THE CONDOR

VOLUME 48

MARCH-APRIL, 1946

.

NUMBER 2

GEORGE WILLETT:

May 28, 1879–August 2, 1945

By HILDEGARDE HOWARD

George Willett was born in Hawkesbury, Prescott County, Ontario, Canada, the first child of George and Hannah Willett. His father, George Willett senior, was of English birth and Norman ancestry. Coming to Canada as a young man, the elder Willett attended university and theological school there and became an ordained minister of the Congregational Church. In Quebec Province he met and married Hannah Theodosia Hill, a school teacher, whose family, of English descent, had lived in Quebec for several generations.

While George, Jr., was still an infant, his parents made their home in Cowansville, Quebec Province, where George spent his early childhood and received his first schooling. It was there, also, that his two brothers, Fred and Harry, were born. In 1887, George, with his mother and brothers, went to stay on his grandmother's farm at Eaton Corner, about 50 miles east of Cowansville, while his father journeyed to Redlands, California. At Redlands the Reverend Willett became the first minister of the Congregational Church, and establishing a home for his family, he was joined there by his wife and the boys in April, 1888.

Of his boyhood in Canada, George Willett later recorded (autobiographical notes, MS):

"Cowansville was a small town on the bank of the Yamaska River, surrounded by farms and woodlands. My early memories are mainly of the river and woods, as even at this early date these features were of infinitely greater interest to me than residence and business districts. I am told that my penchant for leaving home, usually without permission, to wander in the woods or fish or swim in the river, was the cause of great anxiety to my parents on numerous occasions. However, as I learned to swim very early in life, and could always find my way out of the woods when ready to leave them, the only bad endings to my expeditions took place after I arrived safely at home and was duly escorted to the wood-shed.

"My interest in natural history certainly began in Cowansville In my first skinning attempt a frog was the victim, this unfortunate animal being skinned and nailed flat on the side of the house. One of my most cherished possessions at this time was the endblown egg of a screech owl which I acquired by barter from an older boy.

"Probably the experience which astonished me the most during my early attempts to study avian behavior was caused by an entirely unwarranted attack on my person by a 'partridge' (ruffed grouse) which I disturbed on her nest."

The absence of a nearby river at Eaton Corner was something of a disappointment to eight-year old George. "But," he says, "as much of the time spent there was winter, I was able to devote many of my out-of-school hours to learning to use snow-shoes and skates. Here I also learned to chew tobacco, a habit that was indulged in by most if not all—of the male inhabitants over six years old.

"At Eaton Corner I shot my first bird, a crow, with a bored-out, muzzle-loading Queen Anne musket which I had to rest on a fence as it was too heavy for me to hold otherwise. The shot was more effective than many that I have fired since, both game and hunter being casualties: the former dead, the latter stood on his head in a snow drift."

At Redlands, George attended grammar school until 1891 and then entered the Redlands high school. While still a pupil in grammar school, young George started his real study of birds. "About 1890," he writes, "a large proportion of school boys possessed collections of birds' eggs and it required no urging to persuade me that I should do likewise. Father had always been opposed to useless destruction of wild-life, so it was with some trepidation that I asked his permission to become an egg collector. After due consideration, Father informed me that I would be allowed to collect eggs under certain conditions. He would buy me a book on American birds, so that I could learn to know the different species and their habits; also, my collecting would be limited to one egg from a nest. I am sure that any ornithologist who started his studies about the same time I did could guess the identity of the book I received: 'Nests and Eggs of North American Birds,' by Oliver Davies, for many years the gospel of the egg collector." This interest in birds was shared by George's brothers, and some of the first eggs taken were recorded on printed forms headed "Oological Collection of Willett Bros."

"Transportation in those days was very different from now," he continues, "and though we boys might occasionally get a horse or burro to ride, most of our collecting trips were made on foot. It was a long hike to Yucaipa Valley where red-wings and occasional coots nested in a small tule swamp, and almost as far to the few cotton-woods in the wash of the Santa Ana River. The timber-covered San Bernardino Mts., although nearby now, were then beyond our possibilities. However, during my stay in Redlands, I did learn quite a lot about some of the birds, largely through careful study of Oliver Davies. It took me some time to discover that our 'Spanish Mockingbird' was the Phainopepla, and it was several years before I was sure whether our marsh blackbird was the red-wing or bicolored."

In 1893 the Willett family moved to San Luis Obispo. George found this area fascinating country for bird study, and his records refer to collecting trips at this time, along the coast and on the nearby small, rocky islands were sea birds were abundant. In the Upper Salinas Valley, he found Yellow-billed Magpies in abundance in 1894, and he caught his first view of the California Condor, which, in those days, nested occasionally within a few miles of town.

In the fall of 1894, the Willetts again returned to southern California, and George entered Whittier Academy (later Whittier College). He was a tall lad by this time, with considerable dignity. His charming personality and dry sense of humor made him very popular among his classmates.

It was in 1895, in Whittier, that George wrote his first published paper. He had been interested in Ravens since, in 1892, at the age of 13, he had first seen a pair near San Jacinto, California; and for the ensuing years he had tried to find an occupied nest. When, therefore, he learned of the presence of breeding ravens in the Puente Hills, near Whittier, and was able finally to collect several sets of eggs, it was an event worthy of published comment. This record is written in boyish fashion, revealing the exuberant interest of the youthful George, and is signed "Geo. Willett, jr., Whittier, Calif." He says (1895:110), "I made up my mind on the spot that if Raven's eggs were to be obtained



Fig. 5. George Willett at about 16 years of age, with his brothers, father, and maternal grandmother.

in the Puente Hills I would add some to my collection. One of the boys of Whittier [Clarence B. Linton] told me one day in February that he knew of a nest of these birds which he and his companions had tried in vain to reach the year before. I prevailed upon him to take me to the cliff it was in and there sure enough in a small cavity near the center of the cliff which was about sixty feet in height, could be seen the outer edge of a large nest of sticks."

Preparing to scale the cliff, a rope was attached to a tree above the nest. "At first," he continues, "I attempted to ascend from the bottom but this proved too difficult and I at last gave it up. I then went to the top and climbed down the rope until I could sit in the entrance of the cavity where the nest was. There to my great joy I perceived five handsome eggs reclining snugly in their bed of sheep's wool." He mentions that, "one egg was slightly jammed in the nest but was safely blown and the break would not be noticed,"—a refreshing contrast to the hypercritical viewpoint of the modern egg collector.

