## WALTER JOHN HOXIE

### BY WILLIAM G. FARGO

Foreword. The writer's acquaintance with Mr. Hoxie began shortly after he came to live in St. Petersburg, Florida, which was in 1927. I have spent three or four months each winter since 1923 at Pass-a-Grille, a suburb of St. Petersburg and about six miles from the home of Mr. Hoxie. I have visited him frequently and have become intimately acquainted with him and with his youngest daughter, Mrs. Mary Russell Day, with whom he lives. Both Mr. Hoxie and Mrs. Day have read the following manuscript and have made corrections. I have had the use of Mr. Hoxie's scrapbooks containing a majority of his numerous contributions to the public press and of such of his journals, field notes, and letter files as were not destroyed in a fire at Beaufort, S. C., in 1891.

As time slips by it is well to record some of the salient points in the lives of men who have spent many of their working days in the field collecting zoological material for our museums and the large private collections and to attempt to portray what manner of men they were. It is unfortunate that Mr. Hoxie feels unable to write about himself. Should he do so, the result would be far more interesting reading than the present disconnected record of his ornithological work and similar interests. Incorporated here are some of Mr. Hoxie's hitherto unpublished bird records and manuscripts.

In preparing this biography assistance is gratefully acknowledged from Mrs. V. H. Bassett and Mr. Gilbert R. Rossignol of Savannah, Georgia, long-time acquaintances of Mr. Hoxie; from J. L. Baillie, Jr. and J. H. Fleming of Toronto, Ont.; Dr. Josselyn Van Tyne and Leonard W. Wing of Ann Arbor, Michigan; and Dr. James L. Peters, Cambridge, Mass.; particularly from Arthur H. Howell, of the U. S. Biological Survey who kindly placed at my disposal various of Hoxie's records in his personal possession or that of the Survey.

The portrait of Mr. Hoxie taken when he was about sixty years of age is from the Ruthven Deane Collection of Portraits of Ornithologists, now in the Library of Congress at Washington, to which we are indebted for its use. The other photographs are by the author.

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Prof. Walter John Hoxie, now past eighty-six years of age,\* living in St. Petersburg, Florida, is known to ornithologists chiefly by his

<sup>\*</sup>Prof. Hoxie died at his home in St. Petersburg on July 30, 1934, after this biography was in type.

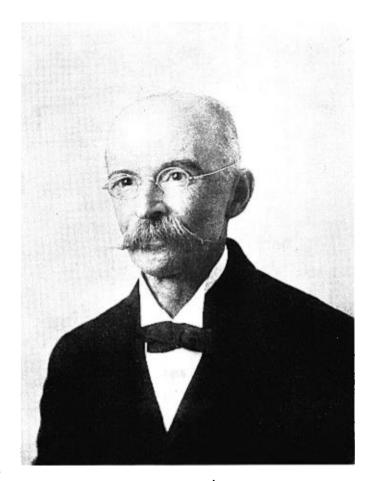
writing on birds in the magazines between 1884 and 1918 and occasionally afterward. There are eight titles by him in the Auk, four in the Wilson Bulletin, and over seventy in the Ornithologist and Oölogist. Most of the larger public and private collections of study skins of birds and mammals in the United States contain specimens from the southeastern part of our country collected by Hoxie.

Walter John Hoxie was born at Rochester, New York, February 26, 1848, but since becoming of age has lived mostly in the South and his writings pertain chiefly to the birds of South Carolina, Georgia, and Florida. He acquired, for those days, an education of rather wide scope, had excellent powers of observation, a spirit of research, a keen interest in fauna and flora generally, and in birds particularly, together with a facile pen and a pleasing style of writing, often quite on the order of Thoreau or Burroughs. He wrote easily and rapidly. Beside the above mentioned ornithological papers and notes Hoxie contributed nearly five hundred, more or less, popular articles, of some length, to other magazines and newspapers of which about 450 appeared in the Savannah Morning News. Georgia, between 1903 and 1920. Practically all of these newspaper and popular magazine articles were on nature subjects and few of them failed to contain firsthand bird observations, pertaining principally to the coast of Georgia and South Carolina.

Hoxie's father, John Anson Hoxie, of English descent, left Rochester, New York, while Walter was a small child, and located at Newburyport, Massachusetts. From 1853 to 1856 the family lived in Perth Amboy, New Jersey, returning then to Newburyport. Here, Hoxie senior "had a grist mill which was a tide-mill run by damming the Artichoke River at its junction with the Merrimac and the family lived in one end of the mill. It was a quaint old town, busy with ship-yards and having a semi-aquatic population in the lower part called Joppa, where the boys were currently reported to have webbed feet and the girls fins that they kept concealed under their arms. My mother raised me on Nuttall's Ornithology; she also had a botany called 'The Plants of Boston'."

Walter J. Hoxie was graduated in 1865 from the Putnam Free School, later taking a special course including physics and advanced mathematics. The latter fitted him for the surveying positions he held from time to time on southern railroads. After graduation he went into the U. S. Coast Survey as assistant in the astronomical division.

In 1866 he taught in the Tyng Academy at Tyngsboro, Massachusetts; then to the Bridgewater Normal School for about three years.



W.J. Hoxie

Fig. 13. Walter John Hoxie, at the age of sixty.

In October, 1868, he went to Beaufort, South Carolina, with a commission from Salmon P. Chase to investigate and report on abandoned lands. He found, however, that a survey and report had been made on such lands in that vicinity and accepted a position as teacher of the Plantation School on Lady's Island, and later taught in the first Normal School for Freedmen. Beaufort and Port Royal are on Port Royal Island. Immediately to the east lies Lady's Island and to the southeast, St. Helena Island, on the southeastern border of the latter lie, in order from west to east: Pritchard's, Fripps', and Hunter's Islands. The larger islands are connected by bridges and there is a bridge from the mainland to Port Royal Island. Frogmore, which later was Hoxie's address, is inland on St. Helena Island. These islands were but partially settled and were the haunt of many interesting species of birds.

Late in 1869 Hoxie returned North and taught in the Boston Farm School on Thompson Island in Boston Harbor; later teaching at various places in Massachusetts. While so engaged at West Newbury in 1871 he was married to Harriet Mosely, now deceased. To them were born three daughters, all living. The youngest, Mary Russell, together with her son John Hoxie Day, are with Mr. Walter J. Hoxie in St. Petersburg, Florida.

In 1879 Walter Hoxie returned to the South permanently and bought a plantation at Lands End on St. Helena Island, where he lived until removing to Savannah, Georgia, in 1901. During all of the years of his residence on the coastal islands and close to tidal waters in the outskirts of Savannah, embracing the period from 1868 to 1927, except when away as mentioned, Hoxie improved the opportunities to study birds found in this maritime paradise of the hunter and naturalist. The material for many of his papers and notes published in the ornithological magazines originated here. Throughout his long life Mr. Hoxie has lived close to the sea, if not actually in sight of it all the time, and is thoroughly at home in various sorts of smaller craft. He has spent the greater part of his life in out of doors pursuits and has been a seasoned camper, an expert woodsman, able and accustomed to live on the country for months at a time in the Florida prairies and swamps, ready for any emergency.

Hoxie was and is a kindly man, modest, self effacing, always a friend to children, birds, dogs, and Indians. One might write many pages about his pets; bald eagles, Audubon caracaras, doves, sand-pipers, parakeets, mockingbirds, etc. Mostly his pets were not cap-

tives, but free to come and go while he studied their habits and wrote entertainingly about them.

# NOTABLE ADDITIONS TO ORNITHOLOGICAL RECORDS

While located on the "Sea Islands" off the coasts of South Carolina and Georgia, Hoxie collected and prepared hundreds of bird specimens for the zoological museums. He made there some important ornithological records which will be referred to in detail below, such as the second and third specimens of the tropical Bridled Tern (Sterna anaethetus melanoptera) to be recorded from the United States; the breeding of the Long-billed Curlew and of the Savannah Sparrow on the Sea Islands, the latter two records not being heretofore published so far as we have found.

There are eight records for the Bridled Tern in the United States. The first record is attributed to Audubon. The first of the Hoxie speci-



Fig. 14. The "Sea Islands" off the South Carolina coast.

mens was taken on St. Helena Island, S. C., and sent to William Brewster and reported by him in the *Auk* (Vol. III, 1886, p. 131) as follows:

"The Bridled Tern (Sterna anaethetus) in South Carolina.—Mr. Walter Hoxie has sent me a specimen of this species shot August 25, 1885 (immediately after a hurricane), at Frogmore, South Carolina. It is a young male in fresh and very perfect autumnal plumage. The occurrence of this species in the United States has been previously open to some doubt, although Mr. George N. Lawrence has a specimen (formerly in the Audubon collection) which is labelled as having been taken in Florida."

