is a large field for the economic ornithologist. For instance, during the two weeks of feeding the young birds in the nest, some seventy to eighty millions of insects must be consumed by these vireos in this county alone, if the parents only work union hours and eat nothing themselves.

The nest is kept scrupulously clean by the parent birds during the period of incubation and later during the time the young birds are in the nest; and as the nest is strongly anchored to green wood and deeply cupped the danger of accident or disease is reduced to a minimum. The nests are invariably so well concealed that a marauding jay or squirrel has little chance of discovering it, unless by accident. In fact I have never found but one raided nest. After the first egg is laid it would be hard to drive the birds from the nest; but one's observations during building operations should be most discreet as the birds will surely desert if they suspect an intruder.

The Hutton Vireo can well be called one of the quietest of our native birds; for, although fairly common in country acceptable to him, his habits and dress combine to make him very little known to the average bird hunter. Therefore I have attempted in this paper to throw a little light on his home and surroundings.

Santa Rosa, California, March 23, 1919.

AUTobiographical Notes

By HENRY WETHERBEE HENSHAW

(Continued from page 107)

TRIP TO LOUISIANA

In 1869, a few months before the examination for Harvard, my health gave away, as indeed it had done several times before with loss of school time, and I postponed for the time entering college. In the fall of the year I was made happy by receiving an invitation from Captain Frank Webber to spend the winter in Louisiana on board the Coast Survey schooner "Varina." I sailed from Boston for New Orleans early in December, and had my first experience of a real gale at sea when off Cape Hatteras where I lost, among other things, four days out of the calendar. None the worse for my experience of one of Neptune's moods, I reached New Orleans in due time, and passed the next ten days or so in that delightful southern city. Embarking on the "Varina" about the middle of the month, we tacked leisurely down the broad expanse of the Father of Waters till we were in the Pass a Loutre, one of the five passes through which the muddy waters of the giant stream find their way into the Gulf, when about noon, when visions of lunch were uppermost in my mind, we ran upon a hidden snag, which stowed a big hole in the schooner's bottom. Hasty efforts to plug the break proving unavailing, the vessel was run ashore and abandoned, though not until all our effects and the ship's stores were landed in the boats and the little steam launch. We found cordial welcome and shelter in a small fishing settlement on the banks of the pass, and I remember
that afternoon when exploring the neighborhood, noting among the thick marsh vegetation some Maryland Yellow-throats, Palm Warblers, and other birds. Little did I think, as I scanned this wilderness of reeds, that nearly forty years afterwards, as Chief of the Biological Survey, I should be called upon to administer this and other similar tracts in the neighborhood as a Federal Bird Reservation, which was set apart August 8, 1907, under the name of the "Tern Islands".

That night, as guest, I was favored with a bed improvised on top of a billiard table, while the other members of the party slept, as best they could, on the floor. The next day the ship-wrecked party was taken aboard the light-house tender "Essayons", commanded by Captain Freeman, which chanced to be on her way to New-Orleans. Thus we were back in the hospitable city the same week we had left it. If I remember rightly, it was just ten days later when we sailed by the scene of our former ship-wreck in the "Varina", which, meantime, had been raised, towed to New Orleans, repaired, and made as good as ever. This time we sailed triumphantly through the pass into the Gulf, and in due time reached the scene of our winter's labors. Captain Webber and his wife proved the most delightful and sympathetic of hosts, and as the others of the party were pleasant and congenial comrades the winter was most agreeably spent.

The work of the Survey party, of which Captain Webber was in charge, lay chiefly in and around Lakes Borgne and Ponchartrain, and I had lively anticipations of the feathered treasures in store for me in this entirely new field. As, however, the territory bordering the lakes consisted almost entirely of marshes, the variety of bird life proved very small. Such as it was; however, I devoted myself to it enthusiastically, and in spring carried home something over two hundred skins, among which were the types of Rallus saturatus, which abounded in the marshes about the Rigolets Light House. In the absence of inviting collecting ground, I devoted a good deal of time that winter to hunting ducks, geese and snipe, and the spoils gathered in this way always proved a welcome addition to our mess. The canoe trips after ducks in the tortuous bayous of the lake region with Mr. Schonstein, the keeper of the light house, will always remain delightful memories.