In the school vacation of 1895, George accepted the invitation of Nathan and Robert Moran, whose acquaintance he had made while living in San Luis Obispo, to return to that region for a visit. Of this he writes (autobiographical notes, MS): "By that time, roads had improved somewhat, so I was able to make the trip on my bicycle, carrying a blanket and sleeping in straw stacks en route. This collecting season was a notable one to me. I took my first set of duck hawks' eggs near Avila, and black oystercatchers' on the Pecho coast. But the highlight of the season was the collecting of the first set of eggs of the white-throated swift known to science. The Morans had located a nest in a crevice in the roof of a cave on the ocean bluff near Avila. We cut a pole in a nearby eucalyptus grove and lowered it down the cliff to the cave. The pole was stood up in the cave and while the other boys held it, I climbed it and by baring my arm, was able to get the tips of my fingers over the edge of the nest and extract the five eggs one at a time and hand them down to the boys below."

In Whittier College, George's fine physique won for him a place on the football team when he was only sixteen. Football, as he later explained, was not then the game of endless substitutions that it is today. In the '90's the Whittier eleven (and *only* eleven) bicycled the 12 miles or more of dusty, bumpy roads to Los Angeles to play the opposing team, played the entire game, and pedaled back to Whittier again. No wonder George Willett had not too high opinion of the modern football hero!

In June, 1897, mother Willett, a frail and gentle woman whom George adored, passed away. Shortly after this George left college and home to secure his first job—on an orange ranch at East Highland, in San Bernardino County, where, he says, his work consisted largely of handling horses and mules. By this time he was nearly fully grown and capable of handling a man's work.

At East Highland, George joined the California National Guard, and when war with Spain was declared, in 1898, his regiment was sworn into United States service. Much to his disappointment, however, the group was kept in training at the Presidio at San Francisco for several months and then mustered out. George wasted no time in enlisting, then, as a private in the 35th U. S. Volunteer Infantry which was slated for service in the Philippines.

Although the war with Spain was over by the time his regiment reached Manila, it took active part in quelling the Aguinaldo insurrection which followed. George's diary for November, 1899, shows that he marched over a hundred miles in the first three weeks on the islands, traversing some of the same territory covered by MacArthur's men in 1944. At the Agno River, so easily crossed by the mechanized troops of today, his detachment was unable to follow the escaping Aguinaldo who had destroyed the last available boat, after effecting his own crossing. In response to a call from General Lawton for a volunteer to investigate the possibility of fording the river, George stripped and swam back and forth time after time only to have to report, as darkness descended, that crossing would be impossible except for good swimmers, unencumbered by fighting equipment. These sorry events took place on Thanksgiving day of 1899, and George's dinner consisted of a small handful of half-cooked rice, eaten on the bank of the river.

In February, 1901, while still in the Philippines, George received his honorable discharge from the army; he then served as an officer in the Manila Police Department for five months. Late this same year he left Manila and returned to the United States on an army transport, by way of Japan and China, making tantalizingly short stops at ports of call only.

George's collecting activities were considerably curtailed during his army service. He managed to take a few sets of eggs in the Philippines, but, unfortunately, these were all destroyed by rats before he could get them home.

Soon after his return to California, in 1902, George Willett, now grown to young manhood, accepted a position as recorder with the United States Geological Survey. This work took him to Arizona and Montana, where in his spare time he continued the collecting and study of wild life.

In June and July of 1903 he made several visits to Lake Bowdoin in northeastern



Fig. 6. Willett in 1901 while on Philippine police force.

Fig. 7. Willett shortly after joining the Los Angeles police force.

Montana. This lake, 3 miles in diameter, has in its center several small islands, on which Willett found numerous nesting birds. Reaching these islands was no small undertaking. After arriving at the lake by train, he found no boats available, so proceeded to wade to the nearest island. His own description (1907:105) of his visit to this island is too colorful to paraphrase: "I took off my clothes and carrying them above my head succeeded in wading to the first and largest island which was about 150 yards out. I was met half way by a swarm of Common Terns and Avocets. As I stepped ashore the ducks started to rise from and the grass all around me and I found myself in the midst of four or five acres of eggs. The bare spots between the grass patches were occupied by the Terns and Avocets, and I also found two nests of the Spotted Sandpiper, each containing four eggs." The next island being another three-quarters of a mile beyond, and the wind having stirred up the waters of the lake, George postponed his attempt to reach it until the following week. He then returned to the spot, armed with a wooden pickle bucket, "to bring back the spoils," and, as the water was quite calm, swam out to the island. He found the greater part of its two acres to be occupied by a rookery of hundreds of Great Blue Herons, with Ring-billed Gulls, White Pelicans and ducks in lesser numbers. After completely exploring the area, he loaded his bucket and made the return trip, swimming on his back with the egg-filled bucket poised precariously on his chest!

Late in 1903 Willett returned to southern California where he remained for the next nine years. Here he met and married Anna Wells, and became the father of one son, George, Jr. Settling in Los Angeles, he joined the police force of this city, advancing in his years of service from patrolman to sergeant. One of the strongest men on the force, he entered into the sports contests of the police and upheld the championship for his group in the annual tug-of-war against the firemen, in which he acted as anchorman.

For many years he was assigned to old Chinatown and became well liked by the Chinese for his genial personality and fairness in dealing with them. They brought many of their disputes to him to settle, and they went so far as to make him an honorary member of the Hop Sing Tong. Undoubtedly his great size and resonant basso voice helped somewhat to engender their feeling of respect for him. Willett now stood 6 feet 3 inches in height and weighed in the neighborhood of 250 pounds. He knew all of the "old-timers" by name, and his discerning eye was quick to note new faces. In this way he had no trouble in rounding up groups of illegally imported Chinese.