About 1919 Mr. Brewster's large collections of birds went to the Museum of Comparative Zoology at Cambridge, Massachusetts, where this specimen still remains. The present label on it gives the sex as a female, according to Dr. James L. Peters, who kindly examined it for the writer.

The third record for the Bridled Tern in the United States was a specimen taken by Hoxie at Cape Canaveral on the east coast of Florida, August 29, 1888. This skin was sent to Dr. C. H. Merriam, Hoxie being then in his personal employ on a three and a half-month collecting trip in Florida. This specimen was sold by Dr. Merriam to Salvin and Godman and now appears to be in the British Museum. (See Howell's "Florida Bird Life", 1932, p. 266).

The fourth record for the Bridled Tern in the United States was a specimen which flew aboard ship off the South Carolina coast in 1912, and was reported by Gilbert R. Rossignol (Auk, Vol. XXX, 1913, p. 105; see also for further particulars of this record, the Auk, Vol. L, 1933, p. 104). In Bent's "Life Histories of Gulls and Terns" (1921, p. 290) this record is attributed to Georgia, as the steamer with the bird aboard put into Savannah, which is close to the South Carolina line.

Four more records for the Bridled Tern in the United States appear in the Auk, three of which are for South Carolina; namely: Auk, Vol. XLIV, 1927, p. 93, by E. S. von Dingle; Auk, Vol. L, 1933, p. 104, by Mr. E. B. Chamberlain who records two more South Carolina records, one being inland at Orangeburg, seventy-five miles northwest of Charleston, and one from Long Island, S. C. An Alabama record from the Gulf Coast is given by Helen M. Edwards in the Auk, Vol. L, 1933, p. 105. All of the eight specimens have been identified by competent ornithologists.

The two Bridled Terns credited to Hoxie were shot by him as they were flying along the coast. He recognized that they were something out of the ordinary and had an "elaborate" flight—a graceful undulatory motion in a vertical plane.

Long-billed Curlew (Numenius americanus americanus) nesting in the Sea Islands of South Carolina. "In 1867 Long-billed Curlew, locally known as Spanish Curlew, were plentiful on Lady's Island, S. C. In the spring following my arrival there, that is in the spring of 1869 I saw a pair of these birds walking about on Distant Island sands feeding their young which could not fly. The bills of the young were straight. I watched them several days." (Unpublished Mss. of W. J. Hoxie).

Killdeer (Oxyechus v. vociferus). "The Killdeer in the 1870's nested quite abundantly in the cotton fields of southern South Carolina, but disappeared about 1880." (Unpublished Mss. of W. J. Hoxie).

Late Observation of the Passenger Pigeon (Ectopistes migratorius) in Georgia, July 2, 1907. "A little way east of Jakin, Georgia,

three doves lit in a tree. The two outer ones were common 'field doves' (i. e. Mourning Doves), but the middle one was a Passenger Pigeon, it sat bolt upright and seemed twice as large as the other two. 'Look at that Wood Dove,' said a voice behind me—'a regular old Wood Dove.' In 1908 one flew over my head near Lanes, S. C., and a day or two later eight were seen near the Santee River by the engineer of the Atlantic Coast Line train. He knew them well, having



Fig. 15. Walter John Hoxie, at his St. Petersburg Cottage, "Hanat Selo", April, 1934.

previously caught them to be sent to trap-shooters in Chicago." (W. J. H.).

Savannah Sparrow (Passerculus sandwichensis savanna) nesting (?) near Savannah, Georgia. On May 23, 1907, Hoxie collected a female Savannah Sparrow on Wilmington Island, south of Savannah, which contained two large eggs, one with hard shell about to be laid. This well marked egg, .75x.60 inches in size, had grayish white spots and blotches of brown on a lilac ground. Mr. Hoxie found this species of sparrow in the Sea Islands of South Carolina and Georgia

in May of various years from 1869 on, but did not succeed in locating nests or young birds.

Arthur T. Wayne in his "Birds of South Carolina" (1910) mentions Walter J. Hoxie on pages xvii, xviii, 7, 168, 171, 217, and 220. He discredited several of Hoxie's records which later have been vindicated in the Supplements to the above book. Thus, on page 217 of "Birds of South Carolina", Wayne discredits Hoxie's records of the American Merganser (Mergus merganser americanus) for South Carolina. There are records of this species in all the southeastern Atlantic states, including Florida, although the Red-breasted Merganser (M. serrator) is doubtless the more abundant winter visitor. In the second Supplement to Wayne's "Birds of South Carolina" the American Merganser is removed from the hypothetical list by Sprunt and Chamberlain, thus corroborating Hoxie.

Mr. Wayne on page 220 of his "Birds of South Carolina" discredits Hoxie's records of Buff-breasted Sandpiper (Tryngites subruficollis) in South Carolina. Later observations have confirmed Hoxie's records. Also on page 171, Mr. Wayne discredits Hoxie's winter records of Prairie Warbler (Dendroica discolor discolor) at Frogmore, S. C., March 5, 1888, and February 19, 1891, "as this species could not possibly live in South Carolina at such dates". He states in his book that these particular winters were mild and in the Auk (Vol. XXXIX, 1922, p. 267) himself records this species in the state on January 9, 1922. In the second Supplement, therefore, Sprunt and Chamberlain vindicate Hoxie.

Having collected together and disposed of these various credits and discredits of Hoxie's new bird records for certain localities, we now resume the rather disconnected narrative of his life from 1888. In late July, 1888, Hoxie arrived at Titusville on the east coast of Florida where he began August first a three and a half-month collecting trip for Dr. C. H. Merriam, returning to South Carolina November 15. He kept a daily journal on this trip which was one of the few of his note books that were saved from a fire in 1891. His route lay across Merritt's Island, to Cape Canaveral, Melbourne, St. Lucie, Fort Pierce, and Fort Drum. In this journal there is a list of seventy-five species of birds observed or collected in the vicinity of Titusville; fifty-five species near Cape Canaveral; eighty-five at St. Lucie and ninety-nine between Ft. Pierce and Ft. Drum.

The journal recites: "Oct. 27, shot nine Parakeets (Conuropsis c. carolinensis) west of Bassenger Island. November 6, shot five Para-

keets at Ft. Drum." An Everglade Kite (Rostrhamus sociabilis plumbeus) was also collected on the Kissimmee Prairies.

While on this trip alone and afoot Hoxie fell in with several families of Seminole Indians, hunted and camped with them and entered in his journal some 200 Seminole words, mostly nouns, with their English equivalents. The Seminole Indian names for some of the birds of the region were published by Hoxie in the Ornithologist and Oölogist (Vol. 14, No. 1, 1889, p. 16 and same Vol. 16, No. 6, 1891, p. 96). While in the Everglades for fourteen months in 1889-1890, Hoxie became better acquainted with the Seminole language and has an exten-

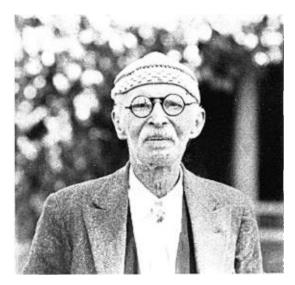


Fig. 16. Walter John Hoxie, at the age of eighty-six.

sive vocabulary. Like other Indian tribes the Seminoles had names for many of the birds and animals of the country. The nom-de-plume of "Huskee Hadki" which Hoxie sometimes used is the name given him by the Seminoles and means "rain-white", i. e., snow, and was the outcome of his having told them about the snows of the North.

Hoxie named his Savannah home in the Bonnabella district, Tashkokah, the Seminole name for the Red-cockaded Woodpecker. A cabin he had in the woods in the outskirts of Savannah he called Os-to-pah' (the Cardinal). His St. Petersburg cottage at 5359 Sixth Avenue, North, has an artistically carved sign over the entrance—Hanat Selo (Meadowlark). This cottage stands among lofty long-leaf pines in the typical "flat-pine woods" of the South, a little oasis in the mid-

outskirts of the city, the ground somewhat moist in the season of rains, with the varied wild flowers of that region in bloom all about, and for most of the year. "Professor" Hoxie as his friends call him, spends much of his time these days of 1934 on the screened front porch of this cottage with his books, his typewriter, and usually a dog. A gun stands in a corner ready to collect the occasional rare bird—perhaps a half dozen in a year. Food and water are out for the mockers, doves, towhees and cardinals. Pine-woods Sparrows in the nesting season sing their sweet little song from nearby.

