

THE OKEECHOBEE WILDERNESS.

Almost immediately after passing out of the cut which the Caloosahatchie has excavated in the limestone at Fort Thompson our schooner was fouled on one of the banks that obstruct the upper channel, and we were compelled to lie over for upwards of an hour. The current was here particularly swift, and it was only after a most determined effort on the part of our captain, who succeeded in beaming up the ship by wedging one of our dingies under its bow, that we were able to get off at all. We had suddenly missed the channel proper, but the stranding was the first indication we received of our having gone astray, an experience which we had already lived through on more than one occasion during our Florida campaign. The water was literally alive with coots, whose break through the surface echoed from far and near over the solitudes. Large numbers of ducks were also hidden in the sedge.

Prior to the operations of the Florida land improvement company, whose dredgings have succeeded in opening a navigable channel of a few feet depth of water, this point was practically the head of navigation of the river, which here emerges from a vast expanse of almost impenetrable sedge and saw-grass. Light boats, after being transported over the rapids, could still ascend the stream for a distance of several miles, winding tortuously through the mazes in which the stream is ultimately lost. The newly excavated canal follows for some distance the actual line of the river, being merely an extension of the stream, but after passing through Lake Flirt—at the time of our visit scarcely more than a swamp tract largely overgrown with grass, flag, and various water-plants—almost completely leaves the bed of the old stream, which appears here and there meandering through the wilderness of morass, and pursues a more nearly direct course to Lake Hikpochee, over a total distance of some seventeen miles.

The depth of water in the canal varied from about four to six feet, while the current was running at the rate of probably not less than two miles an hour, if not more. We had the advantage of a favorable wind, and made the passage before nightfall, keeping hard on to the bank over which our boom felled the grass like so much broken chaff. As far as the eye could reach this almost boundless expanse of grass, relieved at intervals by oases of the most luxuriant verdure of palms and cypresses,



CYPRESS
SWAMP.

HEAD OF LAKE OKEECHOBEE

constituted the landscape; the general growth was about six to eight feet in height, dense to impenetrability, but in some places it was very much higher, and completely shut off from view all but the narrowest vistas. We found here a virtual paradise for birds. The red-winged starling, merrily contesting with the more sombre crow-blackbird a peaceful habitation along the immediate banks of the canal, appeared in almost countless numbers, pealing forth a continuous and perpetual strain of song, while hundreds of herons, egrets, and ibises, decked in the majesty of their full plumes, disported among the inner recesses of the morass, or flecked with so many specks of white the clumps of trees that had been selected for their heronries. An occasional limpkin or courlan (*Aramus pictus*) might be observed hovering over a mud-flat, but more commonly its presence is announced through a peculiar distressing cry, from which, not inaptly, the bird has received the name of screamer. On our return journey over the same ground we observed, associated with the white herons and ibises, two flocks of the roseate spoon-bill, a bird not exactly uncommon in these regions, and known to the inhabitants as the "pink curlew."

We were much surprised at the abundance of alligators, whose freshly made, or but recently deserted, "beds" appeared all along the banks. At intervals of almost every few hundred feet one of these grim monsters of mail, disturbed by our approach, would rise, and suddenly turning upon itself, plunge from its sunny retreat into the cooler shades below, disappearing only to reappear after the disturbing element had passed. A limited number of individuals, especially young forms, took no notice of our approach, retaining an air of composure in their siestas which seemingly no ordinary incident could disturb; but the greater number of the individuals took to flight apparently before our approach had actually been noticed, except in so far as it had been announced by the displaced water of the boat spreading commotion in advance of our own coming. As many as six or seven of these animals could at one time be observed from our vessel, lazily crossing and recrossing the canal, sometimes submerged to the extent that only the extremity of the snout and the large eyes were visible, at other times extended out on the surface for nearly their full extent. It is not often, I believe, that one has an opportunity of observing these animals attack their prey, but I was fortunate on one occasion to detect a small alligator seize a turtle by its protruded neck, and draw it beneath the water. This is the only instance during our entire trip that one of these animals was observed in the act of feeding.

The shallowness of the water in the canal permitted us to make considerable use of our landing-net, which, however, brought nothing to the surface but the few freshwater mollusks, recent and fossil, whose species

made up the bulk of the limestone exposed at Fort Thompson. The bottom is very largely overgrown with a species of *Myriophyllum* (?), which is especially abundant on the sands. We dragged in Lake Flirt, but failed to detect anything of significance in the mass of black vegetable muck with which our dredge came loaded to the surface.

