MEMOIR TO ACCOMPANY A MILITARY MAP OF THE EVERGLADES, COMPILED BY LIEUT. J. C. IVES, UNITED STATES ARMY, IN 1856, BY ORDER OF THE HON. JEFFERSON DAVIS, SECRETARY OF WAR.

The first authentic description of the Everglades of Florida, with maps, profiles, and levels, was doubtless the Memoir to Accompany a Military Map, compiled by Lieut. J. C. Ives, topographical engineer, under the general direction of Capt. A. A. Humphreys, topographical engineer, by order of the Hon. Jefferson Davis, Secretary of War, published in 1856, and commonly known as the "Davis map." The following quotations are taken therefrom:

The Everglades of Florida cover an area of about 4,000 square miles; embracing more than half of the portion of the State south of Lake Okeechobee. The subsoil of this vast region is coralline limestone. Upon the surface of this, which is very rough and irregular, lies an immense accumulation of sand, alluvial deposits, and decayed vegetable matter; forming a mass of quicksand and soft mud, from 3 to 10 feet or more in depth, that overspreads all but a few points of the first stratum. Upon the mud rests a sheet of water, the depth varying with the conformation of the bottom, but seldom, at dry seasons, greater than 3 feet. The whole is filled with a rank growth of coarse and tough grass, from 8 to 10 feet high, having a sharp, serrated edge like a saw, from which it obtains its name of saw grass. In many portions of the Everglades this saw grass is so thick as to be impenetrable, but it is intersected by numerous narrow and tortuous channels that form a kind of labyrinth, where outlets present themselves in every direction, most of them, however, terminating, at longer or shorter distances, in an impassable barrier of grass, mud, and quicksand. The surface of water is quickly affected by rains; the alternate rising and falling during wet seasons being very rapid. The difference of level between the highest and lowest stages of water is from 2 to 3 feet. The general surface of the Everglades is therefore subject to great changes; the character of marshy lake or mud flat predominating according to the wetness or dryness of the season. It is probable that, sometimes, more than one-half of the surface has no water upon it. Besides the mud islands, small keys are here and there met with which are dry at all seasons. Upon these the soil is very rich. There are many such, undoubtedly, that are often made the sites of Indian gardens.

In the year 1855, Capt. Dawson, First Artillery, made two explorations into the Everglades. The first was undertaken during the month of March, which is one of the dryest of the year, June and October being ordinarily the rainy months. * * * The water at first was very shallow, but in 5 miles increased in depth to 20 inches, * * * The general direction was west, though the route was extremely winding and circuitous. * * * At the end of 18 miles it was found the usual course to the western side was impracticable, * * * long mud banks were encountered, in which the men sank to their middles while dragging their boats. The course through the intervening ponds was greatly obstructed by fungi, clumps of trees, and bushes, and innumerable keys could be seen in all directions, the ground everywhere being boggy and wet. The third day the water became in many places too shoal to float the canoes, the breaks between the ponds were of greater extent, and the men were annoyed by the saw grass cutting their feet and limbs while forcing a way along. On the fourth day all the difficulties increased, breaks occurring 200 or 300 yards in length, grown up with old saw grass and without water. The ponds were but a few yards across and filled with fungi. The keys were smaller, however, and fewer in number. At the end of the day the command had reached a point 43 miles by the trail and 27½ in a direct line from Adams's Landing, when all progress was barred by a sea of tall saw grass, extending as far as the eye could reach; occasional small keys being seen, but no water.

A second exploration by Capt. Dawson was undertaken during the month of June, at which time the surface water was more than a foot deeper than before. After six days of difficult and laborious exertion he succeeded in obtaining a point a few miles northeast of Prophet's Landing, where further advance was stopped by want of water. * * * The edge of the Big Cypress was approached to within 3 miles, but it was impossible to get any nearer. The distance in a direct line from Fort Dallas to the place where the party turned back was 53 miles. By the trail it was estimated to be 120 miles. For 18 miles * * * the canoes had to be dragged through the mud and saw grass. * * *

In December, 1841, the command of Maj. Childs crossed in four days, from Fort Dallas to Prophet's and Waxy Hadjo's Landing, and afterwards recrossed the Everglades to Fort Lauderdale in about the same time. The first line passed over was undoubtedly the same as that traversed by Capt. Dawson, but no such obstacles were encountered as were experienced by the latter. There appears to have been at that time a passage for canoes without having to resort to hauling. The Indian guide who accompanied Capt. Dawson stated that the country was greatly changed since he had crossed it 16 years before, and that the keys were larger and more numerous. Settlers, who have resided upon the Miami River for 10 or 12 years, assert that the gradual filling up of the Everglades has been very perceptible. It would be reasonable to infer from the nature of the country that this must have been the case. The filling up appears to have been greatest toward the north and west, the southeastern portions always containing the most water. The late examinations would seem to establish the fact that, at present, during dry seasons, the Everglades are impassable. Only during high stages of the water would it be possible to cross. Even then the passage would be attended with great difficulties.

REPORT BY LIEUT. COL. Q. A. GILLMORE, CORPS OF ENGINEERS, IN 1882, UPON SURVEY MADE WITH A VIEW OF OPENING A STEAMBOAT COMMUNICATION FROM THE ST. JOHNS RIVER, FLA., BY WAY OF TOHOPEKALIGA LAKE, TO CHARLOTTE HARBOR OR PEACE CREEK.

Lieut. Col. Gillmore, whose observations were made largely within the limits of the drainage district, in speaking of the nature of the soil, said:

The subsoil is a well-stocked receptacle and storage magazine of the rain water thus absorbed, from which, by innumerable veins and rivulets, the lakes and ponds are fed. This condition is very favorable to the employment of the large lakes as natural reservoirs for a canal with locks, since the demand for water to operate such a canal would be moderate enough to cause no violent disturbance of the existing hydraulic relations. But an open and comparatively deep cut would soon cause a very active flow of these subterranean waters to its bed, which would probably be abundantly provided with water from that source for a certain length of time. But gradually the level of these subterranean waters will be lowered by the unceasing drain, the stock of stored-up water will become exhausted, and while the swamps may be reclaimed by the operation, their usefulness, as direct or indirect feeding reservoirs to the canal, will be destroyed or very materially impaired. (Ex. Doc. 189, 47th Cong., 1st sess., May 23, 1882, p. 5.)