In 1930 Mr. Hoxie had become almost totally blind from cataracts and in June, 1931, these were removed, since which time his vision with the aid of glasses is excellent.

In the Spanish War period Hoxie was on shipboard in Government employ for about two years off Beaufort, S. C. He was appointed "shipkeeper" on the U. S. S. Wasp, June 27, 1899, serving "two days on and one day off". Here he made many notes of bird life off shore, among them those utilized in writing one of his pleasing bird life descriptions entitled "The Rough-wings of the Hercules" which pertains to the Rough-winged Swallow (Stelgidopteryx ruficollis serripennis) and was published in the Wilson Bulletin (No. 34, pp. 1-2, XIII O. S., 1901). However, as comparatively few of the readers of the present biography have ready access to the original, this interesting example of Prof. Hoxie's style of popular bird-lore is reproduced here.

### THE ROUGH-WINGS OF THE HERCULES

The Hercules with her guns and war-paint taken off was our station tug at Port Royal. A powerful old sea-going tug thoroughly refitted and just what we needed. I was on the Nantucket then and came astern one morning in the light skiff with the regular report. Forward on the Hercules was old Johnny Greek, who ordered me to moor my boat further aft so as not to disturb his birds. He didn't seem to be as crusty as usual, so I asked to see his birds, supposing he was trying to raise some young Mockingbirds. I was much amused when he pointed out a pair of Rough-winged Swallows that were frolicking around above the dry dock that was just ahead of us. Johnny stoutly asserted his claim to them, and in a minute or two one had procured a straw and with much chatter and congratulation from its mate flew with it right into the port hawse-pipe of the Hercules. This was something new to me. I had always seen the Rough-wings burrow in sand banks, though I had read of their nesting under bridges and in sheltered crannies. The old Greek sailor I found was protecting them well. He had the deck plug of the hawse pipe neatly battened down and would not let any of the crew handle the hose forward when they washed down the decks. He was worried about their feed he told me. Said they wouldn't eat potatoes or eggs, or rice, and he was afraid they would go somewhere else if he didn't furnish them with the proper dainties. I explained the matter to him as well as I could and every trip after we had little consultations and he gave me all the news about his pets and their smart doings. They seemed to occupy a very big place in his old heart. One day he called me in to back a letter to his mother, which I used to do every pay day because I could write her name in Greek and he confided in me that he had told her about the little "rough-birds".

Three times a week the tug went up to Beaufort for groceries, etc., and the little birds seemed to think it was a pleasure trip for their special enjoyment. In town they tried to make friends with the sparrows about the wharf and came near having a pitched battle over some building material one day, but their watchful guardian scattered the contestants and brought away half a bucketful of rubbish for them to select from in peace.

Then there were eggs at last. When John tried to peep at them the little hen "bit him" and he had the finger to show for it, too. She was "scrabbich too much" he said. Trouble was nearby. A big derelict was drifting around somewhere about Cape Romain and several ships had narrowly missed disaster by it. The Hercules was ordered to put to sea, find it and blow it up. Away she went bright and early one morning and was gone five days. When she came back a very draggled looking swallow was on the truck above the pennant. The other Johnny had tucked away somewhere below. When the first big sea struck her down on the bar, Johnny had pulled out the plug and rescued the little mother but the nest and eggs were past his aid. A day or two they mourned around, but soon set up housekeeping in the same place. All went well and a young brood tried their wings from the rail of the Hercules but never came back.

The same little pair, much more sober and sedate now and with much less chatter than in their younger days, at once began to renovate their old quarters. But the Hercules was ordered to Norfolk with all her crew. When she started off gayly that morning with much saluting of whistles and all her gay bunting flying, do you suppose those wise little birds went with her? I became Johnny Greek's residuary legatee. For they came on board the Nantucket, made a careful survey and then took up their residence in one of the peep holes of the conning tower. When the Nantucket in turn was taken away, they were at some fashionable winter resort in the tropics. I look for them back this spring. The Accomac has just as good hawse-pipes as those they liked so well on the Hercules.

Leaving the vicinity of Beaufort, S. C., in 1901, Mr. Hoxie located in the eastern outskirts of Savannah, Georgia, which city he considered his place of residence until he went to live in St. Petersburg, Florida, in 1927. While located at Savannah he made several collections of mounted birds of the region. One of these was for Mr. W. J. DeRenne, whose son living on the Wormsloe Plantation near Savannah may yet

have it. Another collection was for the Georgia State College at Athens. Mrs. V. H. Bassett writes that one of the Hoxie collections of Chatham County birds is at the home of a Mr. Morgan, in Effingham County.

In 1929 Mr. Hoxie presented a collection of forty-five mounted birds and a few mammals taken near St. Petersburg to Miss Ethel Bachman, principal then of the Lakeview School in that city. Miss Bachman who is a granddaughter of John Bachman, the early American naturalist, is doing a good work interesting her pupils in nature study. She has added much to the collections which are at the Mt. Vernon School in St. Petersburg where she is teaching in 1934

While Mr. Hoxie lived at Savannah he was from time to time engaged in various occupations; as surveyor and inspector on railroad work,\* as a teacher, proprietor of a taxidermy shop, commercial photographer, and as writer for the Savannah Morning News and other publications.

Beginning in 1912 he was active in early Girl Scout work, with Mrs. Juliette Low who organized in Savannah in that year the first camp in America of Girl Guides, as the organization was then called in England. He also was connected with the Bethesda Orphan's Home near Savannah, for several years, first as assistant superintendent and later as acting superintendent. He easily made friends with children and secured their confidence, for he never has forgotten how to see the world from their viewpoint.

Mrs. V. H. Bassett, of Savannah, who knew Mr. Hoxie there has kindly furnished some reminiscences of him:

"Mr. Hoxie's home was in the southeastern outskirts of Savannah, in the Bonnabella section—the name of a former plantation. His two acres of land was a tangle of native trees, shrubs, vines, and ferns, bordered by a green lane with high walls of shrubbery. Beyond the house was a small cabin about twelve by sixteen feet, containing three rooms, a front room where he did his taxidermy work, a rear room with a fireplace, and a sleeping room just about large enough for a cot. A coral honeysuckle vine shaded the windows.

"As one approached the house from the street-car line he heard Brown-headed Nuthatches, Chickadees, and Tufted Titmice all about. Mockingbirds, Catbirds, Brown Thrashers, Cardinals, Thrushes, and many other birds, varying with the season, effaced themselves in the greenery as he walked along the lane. This lane was a joy to a birdlover; one could get a very respectable list while walking its length.

<sup>\*</sup>Mr Hoxie was on the Florida east coast on such work in 1891 and in 1893 and in 1903 near Fort Myers. He recorded finding the nest and eggs of Bobolink (*Dolichonyx oryzivorus*) May 20, 1903, near the A. C. L. R. R. bridge over Caloosahatchie River, three and one-half miles above Fort Myers.

The Wood Thrush built its nest in his yard, adding its beautiful song to the morning and evening bird-chorus.

"The years that I knew Mr. Hoxie best I am afraid were lean years for him, with work irregular and often lacking, but then as now he was a reserved man concerning his personal affairs. I do know this, however, that if he had little to spend, he spent a little less; if food lacked abundance, yet there was always some to spare for the birds that came expectantly to his window-shelf; and that he always had something to give to others and gave freely. The Scouts and nature lovers in general came to him for information, instruction, and encouragement and were not turned empty away."

Mr. Gilbert R. Rossignol, in a letter to the writer, dated April 8, 1934, says:

"I have known Mr. Hoxie for nearly thirty years and I owe much to him. He taught me to skin birds; gave me my first lessons in critical ornithology and I shall never forget his patience. . . . To know a man is to camp with him, sleep with him, and go hunting together. All three of these I have done. Mr. Hoxie was a master woodsman, lithe as a panther, noiseless as a Screech Owl. He never seemed to tire. Although I was thirty-five years his junior, he often tired me out. I can well imagine that in his youth he must have been truly a marvel."