It was about a year after his return to Los Angeles that George Willett discovered the Cooper Club and applied for membership. On the night of April 20, 1905, at the meeting of the Southern Division held in the offices of Mr. Howard Robertson, in downtown Los Angeles, Willett's application was presented. On this same evening "Mr. Loye Holmes Miller, State Normal School, Los Angeles," was elected to active membership. From this time in April, 1905, when he was welcomed to the club by President Eugene Law, until the meeting of June, 1945, the last scheduled meeting before his death, George Willett was in regular attendance at the Southern Division unless called elsewhere in line of duty. Some of his closest friendships were formed at those early Cooper Club gatherings. The group that met in those days in Los Angeles was small, usually 12 to 18. The names most frequently appearing in the minutes were Willett, Eugene Law, Harry Lelande, Joseph Grinnell, Alphonse and Antonin Jay, Joseph Dixon, H. F. Clifton, Howard Robertson, W. P. Taylor, G. F. Morcom, W. B. Judson, and Love Miller. Willett's notes mention collecting trips taken with one or another of these men, singly, or in groups. Often, too, a friend from Cooper Club accompanied him on his Chinatown beat and enjoyed a tour which the average American would rarely be privileged to experience. Love Miller tells of one interesting occasion when, in response to his query regarding the swifts' nests eaten by the Chinese, Willett conducted him to a small store, tucked away on a side street in the Chinese quarters. Here, after some friendly parley, Willett persuaded the proprietor to part with several broken bits of this rare and cherished delicacy.

From the time of joining the Cooper Club, Willett's scientific study of birds developed rapidly. In addition to egg collecting, he became interested in studying the habits of birds, and he also began his collection of bird skins. Presumably he had prepared skins even in his boyhood but had not previously endeavored to maintain a scientific collection. The first skin entered in his catalog is dated October 21, 1905, and by the end of that year he had listed over a hundred specimens. Always at home out of doors, watching birds in the wild since childhood, Willett now began to publish some of his observations. In May, 1906, two of his notes appeared in "From Field and Study" in the Condor, and the November issue of that year carried a short article on the nesting of the Clapper Rail at Nigger Slough in Los Angeles County. Longer papers began to appear the following year.

With his friends of the Cooper Club, Willett was in the field whenever his police work allowed. In the years 1907-1912, the Condor carried his reports on many trips taken in and near California, from San Luis Obispo to San Diego, and south into Lower California. Of these a few refer to inland areas, but his interest centered largely in birds of the ocean and shore. This interest in water birds served to stimulate others of the group to greater study of coastal birds and resulted in adding some thirty species to those recorded for southern California by the time the new distributional list appeared in 1912.

The more extended trips taken in this period included two expeditions to the Santa Barbara Islands and one to the coast of Lower California. The earlier of the Channel Islands trips was made in November of 1907, in a "dilapidated fishing smack" with his old school friend, Clarence Linton, Linton's father, and a crawfisherman named "Coldfoot" Jorgenson. As described by the younger Linton (Condor, 10, 1908:124), this tenday expedition was an exciting one. As is frequently true around the islands, the wind was strong, and the none too sturdy craft was twice saved from destruction on the rocks by the skill and quick-thinking of Willett and the Lintons. Once established in camp at Santa Cruz Island, however, they found the collecting good, and there was fine opportunity for observation.

Willett's second trip to the islands was taken in June, 1910, with several other Cooper Club members, and on a more seaworthy launch. Two days were spent on Anacapa Island where nesting birds were observed and eggs were collected. Touching at Santa Cruz and Santa Rosa Islands the party went on to San Miguel where it was stranded for 14 days due to storms.

Willett seemed destined to encounter inclement weather on these early expeditions. On the trip to northern Lower California, in April, 1912, taken in the company of W. J. McCloskey, for the Los Angeles Museum, H. C. Lowe, conchologist, and Clarence Linton, only two of the twenty-two days at sea were calm. In spite of the weather, however, Willett returned with a quantity of notes and a number of excellent specimens; another valuable experience was added.

In 1910 interest in the building of a museum for southern California was occupying the attention of the Cooper Club. The Club had been given the responsibility of planning the ornithological exhibit for the new museum and had been asked also to prepare data to be placed in the cornerstone. George Willett was appointed on committees concerned with the carrying out of both of these missions. Thus, his contact with the Los Angeles County Museum began seventeen years before he entered the employ of the County and became curator in charge of the Ornithology department of that institution.

Recognizing the accuracy with which he recorded his observations in the field, as well as the considerable knowledge of southern California birds by this time at his command, the Cooper Club, in 1910, assigned to George Willett the task of compiling a new distributional list of birds of the area to replace that prepared by Grinnell some ten years before. He accepted this task with characteristic modesty, indicating his willingness to undertake the work, but stating that he would need to call upon all other members for help in gathering the necessary records.

Preparation of this list occupied most of the spare minutes at his disposal for over a year. Loye Miller tells of visits to George when on duty in Chinatown. He had a little "office" in the old haymarket on the edge of the Chinese quarters. In here he had his telephone and a desk, and on a shelf in the desk was his notebook. This he would open to ask Miller what information he could fill in about this or that species. When the time came to start around on his beat again, Miller would accompany him, talking over observations of birds between sing-song greetings exchanged with the Chinese.

Early in 1912 the manuscript was completed, and on July 12 it appeared in print. This first major publication by George Willett drew exceedingy favorable comment for its accuracy in attention to detail and for the large amount of new data recorded. It is not unlikely that the excellence of this work had much to do with his election, the following year, to full membership in the American Ornithologists' Union.

In the summer of 1912 Willett procured a leave of absence from the police force to accept an assignment with the United States Biological Survey as Reservation Inspector. In the interests of the National Association of Audubon Societies he made a study of the bird life in the vicinity of Sitka and in particular of those birds on St. Lazaria Bird Reservation. His report on this first of his many trips to Alaska appeared in Bird-Lore in the latter part of the year.

In December of this year Willett, now resigned from the Los Angeles Police Department, joined an inspection party organized by the Biological Survey to visit several of



Fig. 8. First trip to Alaska, 1912.

the smaller Hawaiian Islands, giving particular attention to Laysan. This trip was a continuation of the Survey's inspection of these islands as a result of the mass destruction of bird life there by plumage hunters, in 1910. Previous observations had been carried on in the summer months, and this was the first winter census of the sea-bird population. The birds were found to be re-establishing themselves, and it was possible to bring back a number of scientific specimens. Alfred M. Bailey, who was also on this trip, relates, in a recent letter to me, one of the many adventures of the trip, in which George Willett was involved. He writes as follows:

"I recall one day I was on the north end of the island [Laysan] shooting sharks when I was surprised to see George come swimming in from the barrier reef. He had gone out there some two miles, killed a turtle, and then swam back with the bloody meat



Fig. 9. George Willett and Alfred M. Bailey skinning rare Hawaiian seal (first specimen to be preserved). Laysan Island, December 31, 1912.

on his back. He landed in a pot hole where there were sharks about 5-8 feet in length, and taking a knife for his security, went after them. He hit one in the head and his hand slipped over the hilt, cutting his fingers severely. When he climbed out over the coral reef, dressed only in his shoes, he held out his arm with the blood running from his elbow and remarked, 'Al, that's what I get for being a kid all my life.'"