BACK FROM LOUISIANA

I returned home in the spring of 1870 greatly improved in health, but presently gave up all idea of a college course. Then followed a delightful interim of months when, without much thought of the morrow and its responsibilities, I devoted most of the time, in company with Brewster, wholly to outdoor life and to collecting birds.

EVENTS LEADING TO FOUNDING OF THE NUTTALL ORNITHOLOGICAL CLUB

It is surprising how trivial incidents may lead to important and unforeseen consequences. Mr. Brewster possessed a copy of the octavo edition of Audubon's "Birds", and the discoveries and experiences of this pioneer of American ornithology often formed the topic of our conversation, especially when his account of species familiar to us differed from our own experiences. As I was less acquainted with the writings of Audubon than he was, and desired to become more familiar with them, in the fall of 1871 I suggested the plan of reading aloud a chapter of Audubon and then discussing it. The plan soon becoming known to Ruthven Deane, Henry Purdie, and, later, to W. E. D. Scott
and Ernest Ingersoll, they joined us around the cozy winter fire in Brewster's house, and many pleasant and profitable evenings were thus spent. Soon others expressed a desire to join the little circle, and from this small beginning was born in due time the Nuttall Ornithological Club. The first issue of its bulletin appeared in 1876, with J. A. Allen and Elliott Coues as assistant editors.

The choice of a name for the club was a happy one, for, although Thomas Nuttall was much more of a botanist than an ornithologist, he lived for a decade in Cambridge, wrote his "Manual of the Ornithology of the United States and Canada" there, and doubtless many of the original observations recorded in it were made in the Cambridge region.

THE AMERICAN ORNITHOLOGISTS' UNION, BIOLOGICAL SURVEY, AND NATIONAL AUDUBON SOCIETY

Perhaps it is not too much to say that as a natural sequence of the formation of the Nuttall Club and the publication of its bulletin there sprung into existence in the fullness of time, the American Ornithologists' Union, founded September 26, 1883, and its journal "The Auk" which has had more potent influence in shaping the trend of American Ornithology than all other agencies combined.

Still another important consequence followed in the wake of the N. O. C., though in nowise directly connected with it. At the first meeting of the Union one of the committees appointed was "On the Status of the English Sparrow," and in 1885, Congress made a small appropriation to carry on the investigation in connection with the Agricultural Department. This was the beginning of the "Division of Economic Ornithology" which later, under the able management of Doctor C. Hart Merriam, grew into the Bureau of Biological Survey.

The first meeting of the Union was pregnant with still further important consequences. The Committee on the Protection of North American Birds then appointed did yeoman's service for several years, and then, largely due to the enthusiasm and leadership of William Dutcher, grew into the National Association of Audubon Societies which, with its Model Bird Law, has exerted a very powerful influence in this country for the protection of Citizen Bird.

MEETING WITH W. E. D. SCOTT

In the fall of 1870 I was collecting birds one day on the Coolidge Farm, back of Mount Auburn—a locality no doubt familiar to Nuttall in his day and for several years a favorite collecting ground of Brewster and myself—when I heard the report of a collecting gun, and investigation soon revealed a young fellow slowly limping his way through the trees, gun in one hand and cane in the other. Accosting him, I found he was W. E. D. Scott, then taking a scientific course at Harvard. He came to be an excellent naturalist and a successful and indefatigable bird collector despite his disability, which would have proved an insuperable obstacle to anyone not possessed of more than ordinary courage and enthusiasm. Later he became one of the founders of the Nuttall Ornithological Club.