While living at and near Savannah, Mr. Hoxie wrote over 500 articles for newspapers and magazines, largely on popular nature subjects, few of which failed to contain first-hand observations on the bird life of the region. Over 400 of these appeared in the Savannah Morning News between 1909 and 1918. Some 450 such articles by Hoxie examined by the writer average 750 words each, many containing as many as 1,500 words, and some more. In the magazines these articles were illustrated by Mr. Hoxie's own excellent photographs of birds, etc.

The aim of these articles was to create interest in nature, particularly in the fauna and flora of the coastal region contiguous to Savannah, and especially to interest youth in the worth-while things of the out-of-doors. These articles carried, too, a wholesome spirit of conservation, decried unnecessary destruction of trees and shrubs by improperly directed labor forces, as on highway work, and in various ways began a pioneer effort to bring about a right attitude of the public toward the beauties of nature.

Appended to this biographical sketch of the life of Walter J. Hoxie, is a bibliography which is intended to be complete as to the ornithological items published in the Auk, in the Wilson Bulletin,

and in the Ornithologist and Oölogist, together with titles and abstracts from a few of the articles in the Savannah Morning News.

In a report on the work accomplished by the Girl Scouts of Savannah in the first year following the initial organization, Jane Judge says in concluding the report published in the Savannah Morning News in 1913:

"The Girl Scouts have no better friend in Savannah than Mr. Hoxie. From the very beginning he has interested himself in their affairs and has become a specially valuable companion on their country walks and camping parties. Through Mr. Hoxie they have learned much about the Nature World. . . . The first Girl Scout Handbook . . . was largely written by Mr. Hoxie, some of it being adapted from the handbook by Miss Baden-Powell and Sir Robert Baden-Powell."

This handbook was entitled "How Girls Can Help Their Country."
During his stay in Savannah Mr. Hoxie continued to devote much time to coaching Girl Scouts and others in nature study. His daughter, Mrs. Mary Russell Day carries on the same work in St. Petersburg, Florida, where she is a Girl Scout captain.

Thus it is seen that Mr. Hoxie has made a great contribution to nature study and to the cause of conservation by his educational contacts with boys and girls and by his persistent messages in the public press for a third of a century. In these well written and interesting articles—drawing the attention of both young and old—Mr. Hoxie has told the facts of his own observation about vertebrates and invertebrates; about insects and plants; about tides and winds, and particularly about the seaside, but always his interest in birds predominates. Occasional articles and communications by Mr. Hoxie to the St. Petersburg Times still continue the work.

It is worthwhile to reprint some of these articles which have appeared only in a daily newspaper and so have served but a limited section of the country. Here follow four examples of Mr. Hoxie's contributions to the Savannah Morning News, entitled: "The Fall Movements of Birds", "Bachman's Sparrow", "Fluctuations in Bird Life", "The Boy that Could Wiggle His Ears". Also two titles written in 1933 not hitherto published: "Audubon's Caracara", "The Reaction of Mockingbirds to the 'Charleston' Earthquake". And "Camp-fires on the Beach", from Success Magazine.

THE FALL MOVEMENT OF BIRDS. But presently some warm muggy August night there is a steady tune going on overhead of "chi-chink, chi-chink" and straightway joy fills the hearts of the worshippers of the belly-god, for the Rice Birds have come. In their Northern home as the tuneful Bobolink they were the most cherished and admired of

song birds. Here they are a dire and dreaded enemy whose destruction is meritorious and remunerative at the same time. Close in their wake and mixing with the last of their straggling ranks come a veritable mass of many species rushing southward in chirruping throngs every still night.

By day the march is also southward among the swallows, king-birds, and martins who prefer the day light trail, feeding as they travel. Vireos and tanagers seem to travel both by day and night indiscriminately; or perchance do they select only moonlight nights? The overhead calls of these passing swarms seem to have a sleepy tired sound. Even the shore birds, whose calls are plainly distinguishable, have not the vim and ring to them that is so characteristic along the beaches or on the flats. Only the herons that seem to be scattered among the throng give clear and hearty outcries that seem as if they might be commands and directions for the movements of the winged hosts that are sweeping along in the darkness up in the sky and perhaps need the encouragement of these acknowledged night prowlers among their ranks.—W. J. H., in Savannah Morning News, Nov. 2, 1910.

Bachman's Sparrow. Bachman's Sparrow has put in appearance this winter in largely increased numbers. He is one of the woodland delights. Though pretty rare in summer he can frequently be detected by his song. It is exactly the opposite of that of his half-cousin the Pine-woods Sparrow. Both are in the same pitch but our Bachman's begins on A with a whole note and drops to E with four quarter notes. Pine-woods' whole note is on E and rises to A for his quarters. To the average man, therefore, it seems as if both were the same bird practicing an up and down rendering of the same tune.

Bachman's may be said to be like the poor, always with us, for we are just barely within his southern nesting range and also cover the northern portion of his winter sojournings. To the student of bird life he is one of the most elusive of all the feathered things. Mousey in his movements at all times, he refuses to take wing unless trodden on. Sometimes it is necessary to make a quick rush toward the spot where he is suspected of lurking. Then ten to one he whisks away behind you, but will almost always perch on some high twig for a moment to see what it is that has frightened him so. In the summer he and the Pine-woods have the same habit of singing to the brooding mate from some elevated perch and looking down at her where she is on the nest. So, to the initiated it is a dead "give away" of the situation of their home on the ground among the dense cover which otherwise it is almost impossible to locate. The Bachman's always arches the nest over somewhat, while the Pine-woods builds a perfectly open nest. The eggs of both are pure white. The songs of both are sweet beyond description.—W. J. H., in Savannah Morning News, 1913 (?).

FLUCTUATIONS IN BIRD LIFE. One hundred years ago or more Alexander Wilson, the Father of American Ornithology, was in Savannah. Reading some of the accounts of the birds he found to study

here then, and their comparative scarcity at the present day throws some light on the fluctuation in bird life in this region. Take for instance the Ivory-billed Woodpecker. He relates that on one occasion while riding his horse from Augusta to Savannah those birds flew so close to him and screamed so loudly as to frighten his horse. Now they have disappeared from this region entirely. In South Carolina there was one favored spot where a few pair survived until about 1870. A record of a single individual shot in 1879 and another seen in 1884 seem to complete the history of this remarkable bird for this locality.

Now this is an instance of the total disappearance of a species that was unpersecuted or harmed by man. An explanation must be looked for in some cause other than human agency. Possibly the solution may be in the matter of food supply. The Ivory-bill is a bird of the tall timber. His dependence for an existence seems to be on the dead or decaying trees with their accompanying beetles and larvae. With the deforestation of the land he is literally starved out and is forced to migrate. At his last abiding place in our neighboring state (South Carolina) there were circumstances that for a time favored his remaining for so long in an isolated spot. In 1856 the coast was visited by a tremendous storm. The sea invaded some of the outlying islands and piled the big trees high up on the beaches in long stretches and confused masses. As these slowly rotted away and were filled with destructive insects the birds found an unexpected and large supply of food. So there they lingered for a long time after the rest of their kin had left the neighborhood. But when another storm came and swept all the decaying logs and stumps off into the sea their means of existence was taken away from them and there was nothing left for them to do but decamp.

When I was a boy wild pigeons were plentiful all over the country. They were frequently seen in the markets and at times "pigeon pie" was one of the cheapest dishes in the restaurants. Barrels of them were in Fanueil Hall Market at Boston, Mass., as late as 1869. . . . There seems to have been a fatal habit of these birds to bulk together in some localities. But there were also a few favored spots that were occupied from year to year by much smaller colonies. Such a place was in the northern part of Essex County, Massachusetts, where only four or five pairs were known to nest. Local gunners were responsible for their destruction.

Authors differ as to the number of eggs laid by these birds, most of them adhering to the statement that only one egg was laid to a nest. This seems to be the case in all of the biggest breeding grounds, but where the colony was small two were always deposited.. This I can substantiate from my own observation and also from the testimony of an old man who used to trap and keep the wild pigeons to sell to a Chicago gun club for trap-shooting. He states positively that the birds always laid two eggs and when he obtained squabs from nests in northern Illinois there were always two in a nest.

Their mode of flight during the migrations was one of the singular features of their habits. It was a case of strictly following the leaders.

Wilson relates a curious incident in this connection. While a big flight was in progress, the flock was attacked by a hawk. In order to escape, a wide section dropped almost perpendicularly down toward the ground, rising again when the danger was past. Those following however, made the same kind of a dive from aloft when they came to this exact spot in the line of flight and rose again to the higher level in the exact course pursued by their leaders.