This visit to the Hawaiian Islands probably marks Willett's first experience in collecting mollusks. He became interested in picking up beach shells on Laysan, and, on Oahu, joined a couple of conchologists in collecting land snails. His vigorous shaking of the trees, bringing down the tree snails in good quantities, was the source of considerable amusement to fellow members of the party. He was not concerned with making a mollusk collection of his own at this time and most of the specimens taken were disposed of to others.

Returning to California, Willett was appointed inspector for the Biological Survey for the western United States, under the new Federal Migratory Bird Law just going into effect. For the next five years his work with the Survey took him to Alaska in the summer and early fall, and to California, Arizona, and Nevada in the winter. Many new bird reservations had been created, and it was Willett's job to report upon the conditions in these areas and to enforce the "no shooting" laws. In the summer of 1913, as in 1912, he was located in the Sitka area of Alaska. The summers of the next four years, however, were spent at Forrester Island. His bird observations during this time appeared in the Auk and in the Condor for 1915 and 1917. While at Forrester Island he spent some time in dredging for marine mollusks and began to make a study of the species found. His first paper on this group was written for the Nautilus in 1918 and contained the description of a new species of bivalve.

The summer of 1918 was spent in Harney County, Oregon, at the reservation at Malheur Lake. Here Willett met Stanley Jewett, also working for the Biological Survey. Mr. Jewett tells, in a recent letter, of their first meeting, on a hot day in August: "Going to the hotel I was told the number of George's room, and as I knocked on the door a very heavy deep gruff voice said 'Come in.' I opened the door and there sat George at a little

THE CONDOR

table skinning two small bats that he had recently brought in. Having never seen George before, and finding him at the table, stripped to the waist, following his chosen work, I was greatly impressed, especially with the enormous size of the man and his broad shoulders and deep voice. Knowing George, as most of us do, you realize that it took very little time to become acquainted.

"A few days later we were joined by Dr. George W. Field, formerly in charge of wildlife refuges under the supervision of Dr. T. S. Palmer. The three of us not only visited Malheur Lake and vicinity but made a reconnaissance trip through the desert regions of south-central Oregon, visiting Catlow Valley, Lakeview, Summer and Silver lakes, and ended the trip at Klamath Falls, Oregon, early in September. Most of that section was new to George and I can remember the enthusiasm and delight he expressed in seeing the large numbers of California Jays in the Summer Lake Valley, and of Piñon Jays, Gray Jays and Crossbills in the lodgepole pine forests in Lake and Klamath counties.

"Spending the time together, camping in the desert and pine forest, eating out of the same frying pan, and drinking out of the same coffee pot, a close friendship was developed"

At the close of this expedition, Willett put his family affairs in order and entered the armed services in World War I. He was sent immediately to the Infantry Officers' training camp at Waco, Texas, where he was on November 11, when the Armistice was signed with Germany. A week later he was a civilian once more, and for about four months (until March, 1919) served as United States Game Warden for Los Angeles and vicinity. He then resigned from the government service and, a few months later, returned to Alaska on his own.

From his previous experience in Alaska, George Willett had concluded that a man could make a living there by trapping in the winter and fishing in the summer. This seemed an ideal arrangement which would give him plenty of time for scientific collecting as well. He therefore moved his family to Craig, on the west coast of Prince of Wales Island. He was probably the first active ornithologist to winter in southeastern Alaska. An account of the first winter and early spring (1919-1920) there appeared in the Murrelet (1921, vol. 2, no. 1). This is exceedingly interesting reading, telling of the resident birds present through the winter, the migrants noted, the first spring arrivals, and the nesting of various species. He mentions being joined at Craig by Sidney Peyton, and he comments on their journey to Forrester Island as follows (op. cit.:8): "On May 10th we packed our camp equipment on the writer's twenty-one foot power dory and proceeded to Waterfall, Prince of Wales Island. We remained there over night and on the morning of May 11th went out through Meare's Pass, between Dall and Suemez Islands, to the open sea and headed for Forrester Island, arriving safely shortly after noon in a pouring rain storm.... We were joined by the writer's family on June 1st, and on July 9th, A. M. Bailey of the U.S. Biological Survey landed on the island and remained with us until July 21st."

Mr. Bailey's recent letter takes up the story of his visit with Willett that summer, "... I joined him on Forrester for a couple of weeks. Sidney Peyton was on the island also, and we had a good time together. When I tried to get back to the mainland, my gas boat broke down, and I started for Japan without any sails. George picked me up and took me to Dall Island in his open dory. On the way in we collected a pair of half grown ancient murrelets, which George said were the only ones taken so far as he knew, after the young left the islands."

Navigating among these islands of southeastern Alaska was tricky business, and

Willett must have been an expert navigator to know how and when to ride the tides. Life here was rough, but undoubtedly the very hardships were a challenge to his spirit of adventure. Bailey tells of finding Willett on one of the off-shore islands where he had gone to trap. "I think he was rather glad to see me appear on the fisheries boat," writes



Fig. 10. George and Ora Willett on their wedding trip, in 1925.

Bailey, "for he had been marooned on the island by a couple of weeks bad weather and was down to his last pot of beans and was smoking coffee."

In the winter of 1920-21, bird life was scarce at Wrangell, Alaska, where Willett was located for the season's trapping. He therefore turned his attention to the scientific ob-

servation of the mammals at hand, and his first mammal publication (Murrelet, 1921, vol. 2, no. 2) is concerned with that winter's experiences.

In the spring of 1921, he abandoned the idea of trapping and fishing for a living and became Deputy United States Marshal, stationed first at Craig, and later at Ketchikan, Alaska. In the period from 1921 to 1925, while deputy marshal, Willett had little time for scientific writing and there was a lull in his published work. His observations continued wherever he went, and he was able to collect in his spare time, but his publications did not get really under way again until after he returned to the states in 1927.