The elevation above sea level of the east end of the canal, or where the canal issues from Lake Hikpochee, is 20-22 feet, or about 11 feet above the base of operations near Fort Thompson. This would give a fall of 10-12 feet in a course of some fifteen miles, an average of somewhat less than a foot to the mile. There can be no question, it appears to me, that Lake Hikpochee was the true source, beyond head-springs, of the Caloosahatchie, although, as I am informed by Captain Menge, it was found impossible, during the survey of the canal-route, to trace that river into the lake, the farthest accessible point on the stream, where it eventually loses itself in the maze of saw-grass, being still removed some distance from its western border. Doubtless, however, the water of the saw-grass country is in large part an oozing-out product derived from the lake, just as the waters of the more southern Everglades represent a similar outflow from Lake Okeechobee. Indeed, in view of the very nearly uniform level occupied by the two lakes, and the swamp character of the intervening territory, it is more than probable, despite the existence of a low dividing ridge, that the last named lake is itself, whether directly or indirectly, the most important contributor to the river's basin, largely regulating the height of its waters, and of those of the smaller sister lake lying to the west.

We traversed the lake (Hikpochee) in a direction slightly north of east, at a point where its width was estimated to be about seven miles. The north shore was visible for much of the distance, but in the south no bounding line could be detected. It is remarkable, in view of the broad extent of this beautiful sheet of water, that even as late as 1875 its very existence should have been doubted. The following quotation is taken from Dr. Kenworthy's narrative of a journey in Southern Florida, published in Hallock's "Camp Life in Florida" (p. 298-9): "An examination of Drew's and Colton's maps will show a large lake existing at Fort Thompson, and another some miles east, named Hickpochee. These bodies of water only exist in the imagination of map-makers . . . We instituted many inquiries of Indians, settlers and cattle-drivers regarding Lake Hickpochee, but all scouted the idea of its existence."

We took numerous soundings, which gave an average depth of water along the line of passage of upwards of ten feet, the lead at no place indicating a drop of over fifteen feet. The bottom appeared to be largely overgrown with the same plant which we had observed in the canal, and which, in its profuse development, prevented the dredge from

reaching the actual bottom of the lake. I have little doubt, that the true fundament is a compact sand, similar to that which we subsequently found to constitute the floor of Lake Okeechobee, although along the eastern border of the lake, especially at the mouth of the Okeechobee canal, a vast accumulation of black vegetable muck, containing much woody-fibre, and representing the incipient stages of peat formation, clogged the waters over considerable areas. The fauna of the lake appears to be a very deficient one, if we may be allowed to judge from the character of our drags. Apart from a few Unios and Paludinas obtained in one of the western bays, the dredge, in several trials, brought to the surface from deepest water (fifteen feet) only the red larvæ of a species of annelid, a form which was also subsequently obtained in Lake Okeechobee. The fact, however, that the dredge in most instances did not completely penetrate the grass-growth covering the bottom, accounts in a measure for the poverty of the catch; but yet the almost total absence—indeed, it might practically be said, total absence—of animal forms in the grass with which the net came up loaded, is certainly very surprising, and argues strongly for an actual deficiency in the lake fauna. Several species of fish, among them the bass, were fairly abundant in the eastern shallows, where we also obtained a specimen of the alligator-gar, and a number of alligators. None of the last named animals were observed to pass far into the lake.

Contrary winds, and a powerful current, probably not less than three miles an hour in the inflowing canal, prevented us from continuing our journey during the day beyond the eastern margin of the lake. We tried the plan of warping, *i. e.*, pulling the boat by means of a long line doubled over advanced stakes, but were compelled to desist after a drag of a few hundred feet, and after very nearly meeting with a serious mishap. Only four miles intervened between us and the large body of water which so many before us had vainly attempted to reach, and concerning which so many vague and contradictory reports had been spread. I allowed myself to be hoisted to the mast-head, whence, with the aid of a powerful field-glass, I obtained an unbroken survey of the surroundings. To the north and east the eye wandered over an almost unbroken expanse of swamp low-land—here and there a few clumps of hard wood relieving the monotony of the endless sea of saw-grass—while to the west the low line of sedge, making the western boundary of the lake, could just be distinguished. I had expected to obtain a fairly good view of Okeechobee, but a lowering sky, combined with an intervening fringe of willow scrub, practically shut out the object of my search, although from an occasional momentary shimmer I could just determine the position of the ruffled waters of the lake, and mark a boundary to the dreary waste of Everglades.

The next morning, with a favorable wind, we made the connecting passage in less than two hours. The waters of the canal teemed with alligators, and we also observed several turtles sunning on the bank. At the west end of the canal we obtained specimens of *Ampullaria depressa*, *Limnea columella*, *Physa gyrina*, and *Sphærium stamineum*, and also a variety of freshwater shrimp; and at the eastern extremity *Unio Buckleyi*, *U. amygdalum*, and *Paludina lineata*. The last two, in addition to *Ampullaria*, were also brought up by the dredge from about its middle course.