The sudden disappearance of such immense numbers of birds is no more wonderful than the fact that such numbers ever did really exist. Pigeons are birds that require an abundant food supply and if an individual had only a daily ration of a gill, what a perfect cargo of grain must it have required to feed the millions in a single flock that have been recorded. . . .

Another of our fast disappearing birds is the Parakeet. Plentiful at one time all over the South and extending its range even to the latitude of New York at favorable times; it is now extinct or if yet in existence, confined to very narrow limits in South Florida and perhaps in the southwest. My own acquaintance with one of these birds was a pleasant incident on my first trip into the Everglades in 1888. He was a very young bird without any yellow about the head but a scarlet mark around the base of the bill. Being only wing-tipped I kept him for a pet and he never offered to escape. Truly I must have presented a wild and weird spectacle tramping day after day clad only in a belted hunting shirt with my little green bird hanging to the back. Though I brought him home with me and he lived some years he never took on the adult phase of plumage.

The flight of the Parakeets closely resembles that of the wild pigeons. Like them too, they like to roost in communities and assemble from great distances in some favorite old hollow tree.—W. J. H., in Savannah Morning News, 1918 (?).

Settlers in the vicinity of Old Fort Drum in southern Florida say that the Parakeets came when the cypress balls were ripe. They eat corn and were often found around the plantations.

Prof. Hoxie found no nests of the Parakeet containing eggs and has never seen the eggs. In 1890 Hoxie took eight live Parakeets from southern Florida to Beaufort, S. C., where he soon liberated seven of them near the National Cemetery. All flew up, circled high and took a line due south.

THE BOY THAT COULD WIGGLE HIS EARS. (An Abstract). Why does not a boy like to wash his hands? To tell why that is you must know boys and how few people really do know boys? The real reason is that so few people really try to know them. . . .

This brings us to another point in our look at the character of the real live boy. He is to a certain extent a savage. His code is based on the same inherent principles that governed the cave man. He is not necessarily a liar but he tells the truth only as it seems best to him. He is not necessarily a thief, but he gets what he can by stealth if he cannot get it in any other way. And he admires the boy that can wiggle his ears just as our cave man admired the man with a ring in his nose or the woman with one in her ear.

When the boy that could wiggle his ears came to our school we were all in a fever of expectation. We felt sure he would exhibit his accomplishment for our admiration and furthermore we had a new teacher. There was a distinct tension in the atmosphere. All went well for an hour or so and then the ears began to wiggle. Our attention was so profoundly attracted to them that for a minute we didn't notice that the new teacher was looking straight at the exhibition. Dire disaster seemed to us to be coming and a hush fell on the room. We hadn't got well acquainted with the new teacher and of course it was impossible to tell how he would take such a strange episode. All he did was to ask the boy if that hurt him any. Because if it did he had better not do it too often unless he got paid for it. That was more of a surprise to us than if the teacher had wiggled his own ears in response and so done a duet for our benefit.

Recess soon came and the new teacher was voted all right. He was one of the few—more's the pity—that have not forgotten that they were once boys. He got us so thoroughly in accord with his views that we hardly had any rules. It was enough for him to express a wish to have things done thus and so, and woe to the boy who failed to comply. We found a way to bring him to book as only boys can.—W. J. H., in Savannah Morning News, 1914 (?).

AUDUBON'S CARACARA. My acquaintance with this species began in 1888 on the Kissimmee prairies that stretch north from Lake Okeechobee. We had been alligator hunting and on the way to camp with the hide I heard a strange whistling sound which at first I thought was one of the "dust-devils" which often kick up in the noon-tide on the big prairie. But glancing up there were small specks dropping down out of the sky that quickly materialized as vultures—both Black Vultures and Turkey Vultures. Before we reached camp they were at work on the carcass of our 'gator and must have spread over a half acre of ground. Suddenly there was a commotion and a general scattering, and flying low over the level land came a pair of Caracaras. At a respectful distance stood the entire concourse of vultures while the two visitors made their slow and deliberate meal. Then they wiped their bills deliberately on the grass and departed to a distant tree island for their customary leisurely digestion. Then with a simultaneous rush the waiting swarm of vultures returned to the feast.

Long after, in 1908, one of my friends—Gilbert R. Rossignol—was going to Florida on a hunting trip and asked me what I wanted him to bring me. Somewhat casually I suggested a young Caracara. When I met him on his return he had brought me two. One of them I named Daniel Webster and kept for over twelve years and then sold to a carnival company. For a long time he was at the Isle of Hope, an amusement resort near Savannah. Passing through the names of German Eagle and Mexican Eagle he always responded joyfully to

the name of Daniel. When I visited him on Sundays he would come to the front of the cage to have his head scratched and would posture and croak for my benefit. He would even recognize me when I passed on the open street cars. I was heart-broken when he was sold.—Unpublished Mss., by W. J. H., 1933.

THE REACTION OF MOCKINGBIRDS TO THE "CHARLESTON" EARTH-When I lived in South Carolina I was right in the track of the Charleston earthquake. In the night I was suddenly awakened by a most terrible and discordant screech and then the roaring, banging, and twisting. As soon as I was out of bed and settled down to observing, that terrible screeching began again. In the hedge under my window a pair of mockingbirds had a family of four large young. It was their united voices that combined to make that terrible noise that I had never heard before nor since. The bird's senses were sufficiently acute to feel the approach of the tremor before it made any impression on the human anatomy whatsoever. Time after time on that long night's vigil I was awakened by the birds to note the swing of my improvised pendulum and the time by my watch. When my report went in to Washington, I was informed that mine was the most complete report received at the department. It was due to my nest full of mockingbirds supplemented by a course of training on observing in the astronomical department of the U. S. Coast Survey under Dr. B. A. Gould.—Unpublished Mss., by W. J. H., 1933.

CAMP-FIRES ON THE BEACH. A camp without a fire is a hollow mockery. A camp-fire at the beach seems to have a quality all its own. The rush of the waves, the whispering in the grasses, even the sharp tang of the sea air—all are accentuated by the little flicker of light that hangs on the edge of the vast expanse. It's the bead in the cup.

The very materials of which the fire is built lend to it many expressive moods and startling changes never seen away from the ocean's edge. Driftwood that has been buffeted about by the waves and saturated with bitter brine cannot burn in the same calm and sedate fashion as the mere woodland pine knots and picnic branches. Driftwood has a voice and gesture all its own and can tell tales and sing songs to the sympathetic listener. Here are no overspreading tree-tops to swallow up the smoke as it rises. Great gray and white masses tower aloft if the air by any chance is still. If not it takes unto itself shapes strange, fantastic, and wild in unison both with its source and its surroundings. A waft of air from landward may sweep it low down in a dull black cloud right out over the leaping crests of the charging billows. It veils their whiteness and lends a dull, slaty tinge to their hollows till it mingles imperceptably with the offshore mists. If an inshore breeze catches it, away it rolls blue among the tall beach grasses. Once in a while before a storm comes on the smoke will roll reluctantly along the edge between land and water twisting and writhing in fantastic curls seemingly afraid to venture on either element. Whenever this happens look out for squalls. Trust not the deceitful quiet of the sea and the gentle balmy airs that come

now this way and now that. Drive all tent pegs solid and tauten up every guy. For before morning things will be humming.

The flame itself takes part with its surroundings. No upward roaring sheets and leaping tongues. It swirls low and sweeps in flickering twists and turns licking the fuel crookedly and askance. The spirit of the eddies and waves that erstwhile have played with this driftwood seem as if they were in some strange way present and directing its final destruction.

And even as this food for flames has come from distant shores and strange lands, so can a beach fire give out subtle odors and excite strange imaginings in the little brief hour of its play. A little stick of cane that grew on some sun-kissed islet of the "Spanish Main" is long in yielding to the flame. Fierce, red, snaky spirals lick it round and as they eat their way slowly inward, bursts of white steam spout hissing out and sharp rattling explosions follow like pistol shots. Hot sparks seem to chase you and the heart of the cane glows bloody red as it dies. A fierce tropic product this.

From nearer shores came this shapeless, old, whitened snag of cedar. Through all its wanderings it has kept its gentle odor like a good man withstanding the buffets of life. Slowly, smoking white at first it seems to offer a mild resistance to the clinging clasp of the devourer. But when at last it does burst into flame the whole fire glows rosy red. Even the venturesome little waves that come lapping into the circle of light seem to blush at their intrusion. And all about spreads that sweet, intoxicating odor.