In February, 1925, George Willett was married to Ora Alta Bellah, of Ketchikan, his former marriage having been dissolved a few years before. A little later in 1925, he resigned as deputy marshal and he and Mrs. Willett took over a fox farm on Grant Island. This venture proved unprofitable, however, due to unusually warm weather preventing priming of furs, and Willett accepted an assignment from the Alaska Game Commission to make a trip to the Aleutian Islands. This trip, as well as his other years of experience in Alaskan areas, enabled him to be of assistance to the United States Army in World War II in the matter of determining available nonpoisonous fish, mollusks, etc., which could be used as food, in case of necessity, by men stationed in the Aleutians during the war.

With the conclusion of this expedition, in December, 1926, the Willetts decided to leave Alaska and make their home in the states. George loved Alaska, however, and for many years spoke of returning there to live when he had reached retirement age.

In February, 1927, at the age of 47, George Willett came to the Los Angeles County Museum, acting as Assistant Ornithologist under Mr. L. E. Wyman. Upon Wyman's death, early in 1928, he became the head of the department of Ornithology and Mammalogy and served in this capacity until his death.

His arrival at the Los Angeles Museum coincided with its acquisition of the William Alanson Bryan collection of marine, fresh water and land shells, numbering some 40,000 specimens. In view of Willett's experience in the study of Mollusca while in Alaska, one of his first duties at the museum was to assist in the sorting and cataloging of the Bryan collection. This work gave him the opportunity of continuing his study of Pacific Coast mollusks in addition to his ornithological work at the museum.

In mollusks, George Willett found a group requiring detailed research, where new forms were still to be encountered and described. North American ornithology had reached the saturation point as far as new species to be discovered, and the prevailing interest had centered in splitting into subspecies, a concern for which Willett had little interest or sympathy. The study of mollusks, therefore, as a field still to be explored, held great attraction for him and formed the basis of a large part of his later published work. Surprisingly for a man of his size, he had particular ability in the handling of small objects and in the observation of minute structure. Bearing witness to this there are 41 species and 8 subspecies of gastropods, pelecypods and chitons which carry his name as describer, with 5 others which he left described in manuscript.

One of the extended field problems which Willett undertook in southern California was determining the distribution of land snails in the deserts. Realizing that collection of these gastropods had been spotty and that exact data were lacking as to their distribution, he spent many week ends in making a careful survey of the desert regions. This work required tremendous patience and untiring search, and it is little wonder that no one previously had given it the attention necessary to a complete understanding of the problem. The enormity of the task may be appreciated from his description of a week end in the ranges bordering Coachella Valley and the Salton Sink (Bull. So. Calif. Acad. Sci., 1939:14): "On our latest week-end trip 450 miles were traveled by auto, three mountain sides were climbed, and at least ten hours occupied in moving rocks, with a total bag of one living snail... and half a dozen dead ones good enough to bring in." The results of this survey, which stretched over a period of about ten years, were the addition of some fifteen species and subspecies to the list of known desert snails and the determination of distribution and relationships of many other species and races described by previous workers.

Shortly after coming to the Los Angeles Museum, Willett was instrumental in purchasing a small motorboat for the institution. On this he spent many week ends off the coast of southern California, collecting birds and dredging for marine mollusks. These trips were taken mainly in the spring and fall months when sea birds were in migration, and the observations made and specimens taken supplied many of the records included in his 1933 revised distributional list of the birds of southwestern California. His most frequent companion on these off-shore expeditions, as well as on all other field excursions, was his wife. An excellent sailor, and experienced camper, Ora Willett was capable of carrying her share of the work on ship or in camp. Mr. Willett never thoroughly enjoyed an expedition unless Mrs. Willett was present. He was also justly proud of her ability as "camp cook." "Sure she's a good cook!" he often said, "I taught her." Though a man somewhat conservative in his views of women, he modified the saying of "woman's place is in the home," to "a woman's place is with her husband," an ideal which Ora Willett ably fulfilled, were it stalking grouse by day, setting mammal traps by night, searching for snails under rocks in the desert, or working over manuscripts at home. The stimulus of her interest and companionship undoubtedly played a large part in the high scientific productivity of this later period of Willett's life.

Among the new friends which George Willett made after his return from Alaska, perhaps the closest was the late Herbert McCoy. Though a chemist by profession, Dr.



Fig. 11. The two Georges, Cantwell and Willett, at Mount Pinos, May, 1937.

McCoy had a great interest in birds, and the McCoys and the Willetts made frequent trips together. During depression days, when the museum was forced to stagger the time of its employees in order to keep running, Dr. McCoy proposed a trip for the two families to Guatemala. This trip, taken in the winter of 1932, was a combined pleasure and collecting expedition which resulted in the addition of over 300 bird specimens to the museum's collections.

In 1929 Mr. Willett called in George Cantwell, an old-time Alaska man, whose path he had been crossing off and on since the two of them took their first examination for inspector with the Biological Survey on the same day in 1912. Although, in the intervening 17 years, Willett had never become well acquainted with Cantwell, the latter's reputation as a collector and expert in mammal taxidermy had spread, and the museum was now in a position to take on an assistant to Mr. Willett. In April, 1929, therefore, Cantwell joined the staff, and the two Georges became fast friends.

It was about this time that I moved into a room across the hall from the ornithology-mammalogy offices, and the Georges took an interest in helping me accumulate much needed bird skeletons. If a wing or leg bone of some rare species was essential to the solving of one of my paleontological problems, Willett generously offered one of his own study skin specimens for the skillful operation Cantwell could so ably perform, and the bone was mine, the skin no worse for the deed. Mr. Willett also began to collect extra birds and mammals especially to be used for skeletons, adding over 300 specimens to the osteological collection. Many of these he took off-shore, while out in the museum boat, or collected on his desert expeditions. Furthermore, he took pains to save the body skeletons from specimens which he was preparing for study skins.

Though Mr. Willett sometimes enjoyed teasing me about establishing records of species from "nothing but bones," no osteologist could ask for better cooperation than I received from his department. I felt that I, and the bones, had really won his respect when he posed the problem of distinguishing between the young of the Parasitic and Long-tailed jaegers on the basis of their skeletons. The results of this study, Mr. Willett and I published in joint authorship, though, with his characteristic generosity, he insisted that he "hadn't done anything" on the paper, and wanted me to take full credit.