MEET ISAAC SPRAGUE

In the fall of 1870 my father moved to Grantville, now Wellesley Hills, the region around which proved to be very inviting to the lover of outdoor life. Soon after, I made the acquaintance of Isaac Sprague, then living on the outskirts of the town, who not only had known Audubon when a young man but had accompanied him on his Missouri River trip in 1843 to aid the veteran or-

1For an interesting account of Nuttall and his activities the reader is referred to William Brewster's "Birds of the Cambridge Region of Massachusetts, 1908".
nithologist by his skill with the pencil. He showed me a good many drawings of birds made in his early days, and I particularly remember a spirited pencil sketch of Audubon which hung on the wall of the parlor. This, he said, Audubon, years before, pronounced the best likeness of himself extant, and, taking a pencil in hand, made a few strokes which he thought improved it. This sketch was made in 1842, and was reproduced in volume II, p. 84, of "Audubon and his Journals," which appeared in 1897. I find it referred to also in Herrick's "Audubon the Naturalist", vol. II, being no. 16 on the author's list of "authentic likenesses".

When I met Mr. Sprague he was making drawings of plants for Doctor Asa Gray to illustrate his "Manual" and other botanical works. Gray, who highly valued his work, pronounced him the foremost of living botanical artists. Though Mr. Sprague had long ceased the active study of birds, he was still much interested in them, and occasionally accompanied me in short tramps through the woods adjoining his house. He had never chanced to see a Prairie Warbler, and was greatly pleased when I took him to a nest I had found, when he heard for the first time the song of the bird. Though he had ceased to draw birds, he subsequently made a study of a quail for Mr. Brewster and of a ruffed grouse for me—perhaps the last bird studies he ever made, and excellent examples of his accurate and painstaking methods.

BRADFORD TORREY

It must have been considerably later than this that Bradford Torrey took up his residence in Wellesley Hills, where he lived till towards the closing years of his life when, as is well known, he moved to California. During my annual visits home I frequently met Torrey, and we had some pleasant tramps together over the Wellesley hills. Though by no means unsociable he was not over easy to become acquainted with, owing to a certain diffidence and shyness which tended to limit the number of his close comrades. The slight barriers to his friendship once overcome, he was a delightful companion and a faithful friend. He was an indefatigable student of bird life and an accurate and painstaking observer, and his notebooks are full of interesting observations which, for one reason and another, he was unable to fix definitely upon a given species and he was willing to take nothing for granted. His sketches of the habits of birds and of outdoor life, which have endeared him to thousands of readers, are told in a singularly felicitous manner and with a skilled literary touch peculiarly his own.

TRIP TO FLORIDA

On October 29, 1870, I sailed for Savannah en route to Florida on a bird collecting trip. The peninsula was then comparatively unknown to naturalists and to me was a land of mystery and romance, rich in ornithological possibilities and redolent with memories of Audubon's trip in 1831. Our party consisted of Mr. Maynard and his bride, Mr. E. L. Weeks, an artist who subsequently attained to fame as a painter of oriental subjects, and myself. We sailed from Boston October 29, 1870, and were in such haste to reach the promised land that we stopped in Savannah, then a quaint southern city, only a day, most of which was spent in a walk out to San Buenaventura Cemetery, and I still retain a vivid impression of its avenues of wonderful live oaks festooned with long streamers of grey moss (Tillandsia).
Our first stop to collect, November 6, was at Cedar Keys, on the west coast of the peninsula, which we reached by train from Baldwin on the direct line to Jacksonville. The island not proving a very desirable collecting ground, Mr. Maynard and his wife took the steamer to Key West on a prospecting trip, while I continued to collect birds about Cedar Keys, and Mr. Weeks continued to sketch. After a few days I made the acquaintance of the engineer of a construction train which made daily trips out into the pine barrens and hummocks of the mainland, and this proved most fortunate. By making use of the train, through the courtesy of the engineer, I was enabled to secure many desirable birds, including a number of one species I was never to see again in its native haunts, the Carolina Paroquet, the subsequent extinction of which curious and beautiful species must cause a pang of regret in the heart of every true bird lover.