A shattered bit of a wreck comes next to feed our fire. Was it hidden rock or hostile cannon that tore such a tough bit of timber so raggedly apart? Did some ocean gray-hound speeding through the fogs of Newfoundland crash to its doom against a floating ice-berg? This is a silent witness. Let the torture of fire examine it. Fierce and black burns the tar from the outside. No ill-smelling refuse from the gashouse this. That pungent shippy fragrance was bred in faroff Norway's forests and long tempered by clinging seaweeds and briny wonders. The witness has begun its reluctant testimony. Farther in as the fire works its way, a little spot flashes green. With a hissing burst it spreads and by the blue and violent changes indicates the presence of copper. This then is a piece of some goodly gallant craft that for years battled with Old Ocean's hostile billows. She was of the old "coppered and copper fastened class" now slowly disappearing before the "iron kettle bottoms"-sparless, smoky, old wallowers. . . .

Slowly has died our beach camp-fire while we sat and drowsed beside it. At last an incoming wave, more venturesome than its fellows laps stealthily up and reaches its quenching edge into the hissing ashes. White steam rises for an instant and then follows darkness—darkness that for the first few minutes can almost be felt. Then appears a tired-looking little old moon ready to begin climbing the sky

for a while till vanquished by her lord, the sun. High overhead swing kindly stars.—W. J. H., in Success Magazine (?), about 1911.

Walter J. Hoxie's Annotated List of the Birds of Chatham County, Georgia, appeared in eight instalments in the Savannah Morning News, beginning April 30, 1911, and contained a total of about 12,500 words. It included 314 species of birds of which about twenty species would properly be considered then as hypothetical, because of the identification of some unusual species without the bird in hand or because some sight records were by observers other than Mr. Hoxie whose knowledge of the species recorded by them is uncertain. The following records of ninety-one species are abstracted from this list. The order has been changed to conform to the Fourth Edition of the A. O. U. Check-List.

Stormy Petrel and Wilson's Petrel are found off the coast and in stormy weather come well up into the Savannah River.

American Egret; formerly abundant but now pretty thoroughly

plumed out. One or two seen every year.

Red-breasted Merganser is rare. Éxamined hundreds of American Mergansers in the markets of Savannah between 1907 and 1910 and only found two or three Red-breasted Mergansers among them. The latter species winters farther south.

Swallow-tailed Kite has nested here.

Yellow Rail; two good records in the county.

Purple Gallinule; regular summer visitor.

Florida Gallinule: commoner than the Purple.

Killdeer formerly nested here.

Woodcock; in former years a few pairs succeeded in raising broads in the Cuyler swamp and other suitable places.

Long-billed Curlew; formerly not uncommon and bred near Beaufort in 1868-69. In 1909 saw a small flock, in 1910 only a single bird seen.

Hudsonian Curlew; suddenly becoming plenty in proportion as the Long-bills become scarce. Though still a winter visitor, the numbers become less from year to year. A "bag" can no longer be made for the simple fact that in the past too many "bags" have been made.

Bartramian Sandpiper formerly nested near Savannah.

Great Black-backed Gull; one specimen collected and skin sent to the University of Georgia.

Forster's Tern is the commonest tern about Savannah.

Black Skimmers are very numerous appearing almost like a cloud of smoke off over the outer sand reefs of Tybee.

Ground Dove said to be becoming scarce about Savannah.

Yellow-billed Cuckoo; breeds here. Plunders other birds' nests.

Black-billed Cuckoo; nests a little farther north.

Long-eared Owl; winter visitor.

Saw-whet Owl; a Chatham County record. See Auk, Vol. 28, 1911, pp. 265-66.

Whip-poor-will; a very rare winter visitor, seldom utters its cry

while here.

Ivory-billed Woodpecker; his exit more recent than that of the Parakeet. The lack of food due to clearing forests is responsible, rather than the fault of the gunner. Yet to be found a few counties away.

Gray Kingbird; rare summer resident.

Scissor-tailed Flycatcher; one seen on Warsaw Island.

Crested Flycatcher; the "shot-dodger" of the boys.

Phoebe; winter visitor only.

Least Flycatcher; rare migrant.

Tree Swallow; common migrant.

Bank Swallow; a single migration record. These birds seldom seen along the coast south of Hatteras.

Rough-winged Swallow; summer resident.

Barn Swallow; common migrant.

Cliff Swallow; now rare.

(Carolina) Chickadee; woodland resident.

Tufted Titmouse; strictly resident. One of the few birds that has been able to hold its own with the English Sparrows.

House Wren; does not seem to nest here.

Mockingbird; some one that feared neither God nor man has been caught shooting them for eating figs. Figs that attract birds ought to be considered very useful figs.

Cathird; a winter visitor. Nests a little farther up the state.

Brown Thrasher; abundant resident.

Wood Thrush; summer resident.

Bluebird; resident.

Pipit; abundant winter visitor.

Cedar Waxwing; winter visitor.

White-eyed Vireo; commonest vireo.

Yellow-throated Vireo; nests occasionally.

Blue-headed Vireo; winter visitor.

Red-eyed Vireo; common summer resident.

Black and White Warbler; one of the first to come in the spring. Swainson's Warbler; a summer resident in our swamps. There is no sound in the woods so sweet as the song of this shy little bird. He walks about on the ground among the vines and cane in a sober and sedate manner all his own and never ventures out where his talents can be appreciated by the general public.

Blue-winged Warbler; one recent record.

Bachman's Warbler; the rarest of our nesting birds. If there are more than three pairs in Chatham County in any one year no one knows it. They prefer even deeper swamps than the Swainson and but once detected nesting here.

Tennessee Warbler; one record.

Orange-crowned Warbler; in exceptionally mild winters a few linger, feeding on the ground.

Parula Warbler; common summer resident. Yellow-throated Warbler; common summer resident.

Pine Warbler; our only strictly resident warbler receiving a perfect mob of winter visitors of the northern form of this species.

Kirtland Warbler; one reported recently.

Prairie Warbler; pretty common summer resident. Palm Warbler; by no means rare in migration.

Yellow Palm Warbler; the western form of the Palm Warbler arrives first in the fall and after passing is followed by the Yellow Palm Warbler. A few occasionally remain in winter. In the spring the Yellow Palms go north first and the western form passes toward the northwest behind them.

Maryland Yellowthroat; common summer resident. Yellow-breasted Chat; common summer resident.

Hooded Warbler; resident in the swamps in summer, a fine singer.

Yellow-headed Blackbird; for a number of years this western species has appeared all around Chatham County and this year it was observed by Mrs. V. H. Bassett, a very intelligent witness, on Tybee and confirmed by two or three others.

Orchard Oriole; driven away from Savannah by English Sparrows.

Boat-tailed Grackle; common about the "salts".

Cowbird: winter visitor.

Scarlet Tanager; a very rare migrant. For some reason does not pass through here on migration, but occurs only as an accidental straggler. I have never seen a pair together but once. A little farther north they are regular summer residents.

Summer Tanager; summer resident.

Rose-breasted Grosbeak; no records since the days of the tall electric light towers.

Blue Grosbeak; summer resident, not rare, but shy. Indigo Bunting; the bulk are migrants, but a few breed.

Nonpareil; still quite numerous. Before the English Sparrows came they were all over Savannah.

Purple Finch; a very rare winter visitor.

Pine Siskin; a rare winter visitor.

Towhee, Red-eyed; winter visitor.

Towhee, White-eyed; resident. Locally called Joree.

Savannah Sparrow; found nesting on Tybee Island.

Grasshopper Sparrow; not rare winter visitor.

LeConte's Sparrow; rare winter visitor. Henslow's Sparrow; rare winter visitor.

Vesper Sparrow; a winter visitor.

Lark Sparrow; recorded in adjoining counties. Bachman's Sparrow; one or two nesting records.

Chipping Sparrow; seen in the winter in goodly numbers.

Field Sparrow; winters here and there are two or three nesting records.

White-throated Sparrow; commonest upland winter visiting sparrow.

Fox Sparrow; rare winter visitor.

Lincoln's Sparrow; rare winter visitor, one record.

Song Sparrow; winter visitor.

MIGRATION NOTES AND OTHER RECORDS BY WALTER J. HOXIE, Filed with the U. S. Biological Survey. Bird Migration Notes by Hoxie for the following years are on file with the U. S. Biological Survey in Washington: 1904, 1908, 1909, 1910, 1912, 1913, 1914, 1915, 1916, 1918, 1919, 1922, 1923.