Although George Willett never studied fossil birds himself, he was much interested in the work that was being done and often his knowledge of the habits and distribution of living birds was a contributing factor in the decisions reached in my studies of the Rancho La Brea avifauna. His own entry into the field of paleontology came through his work on marine shells. Many of the shell students of Los Angeles frequently came to him for identification of specimens which they had dredged or picked up on the beaches, and some began bringing in fossil shells. As the most accessible of the marine fossil deposits of this area are of Pleistocene age, and therefore contain mollusks similar to those still living, Willett's interest was aroused. In 1935 a new fossil site was discovered in Playa del Rey, by some of the shell enthusiasts, and samples reached his desk. Examination of this material convinced him of the importance of the site. Consequently he went to work with shovel and screens, and in the course of two or three months intermittent digging he had provided the museum with a representative collection from the area totalling 30,000 specimens. Most of these were shells, which became the subject of a paper, published in 1937, presenting the results of his careful sorting and study of thousands of specimens.

Before completing the work on the del Rey material, however, the Willetts had the opportunity to make the long anticipated return visit to Alaska. In the company of the McCoys, they spent the summer of 1930 in the vicinity of Petersburg, collecting various zoological specimens for the museum, including, in addition to about 100 birds, nearly 200 fishes, 2000 marine invertebrates, a few mammals, amphibians and insects.

Returning to Los Angeles, the remainder of 1936 and part of 1937 were occupied in work with fossils. The del Rey paper was completed, but even before it appeared in print, Willett had excavated two more marine fossil deposits, studied the contents and published the results of his work.



Fig. 12. Willett and Grinnell at the Museum of Vertebrate Zoology, Cooper Club Annual Meeting, 1937.

In addition to these fossil investigations, he completed, in 1937, a comprehensive study of the land snails of southeastern San Diego County, described another species of gastropod from the Riverside Mountains and a chiton from Lower California, and wrote several notes on bird observations and one on mammals. The work of this one year typifies the breadth of George Willett's horizon of investigation during this later period of his life. His specializations took him to opposite ends of the animal kingdom and into two horizons of time, yet there is no doubt but that he held a chair of authority in each realm. There were no half-way measures in his approach to a subject. If it was worth study at all, it was investigated thoroughly. This quality of conscientiousness, combined with a certain conservatism, won for his work the unqualified respect of his colleagues in science.

Late in 1937, Mr. J. R. Pemberton proposed a voyage on his yacht, the "Kinkajou," to the islands off the coast of Mexico. George Willett was invited to "come aboard" as ornithologist and malacologist of the expedition. Unlike some of the trips mentioned in Willett's earlier life, this one was favored by good weather throughout. In the three months trip, from January through March, 1938, birds were collected at Magdalena Bay, Isabel Island, Cleopha Island, several localities in Jalisco and Oaxaca, San Benedicto Island, Socorro Island, and the San Benitos. Between landings, Willett and Steve Glassell, dressed only in shorts and hat, carried on dredging operations which netted a good collection of crabs, mollusks, and other types of marine invertebrates.

THE CONDOR

The year 1939 opened with the museum's launching a program of biological survey of the Channel Islands. In view of Willett's previous experience on the islands, he was called upon to help in planning the project, and he accompanied Dr. John A. Comstock, Associate Director of Science, on the first reconnaissance trip to San Clemente. For the next two years, the museum made numerous expeditions to the islands, the last of which ended abruptly with the beginning of the war. On these trips, Willett collected birds and mammals and made careful surveys of the birds of the islands. In addition to his own field work, he frequently spent a couple of hours in the evening capturing



Fig. 13. Aboard the "Kinkajou," January, 1938.

moths on the screen of his tent; thus hundreds of specimens were brought back for the entomology department. Mrs. Willett officiated on many of the trips as chief cook, frequently being the only woman in the party, with several hungry men to cook for.

America's entry into the war inevitably brought changes to the museum. The younger men were going into military service, and among them was Kenneth Stager, who by this time had replaced George Cantwell as assistant to Mr. Willett. Willett, himself, felt keenly the fact that not only was he too old to join the armed forces, but that an accident to his back a few months previous made it impossible for him even to volunteer to "walk a beat" as a volunteer auxiliary policeman. This injury, as well as the curtailing of gasoline, also cut out practically all field work. He therefore, found himself, for the first time in his life, largely confined to office life. The museum personnel now threw its efforts into publications which would appeal to the visiting public. This was a new venture for most of the scientists on the staff, and Willett was no exception. However, with characteristic immediate attention to duty to be performed, he wasted no time in preparing his part of this program. Within the next two years, four museum handbooks bearing his name appeared, three on Los Angeles County birds, and one on mammals. A fourth one, on birds of the deserts, was completed in

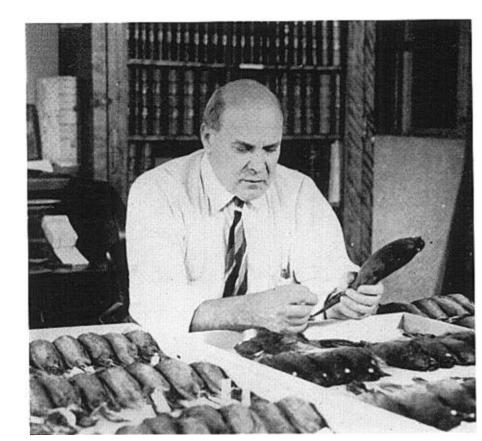


Fig. 14. Willett in his office at the Los Angeles County Museum, January, 1939.

manuscript and awaits illustration now. He also outlined a possible handbook on shells, but the tremendous number of species to be covered raised a problem regarding the size of the publication which had not met solution at the time of his death. He prepared, as well, a short story on the California Condor, which was planned for a popular leaflet. Early in 1945 plans were made for the museum's issuance of short technical works. George Willett again answered the call for papers with several manuscripts which now await publication.

During this period Mr. Willett worried considerably about the Southern Division of the Cooper Club. With those members not in the armed forces scattered widely throughout the Los Angeles area, the meetings dwindled to a small attendance. Since his return to southern California, in 1927, Willett had served the club faithfully, not only in many official capacities, but unofficially as well. In this critical war period he redoubled his efforts in the club's behalf, aiding the president in finding programs, attending every meeting himself, and helping out with transportation for others. There is no doubt that he held the group together through those trying days.