While in Cedar Keys we experienced a “norther” which in the almost fireless condition of the town afforded a more accurate idea of life in the polar regions than I have ever known since. Much of the less hardy vegetation on the island was frost-killed, and, although the temperature of the coastwise waters was lowered only a few degrees, vast numbers of fish were killed and cast up on the beach.

January 2, the party was reunited at Key West, which had proved very unremunerative collecting ground. Upon the strength of information obtained by Mr. Maynard we took passage on a sponger, “The Explorer”, and, after four delightful days among the Keys, in which the plankton of the Gulf Stream revealed some of its wonders, we found ourselves at Miami, which was to prove our headquarters for several months.

Miami was then but a wilderness, and where today is a populous winter resort, then there were only two or three houses on the south bank of the river, and none at all on the north bank, save what remained of the officers’ quarters and barracks, relics of the government buildings that dated back to the days of the second Seminole war (1835). Major J. V. Harris, a native of Mississippi, who had served in the Confederate Army during the Civil War, was in possession of the north bank of the river, and he and his wife lived in the most easterly of the old quarters, while we rented from him the other two.

Between its hummocks and its surrounding pine woods, Miami proved inviting territory, and we collected birds with such ardor and success that I have never thought of the place since without experiencing symptoms of that emotion, not overcommon among bird collectors, remorse. It was with much pleasure, therefore, that I read Bradford Torrey’s account of his stay in the place many years later, from which it appears that Nature in her own good time set about repairing the damage we had done in our efforts to secure “good series” of the birds of the locality. Torrey’s list shows that few if any of the species we found there are now missing, while not a few species not present in our time have come in as the result of changed conditions, as the presence of gardens, parks, and imported tropical vegetation.

The Everglades

We extended our researches across Biscayne Bay to the ocean beach, and up the Miami to the Everglades by means of a row-boat, which, in addition to
many other kindnesses, Major Harris placed at our disposal. However, we got no farther than a short distance beyond the portals of the Everglades, which at that point we found to be little else but a sea of tall canes and grasses, studded here and there with islets clothed with cypress and other sub-tropical vegetation. The tortuous channels by which they were traversed were too narrow and shallow for the passage of a boat, and were navigable only by the light canoe of the Indian. Here we were introduced to that hawk of anomalous mollusk-eating habits, the Everglade Kite or "snailhawk", an excellent account of which with its nest and eggs is to be found in Maynard's "Birds of Eastern North America", 1881, p. 284. Here also we heard for the first time the scream of the cougar, a few of which lurked in these swampy fastnesses to prey upon the deer which were still fairly numerous.

LIFE AT MIAMI

The Seminole Indians from their settlements in the Everglades frequently visited us at Miami, bringing venison and delicious sweet potatoes, which we were always glad to buy, for, to tell the truth, Weeks and I, who messed by ourselves (mess is exactly the right word), fared none too sumptuously. True there was some small game in the woods, quail and rabbits, and schools of fish played in the bay before our eyes, but both of us were busy from morning to night at our self-imposed tasks, and begrudged every moment we spent in attempts to replenish our larder. We took turns cooking—Heaven save the mark!—and as each of us soon became expert at making flapjacks we lived principally upon that delicacy, made palatable with molasses syrup, which we found, somewhat to our surprise, quite capable of sustaining human life. From that day to this the flapjack has ceased to be an object of interest to me.

Perhaps the most notable bird we found at or near Miami was the little grassquit (Phonipara zena), now known as Tiavis bicolor, a straggler from the Bahamas, of which I took a single specimen January 19, 1871. We also secured the nest and eggs of the Everglade Kite in a magnolia bush on March 24. But we obtained fine series of many southern species, which well illustrated the avifauna of the region, and certain of which have since been described as new by one and another author. Most of the specimens collected on the trip found a permanent abiding place in the Museum of Comparative Zoology, or the Agassiz Museum, as it was generally known in those days.