These records are all from Savannah, Georgia, except from February 15 to March 5, 1904, the notes were made in Liberty County, Georgia. Hoxie says: "These observations were made while guarding the tracks and laborers on the Atlantic Coast Line R. R. against striking section gangs. . . . The region covered was from the rice country of the Ogeechee River to the swamps of the Altamaha."

In 1922 Hoxie was at Cape Cod, Massachusetts, from July to September. The summer of 1923 he spent at a Girl Scout camp on Lookout Mountain, Georgia, (Pine-tree Camp). Here on July 9, 1923, he found the Carolina Chickadee nesting in crevices in the rock. On the same date he records an American Goldfinch and on July 16, a Spotted Sandpiper.

Mammal Records. Along with other material collected, Hoxie sent to the Biological Survey from the Savannah region several mammals not before recorded that far south. Thus in 1910 he collected a Woodchuck (Marmota monax monax) quite beyond its recorded habitat. The Biological Survey wrote him it was "probably an escape".

In 1913 a Star-nosed Mole (Condylura cristata) was collected near Savannah and sent to the Biological Survey. Various rats, mice, weasels, skunks, and bats were collected by Hoxie near Savannah for the Biological Survey.

Ornithological Bibliography of Walter J. Hoxie In the Auk:

Breeding Habits of Black Vulture, Auk, Vol. 3, 1886, pp. 245-247.

Kirtland's Warbler in South Carolina, Auk, Vol. 3, 1886, p. 412.

Aptoso-chromatism, Auk, Vol. 3, 1886, p. 413.

Notes on the Bald Eagle in Georgia, Auk, Vol. 27, 1910, p. 454.

Nesting of the Pine Woods and Bachman's Sparrows in Chatham County, Georgia, Auk, Vol. 27, 1910, pp. 457-458.

Bank Swallow at Savannah, Georgia, Auk, Vol. 27, 1910, p. 460.

Saw-whet Owl in Georgia, Auk, Vol. 28, 1911, pp. 265-266 .

Greater Shearwater on the Coast of Georgia, Auk, Vol. 28, 1911, pp. 481-482.

### IN THE WILSON BULLETIN:

The Rough-Wings of the Hercules, Wilson Bul., No. 34, March, 1901, pp. 1-2.

The Red-poll in South Carolina, Wilson Bul., No. 35, May, 1901, pp. 36-37.

Passenger Pigeon, Wilson Bul., No. 35, May, 1901, p. 44.

This Is the Forest Primeval, (Scene in a palmetto hammock, photo-reproduction, no text), Frontispiece, Wilson Bul., No. 59, June, 1907.

#### IN THE ORNITHOLOGIST AND OOLOGIST

Notes from Frogmore, S. C., 250 words, O. & O., Vol. 9, No. 11, 1884, p. 138. (Swainson Warbler collected).

Notes on the Birds of the Sea Islands, Part I, O. & O., Vol. 10, No. 1, 1885, p. 13, 1,000 words—"These notes are a digest of my notes since 1867."

Notes on the Birds of the Sea Islands, Part II, O. & O., Vol. 10, No. 2, 1885, pp. 27-29. 2,500 words.

Red-winged Blackbird, var. *gubernator*, in South Carolina, O. & O., Vol. 10, No. 3, 1885, p. 40. 80 words. (See also Vol. 10, No. 5, 1885, p. 72).

Notes on the Birds of the Sea Islands, Part III, O. & O., Vol. 10, No. 3, 1885, pp. 44-46. 2,000 words.

Do Birds Ever Play 'Possum?, O. & O., Vol. 10, No. 3, 1885, p. 48. 300 words. Editorial Comments on Walter Hoxie's series of articles on Birds of the Sea Islands, O. & O., Vol. 10, No. 4, 1885, p. 56.

Notes on Birds of the Sea Islands, Part IV, O. & O., Vol. 10, No. 4, 1885, pp. 62-63. 1,100 words.

On Describing the Colors of Birds, O. & O., Vol. 10, No. 7, 1885. p. 111. 100 words.

Oological Suggestions—Metrices, O. & O., Vol. 10, No. 7, 1885, p. 111. 110 words. (Measuring the volume of eggs).

Birds of the Sea Islands, Corrections and Additions to My Previous List, O. & O., Vol. 11, No. 3, 1886, pp. 33-34. 800 words.

Aptoso-chromatism, O. & O., Vol. 11, No. 4, 1886, pp. 49-50. 800 words. (Refers to Bobolink, Cardinal, etc. "The above name was suggested to me about a year ago by Dr. Coues to denote the moultless color change.")

Notes from the Sea Islands, O. & O., Vol. 11, No. 5, 1886, pp. 76-77. 500 words.

Notes on Aptoso-chromatism, O. & O., Vol. 11, No. 6, 1886, p. 84. 175 words.

Capacity of Eggs, O. & O., Vol. 11, No. 7, 1886, p. 103. 100 words. (Volume of eggs shown by displacement of water in tube.)

Chickadees and Oak-borer, O. & O., Vol. 11, No. 8, 1886, p. 122. 325 words. (Carolina Chickadee following moth and eating eggs as fast as laid.)

Ratio of Major and Minor Axis of Eggs, O. & O., Vol. 11, No. 8, 1886, p. 122. 180 words. (Intervals between laying affect ratio.)

The Florida or White-eyed Towhee, O. & O., Vol. 11, No. 10, 1886, pp. 155-156. 600 words. (Nests found associated with pine trees.)

A Day on Edding Island, O. & O., Vol. 11, No. 12, 1886, pp. 180-181. 1,400 words. (Notes on Gannets.)

Development of Birds, O. & O., Vol. 12, No. 1, 1887, pp. 8-9. 700 words. (Origin and ancestry of birds.)

In the Tupelo Swamp (In the middle of the Island of St. Helena), O. & O., Vol. 12, No. 2, 1887, pp. 26-27. 600 words.

Historical Ground, O. & O., Vol. 12, No. 3, 1887, pp. 37-38. (Bull's Pt. and visit of Audubon thereto). 600 words.

My Holiday (A Christmas day trip), O. & O., Vol. 12, No. 3, 1887, p. 61. 400 words.

The Sense of Smell in the American Vultures, O. & O., Vol. 12, No. 3, 1887, p. 61. 360 words. (No evidence of sense of smell—evidence of keen eyesight.)

Breeding Dates of Birds Near Frogmore, S. C., O. & O., Vol. 12, No. 6, 1887, p. 94. (21 species.) 300 words. See also *ibid.*, p. 155. (23 species.)