As the rounding out of a full life, Mr. Willett, at the age of 65, became a teacher. In the spring of 1944, the Director of the Museum, Mr. Roland J. McKinney, launched a program of natural history classes for high school students. Five subjects were sched-



Fig. 15. George Willett on his sixtieth birthday, May 28, 1939, sharing his birthday cake. Annual outing of Southern Division of Cooper Ornithological Club.

uled for Saturday mornings, and it was supposed that about 100 students would enroll and be divided among these. Mr. Willett and I, together, were to give the class in birds and mammals. On the day of registration, we found ourselves besieged by some fifty youngsters who insisted they wished to join our class, and we were unable to reduce the number below forty. The problem arose of procuring specimens on which this large group could practice taxidermy and skeleton making. For days the Willetts diligently trapped English Sparrows preparatory to the first lesson, while the Fish and Wildlife Service came to our aid with larger birds to skeletonize.

The experience with these young people would make a story in itself. They were full of life, and George Willett's deep voice occasionally had to remind them of the proprieties of the classroom. But they were tremendously interested, and they were completely charmed with Mr. Willett. Class was supposed to end at noon, but it soon became obvious that many of the students expected to spend the day. A typical Saturday afternoon sight in the ornithology office was Mr. Willett leaning back in his chair discussing trapping and taxidermy, or recounting some of his own early experiences to a group of ten or a dozen boys and girls. Moreover, he gave them the freedom of his laboratory, and they never abused the privilege. They brought in mammals to skin, they borrowed his tools, they studied his books, and they asked his advice. In his last days at the museum he was helping a group of boys plan a mammal survey of one of the canyons. Even in the month's illness at home, "the kids" came to see him and wrote to him for counsel while on their vacations in the field.

From among these youngsters, his newest in a long line of friends, came the words which express the feeling of everyone who knew him, "George Willett was a distinguished scientist, a superb teacher, and a great guy! We'll miss him terribly!"

GEORGE WILLETT'S ORGANIZATIONAL AFFILIATIONS

- Cooper Ornithological Club, Member from 1905; Honorary Member from 1942; President Southern Division, 1930; President Board of Governors, 1936-1937; Secretary Board of Directors from 1935.
- American Ornithologists' Union, Associate, 1912; Member from 1913; Fellow from 1939; Vice-president from 1939.

Pacific Northwest Bird and Mammal Club, Member from 1920.

Conchological Club of Southern California, Member from 1916; President, 1929-1931, and from 1944. Served on all of the Club's committees.

California Academy of Sciences, Member from 1930.

Biological Society of Washington, Member from 1918.

American Society of Mammalogists, Member from 1935.

Southern California Academy of Sciences, Member from 1940; Chairman Conservation Committee, 1945.

San Diego Society of Natural History, Member from 1937; Non-resident Fellow from 1943.

Grinnell Naturalists Society, Member from 1940.

Los Angeles Audubon Society, Honorary Member from 1942.

Society of Vertebrate Paleontology, Charter Member from 1941.

Isaac Walton League.

Western Bird Banding Association, Associate Member from 1943.

U. S. Spanish War Veterans, Theodore Roosevelt Camp No. 9, Charter Member from 1905.

B. P. O. Elks, Ketchikan Lodge, No. 1429, Member from 1923.

Alumni Association, Whittier College.

Los Angeles County Employees' Association, Member from 1928.

Editorial Committee, Los Angeles County Museum, Member from 1943.

Advisory Council, Los Angeles County Museum, Member from 1944.

ANIMALS NAMED FOR GEORGE WILLETT

Birds:

Sula willetti Miller (1925)

SpizaEtus willetti Howard (1935)

Oceanodroma leucorhoa willetti van Rossem (1942)

Insect (Moth):

Carolella willettana Comstock (1939)

Mollusks:

Astarte willetti Dall (1917) Ischnochiton willetti Berry (1917) Odostomia willetti Bartsch (1917) Scaphander willetti Dall (1919) Clathrodrillia willetti Dall (1919) Helminthoglypta traski willetti (Berry) (1920) Cerithiopsis willetti Bartsch (1921) Epitonium willetti Strong and Hertlein (1937) Rissoina willetti Strong (1938)

Mammal:

Sorex willetti von Bloeker (1941)

THE CONDOR

1895

1. The Mexican Raven in California. Oologist, XII, June, 1895:110-111.

1906

2. Peculiarities of Ducks in Nesting. Condor, VIII, May, 1906:75.

- 3. Eggs of the Sage Grouse. Condor, VIII, May, 1906:75.
- 4. The Southern California Clapper Rail Breeding on Fresh Water. Condor, VIII, November, 1906:151.

1907

5. Summer Birds of a Prairie Lake. Condor, IX, July, 1907:105-106.

1908

- 6. The Common Tern and Ruddy Turnstone in Southern California. Condor, X, January, 1908:50.
- 7. Summer Birds of the Upper Salinas Valley and Adjacent Foothills. Condor, X, July, 1908:137-139.

1909

- 8. Bird Notes from the Coast of San Luis Obispo County. Condor, XI, November, 1909:185-187. 1910
- 9. Additions to Grinnell's List of Birds of the San Bernardino Mountains. Condor, XII, January, 1910:44.
- 10. Rodgers Fulmar in Southern California. Condor, XII, January, 1910:46.
- 11. A Summer Trip to the Northern Santa Barbara Islands. Condor, XII, September, 1910:170-174.
- 12. A Southern California Spring Record for the Common Tern. Condor, XII, September, 1910:174.
- 13. Red Phalarope in Southern California in Winter. Condor, XII, September, 1910:175.
- 14. Southern California Breeding Records of the Western Grasshopper Sparrow. Condor, XII, November, 1910:204.

1911

- 15. Blue-winged Teal in Southern California. Condor, XIII, March, 1911:76.
- 16. May Notes from San Jacinto Lake [A. Jay and G. Willett]. Condor, XIII, September, 1911: 156-160, figs. 43-45.