Mr. Maynard and his wife left April 2 on a sailing yacht for a collecting cruise through the Keys to Key West, while I remained in Miami till the end of May when I returned home by way of Key West and New York.

I never published any notes upon the results of my Florida trip, but in Maynard's "Birds of Florida", three parts only of which were issued, and in his "Birds of Florida with the Water and Game Birds of Eastern North America", of which 9 parts were published; and finally in his "Birds of Eastern North America", the reader will find much valuable information and many interesting details of the habits of Florida birds. These were gathered by this indefatigable naturalist, not only on the '70-'71 trip with me, but during several other seasons when he explored different parts of the peninsula, in which work he was one of the pioneers.

\*This bird is figured on the Lantana on which it was shot in Maynard's "Birds of Eastern North America", 1881, pl. II, p. 328.
FIRST SPECIMEN OF BAIRD'S SANDPIPER COLLECTED IN THE EAST

Meantime my own collection of local birds was growing apace, and it was about this time (August 27, 1870) that I took a specimen of Baird's Sandpiper on Long Island, Boston Harbor, the first ever known to occur east of the Mississippi. This specimen proved something of a puzzle to Brewster and myself, and eventually led us to the Agassiz Museum and to J. A. Allen, then Curator of its bird and mammal collection. He very soon verified our identification, and we speedily came to know him very well. If I mistake not he was then at work on his "Mammals and Birds of East Florida", an epoch-making book, which appeared in the following April. Subsequently, at the request of Dr. Coues, I sent the sandpiper to Washington for examination, and in this way, perhaps, became known, by name at least, to Professor Baird, Dr. Coues, and Mr. Ridgway.

ACQUAINTANCE WITH DOCTOR T. M. BREWER

It must have been about this time, too, that I became acquainted with Doctor Brewer, then well-known in Boston as a publisher and book dealer. Though possessing a somewhat peppery disposition, he was a most kind and courteous gentleman, and was particularly fond of young people, and ever ready to lend a helping hand or speak a word of cheer to the aspiring young ornithologist. He came to my house to see some of my treasures, particularly a set of Sharp-tailed finch's eggs taken in Cambridge on the Charles River marshes, and more than once invited Brewster and myself to his house where we examined with pleasure his large collection of eggs. This he willed to the Agassiz Museum.

It was somewhat later than this—I do not recall the exact year—that through him I was offered the position, then vacant, of Secretary of the Boston Society of Natural History. This I declined, not liking the confinement of an indoor position.

In my mind Dr. Brewer was the living link connecting Audubon with our own times, and he often spoke of the pioneer ornithologist and of his acquaintance with him. Dr. Brewer knew Professor Baird intimately, and it was, perhaps, largely through him that I became known in Washington as a 'promising young bird collector'. Later, when I became attached to the Wheeler Survey, he always called at my office when visiting Washington and examined with great interest my bird and egg collections from the west. He died in 1880.

(To be continued)

FROM FIELD AND STUDY

Correction of Impression.—I have found that at least one person regards the last paragraph of my "Trinomials and Current Practice" Communication in the last Condor (xxi, 1919, p. 92), in which I deplore the attitude of certain "quasi-ornithologists", as embodying my personal opinion of Mr. P. A. Taverner. As one has thought this, others undoubtedly will; but such a possibility never entered my head. I have the greatest respect for Mr. Taverner as a man and as an ornithologist, and would not dream of trying to belittle him. I added the last paragraph merely to condense two of my ideas into one communication, and meant exactly what I tried to imply—that I have no patience with those who give all their time and attention to eggs, butterflies or big-game hunting, and yet indulge in a mighty outburst of lamentation whenever a new bird is described.—A. B. Howell, Covina, California, April 21, 1919.

Notes on Some Catalina Island Birds.—On reviewing Mr. A. B. Howell's paper, "Birds of the Islands off the Coast of Southern California", in connection with observa-