- Aptoso-chromatism—A Tabulated Field Study, O. & O., Vol. 12, No. 7, 1887, pp. 101-102. 500 words.
- Was It a Sparrow Hawk's Nest?, O. & O., Vol. 12, No. 7, 1887, p. 102. 200 words.
  Probable Occurrence of the Ivory-billed Woodpecker on Pritchard's Island, South Carolina, O. & O., Vol. 12, No. 8, 1887, p. 122. 200 words.
- The Wood Ibis in South Carolina, O. & O., Vol. 12, No. 8, 1887, pp. 128-129. 1,100 words.
- An Egg Lifter, O. & O., Vol. 12, No. 8, 1887, p. 129. 600 words. (Oyster-catcher carries eggs to new site.)
- Anent Hawking. (Boyhood Pets). O. & O., Vol. 12, No. 8, 1887, pp. 130-131. 700 words.
- The Sense of Smell in the Black Vulture, O. & O., Vol. 12, No. 8, 1887, p. 132. (Describes experiments; evidence negative.)
- Migratory Movements of Herons, O. & O., Vol. 12, No. 8, 1887, p. 133. 500 words. The Number of Eggs in a Set, O. & O., Vol. 12, No. 8, 1887, p. 134. 300 words. My Mockingbirds, (Pet birds). O. & O., Vol. 12, No. 9, 1887, pp. 146-147. 700
  - words.
- Breeding Dates of Birds Near Frogmore, S. C., O. & O., Vol. 12, No. 9, 1887, p. 155. 150 words. (A list of 23 species—12 species additional to previous list, see Vol. 12, No. 6, 1887, p. 94.)
- The Boat-tailed Grackle, O. & O., Vol. 12, No. 10, 1887, pp. 165-166. 1,200 words. Observations on Nest-building, O. & O., Vol. 12, No. 11, 1887, pp. 181-182. 1,000 words. (Unusual data re. Osprey, Clapper Rail, Pileated Woodpecker, Longbilled Marsh Wren, and White-eyed Vireo.)
- Up a Stump. (Pileated Woodpecker family). O. & O., Vol. 12, No. 12, 1887, pp. 194-196. 1,500 words.
- The Capacity of Eggs, O. & O., Vol. 12, No. 12, 1887, p. 207. 500 words. (A tabulation of the average capacity of eggs of 19 species of birds reduced to cubic inches and determined by filling, usually, 5 to 10 of the egg shells with dust shot and weighing the shot.)
- Deer Hunter's Assistants. (Finding deer by listening to crows and woodpeckers.) O. & O., Vol. 13, No. 2, 1888, p .27. 600 words .
- On Making Exchanges, O. & O., Vol. 13, No. 4, 1888, pp. 54-55. 760 words.
- A Bald Eagle's Nest. (Pritchard's Isl. Jan., 1888. Describes process of construction.) O. & O., Vol. 13, No. 4, 1888, pp. 63-64. 400 words.
- Nesting Habits of the Bald Eagle, O. & O., Vol. 13, No. 5, 1888, pp. 77-78. 1,100 words.
- A Delicate Position, O. & O., Vol. 13, No. 6, 1888, pp. 87-88. 650 words. ("In my young and frisky days I was a school teacher in the northeastern corner of Massachusetts." He is scheduled to read an ornithological paper but misses his train to "Peabody"; then runs 20 miles in 3½ hours, shoots several birds enroute, reads his "paper" although part is lacking, because used to wad his gun enroute.)
- Retention of Their Eggs by Birds, O. & O., Vol. 13, No. 6, 1888, pp. 89-90. 500 words. (A possibility that a Cowbird egg may cause retention by the host.) See O. & O., Vol. 14, 1889, p. 6 (refutation in part).
- The Rough-winged Swallow, O. & O., Vol. 13, No. 6, 1888, p. 91. 400 words.
- Notes on the Nesting of the Yellow-throated Warbler, O. & O., Vol. 13, No. 7, 1888, pp. 100-101. 300 words.
- Ratio of the Minor to the Major Axis of an "Ideal" Egg, O. & O., Vol. 13, No. 7, 1888, p. 101. 160 words.
- Notes on the Savannah Sparrow. (In the Sea Islands, S. C.). O. & O., Vol. 13, No. 7, 1888, pp. 101-102. 100 words.
- Notes on the Nesting of the Rough-winged Swallow, O. & O., Vol. 13, No. 7, 1888, p. 102. 100 words.

- Changes in the Relative Abundance of Species, O. & O., Vol. 13, No. 8, 1888, p. 116. 500 words.
- The White Ibis in South Carolina, O. & O., Vol. 13, No. 12, 1888, p. 180. 100 words.
- Letter to the Editor of O. & O. ("Have just returned from South Florida, . . . in the interior, north of Okeechobee." Gives list of Seminole names of birds), O. & O., Vol. 14, No. 1, 1889, pp. 15-16. 250 words.
  - (Hoxie signs this list of Seminole bird names, "Huskee Hadki", which was his Seminole sobriquet and means "rain white", i. e, snow, and was due to his telling the Indians about the white rains of the North. W. G. F.)
- Nesting of the Florida Burrowing Owl, O. & O., Vol. 14, No. 3, 1889, pp. 33-34. 1,200 words.
- Parakeets, O. & O., Vol. 14, No. 4, 1889, pp. 51-52. 1,000 words. (On the Kissimmee Prairies—a collecting trip.)
- More from Frogmore, O. & O., Vol. 14, No. 5, 1889, pp. 71-72. (Notes on: Kill-deer, Loggerhead Shrike, and albino Blackbird.)
- A Day in the Alpataochee, O. & O., Vol. 14, No. 7, 1889, pp. 103-104. 1,400 words. (A three day tramp across the wet swamps of the east coastal plain of Florida.)
- A Trip to Buzzard Island, South Carolina, O. & O., Vol. 14, No. 8, 1889, pp. 121-122. 700 words.
- The Florida Jay, O. & O., Vol. 14, No. 9, 1889. 1,100 words.
- Letter to the Editor of O. & O. to refute the criticisms of C. J. Maynard re. Hoxie's Burrowing Owl data. O. & O., Vol. 14, No. 10, 1889, p. 160. 200 words.
- On the Fort Bassenger Trail, O. & O., Vol. 15, No. 7, 1890, p. 107. 650 words. (South Florida—Burrowing Owls, etc.)
- A New Way for Finding the Capacity of Eggs. (Mathematics). O. & O., Vol. 15, No. 10, 1890, pp. 150-151. 500 words.
- The Capacity of Eggs. (Mensuration). O. & O., Vol. 15, No. 11, 1890, pp. 165-166. 600 words.
- A Moonlight Adventure, O. & O., Vol. 16, No. 1, 1891, p. 11. 500 words. (Not much ornithology, but pleasing style.)
- Looking Backward. (Humorous account of first attempt at taxidermy at age of ten.) O. & O., Vol. 16, No. 2, 1891, p. 19. 700 words.
- Warm Weather Collecting. (Care of specimens in the South to avoid ravages of ants, roaches, etc.) O. & O., Vol. 16, No. 3, 1891, p. 45. 300 words.
- A Lazy Day. (Little ornithology). O. & O., Vol. 16, No. 6, 1891, p. 87. 600 words.
- Seminole Nouns, Etc. (Letter to Editor). O. & O., Vol. 16, No. 6, 1891, p. 96. (Nine more names of birds and 39 other equivalents.)
- Caprimulgidae on the Sea Islands [of South Carolina]. O. & O., Vol. 16, No. 8, 1891, p. 126. 300 words.
- Bird Notes at Sea, O. & O., Vol. 17, No. 8, 1892, pp. 113-114. 800 words. ("All summer I have been cruising off shore on a pilot boat . . . a comfortable 40-ton schooner." A few notes of Petrels, Shearwaters, Cormorants, etc.).

The Ornithologist and Oölogist, published by Frank Blake Webster of Boston, Massachusetts, suspended publication with the combined issue of August-September and October, 1893.

From about 1903 to 1918 Mr. Hoxie wrote for the Savannah Morning News more than 450 articles on nature topics including various short stories in which natural history was cleverly interlarded.

The scope of the present bibliography will not permit the entry of all of these and similar articles printed in the same period and later in other papers and magazines. Files of the Savannah Morning News are kept in Hodgson Hall, the historical library of Savannah.

Several of the Morning News articles of most ornithological interest are incorporated or abstracted in this biography including also a subject or two from Mr. Hoxie's pen which may be lacking in bird lore but throw a strong side light on his personality. The articles incorporated or abstracted are: The Fall Movements of Birds; Bachman's Sparrow; Fluctuations in Bird Life; Birds of Chatham County (Georgia); The Boy That Could Wiggle His Ears.

The following are a few of the many interesting titles of these Savannah Morning News articles:

Our Georgia Game Birds. (Includes Curlew, White Ibis, Ducks, Quail, Turkey, Woodcock, Snipe, Dove, etc.).

Bismarck. (A tame Bald Eagle, account of its habits, etc.).

Nibsie. (A tame Spotted Sandpiper which was rescued with a broken leg and when healed, albeit crooked, continued to stay near the Hoxie boat landing. After migrating in the fall it returned in the spring and resumed its begging for worms which had been its food supplied by Mr. Hoxie during its "hospitalization".)

Chuck-wills-widow. (Seen removing its egg in its mouth) Savannah Morning News, July 9, 1916. Obituary—James Oriole, Musician. Toads and the Weevil. Cold Weather Birds. Fiddlers and Others, (Fiddler Crabs—Uca pugnax and U. pugilator). Weed Destroying Birds. Carnivorous Animals in Chatham County. Sand Dollars (and other Echinodermata). Jim Crow and the Mink. Going Down the Inlet. Song; Our Georgia.

During the past thirty years Mr. Hoxie wrote articles, similar to the examples given, for several magazines, including: Success Magazine; Sports Afield; Home Progress Magazine (Houghton Mifflin Co.).

In these present years of unemployment many idle people have turned to writing and the magazines are overloaded with copy. Under these conditions and because of his lack of photographic illustrations for some of them, Mr. Hoxie has on hand several unpublished articles and stories that in normal times would have been accepted promptly.

JACKSON, MICH.