The Caloosahatchee River is evidently a natural boundary between different floral regions. The most striking feature in the vegetation of this prairie, however, is the cabbage tree. This palm grows in small clumps and also forms hammocks from one to many acres in extent, surpassing in luxuriance any growth of it I had seen previously.

After the usual bumping of banks and sand bars the ferry landed us on the opposite shore of the Kissimmee River whence we at once set out over a trail which seemed to have endless windings, but which finally brought us to Okeechobee City. From there, after a night's rest, we journeyed to Fort Pierce, collecting as we found favorable places in the pine woods and in the swamps, and next day we started on the final stage of our return trip to Miami. The city was reached without further incident, except the passing survey of a large hammock on a high sand dune along Saint Lucie Sound or Lower Indian River, which has already been partly described¹ and which has been designated for thorough exploration.

This preliminary survey deeply impressed upon us the wonderful natural history of that little-known region. Our time was limited and the region was large, but some day, before drainage and other depredations of civilization, not to mention vandalism, have removed the bloom from that still unspoiled garden, we hope to make another and longer visit to the land of the Big Cypress.

¹ *Journal of the New York Botanical Garden*, Vol. XIX, pp. 76-77.