1912

- 17. Birds of the Pacific Slope of Southern California. Pac. Coast Avif. No. 7, July, 1912:1-122.
- 18. Some 1912 Spring Notes from Southern California. Condor, XIV, September, 1912:194-195.
- 19. Report of G. Willett, Agent and Warden Stationed on St. Lazaria Bird Reservation, Alaska. Bird-Lore, November, 1912:419-426, 2 ills.

1913

- 20. Bird Notes from the Coast of Northern Lower California. Condor, XV, January, 1913:19-24.
- 21. Pelagic Wanderers. Condor, XV, July, 1913:158.

1914

- 22. Birds of Sitka and Vicinity, Southeastern Alaska. Condor, XVI, May, 1914:71-91, fig. 33.
- 23. Peculiar Death of California Bush-tit. Condor, XVI, July, 1914:168-169, fig. 49.
- 24. Unusual Abundance of the Glaucous-winged Gull on the Coast of Southern California. Condor, XVI, July, 1914:183.

1915

- 25. New Winter Records for Arizona. Condor, XVII, March, 1915:102.
- 26. Summer Birds of Forrester Island, Alaska. Auk, XXXII, July, 1915:295-305, pls. XIX-XX.

1917

- 27. Further Notes on the Birds of Forrester Island, Alaska. Condor, XIX, January, 1917:15-17.
- 28. Birds of East Park Bird Reservation, California. Reclamation Record, January, 1917:33.
- 29. Birds of Rio Grande Bird Reservation, New Mexico. Reclamation Record, April, 1917:190-191, 1 map.
- 30. Notes on Some Mollusc-eating Birds. Lorquinia, II, December, 1917:33-34.

1918

- 31. Bird Notes from Forrester Island, Alaska. Condor, XX, March, 1918:85.
- 32. A Peculiarity of Plumage in Some Specimens of the Heermann Gull. Condor, XX, May, 1918: 122, fig. 21.
- Description of a New Pandora of the Subgenus Kennerlyia from Forrester Island, Alaska. Nautilus, XXXI, April, 1918:134-135.
- 34. Notes on the Mollusca of Forrester Island, Alaska. Nautilus, XXXII, October, 1918:65-69.
- 1919 35. Notes on the Nesting of Two Little Known Species of Petrel. Condor, XXI, March, 1919:60-61.

- 36. Some Notes from San Diego County, California. Condor, XXI, May, 1919:126-127.
- 37. Mollusca of Forrester Island, Alaska. Univalves. Nautilus, XXXIII, July, 1919:21-28.
- 38. Bird Notes from Southeastern Oregon and Northeastern California. Condor, XXI, September, 1919:194-207, figs. 40-44.

1920

- 39. Additional Notes on the Avifauna of Forrester Island, Alaska. Condor, XXII, July, 1920:138-139.
- 40. Comments upon the Safety of Sea Birds and upon the "Probable" Occurrence of the Northern Bald Eagle in California. Condor, XXII, November, 1920:204-205.

1921

- 41. Ornithological Notes from Southeastern Alaska. Auk, XXXVIII, January, 1921:127-129.
- 42. Bird Notes for 1920 from Southeastern Alaska. Murrelet, II, No. 1, January, 1921:7-11.
- 43. Distribution of the Townsend Fox Sparrow. Condor, XXIII, January, 1921:36-37.
- 44. Mammal Notes from Wrangell, Alaska. Murrelet, II, No. 2, May, 1921:17-18.
- 45. Bird Notes from Southeastern Alaska. Condor, XXIII, September, 1921:156-159.

1923

- Comments on Two Recent Numbers of Bent's Life Histories of North American Birds. Condor, XXV, January, 1923:25-27.
- 47. Bird Records from Craig, Alaska. Condor, XXV, May, 1923:105-106.

1927

- 48. Notes on the Occurrence and Distribution of Some Southeastern Alaskan Birds. Condor, XXIX, January, 1927:58-60.
- 49. Destruction of Eagles in Alaska. Auk, XLIV, October, 1927:591-592.

1928

- 50. Gulls. L. A. Co. Employee, I, 1928:10-11,24.
- 51. Notes on Some Birds of Southeastern Alaska. Auk, XLV, October, 1928:445-449.
- 52. Notes on Some Pacific Coast Acteocinas, with Description of One New Subspecies. Nautilus, XLII, October, 1928:37-38.

1929

- 53. Description of Two New Species of Molluscs from the West Coast of North America. Nautilus, XLIII, July, 1929:26-28, pl. 3, figs. 2-4.
- Description of Two New Land Shells from Southern California. Bull. So. Calif. Acad. Sci., XXVIII, October, 1929:17-19, pl. 6.

1930

- 55. Least Bittern in California in Winter. Condor, XXXIII, January, 1930:64.
- 56. The Micrariontas of the indioensis Group, with the Description of a New Subspecies. Nautilus, XLIII, April, 1930:115-116.
- 57. Notes on Micrarionta rixfordi Pilsbry. Bull. So. Calif. Acad. Sci., XXIX, June, 1930:15-16.
- 58. Desert Helicoids of the Micrarionta hutsoni Group. Nautilus, XLIV, July, 1930:4-7.
- 59. The Common Mynah Breeding in Los Angeles. Condor, XXXII, November, 1930:301.

1931

- 60. The Condor in San Benito County, California. Condor, XXXIII, January, 1931:31.
- 61. Two New Helicoids from the Mohave Desert, California. Nautilus, XLIV, April, 1931:123-125, pl. 7, figs. 3-4.
- 62. Third Ten Year Index to the Condor. Pac. Coast Avif. No. 20, April, 1931:1-152.
- 63. Psephis (Petricola) tellimyalis (Cpr.) Not the Young of Petricola denticulata Sby. Bull. So. Calif. Acad. Sci., XXX, September, 1931:39, pl. 17.
- 64. Three New Mollusks from Catalina Island, California. Nautilus, XLV, October, 1931:65-67, pl. 4, figs. 1-4.

1932

- .65. A New Chiton from Southern California. Nautilus, XLV, January, 1932:101-102, pl. 7, fig. 1.
- 66. A New Helminthoglypta from Monterey County, California. Nautilus, XLV, April, 1932:134-135, pl. 11, figs. 8-10.
- 67. A New Cardita from the Aleutian Islands and a New Epitonium from Southern California. Trans. San Diego Soc. Nat. Hist., VII, April, 1932:85-90, pl. 5.
- 68. Sanderlings and Turnstones at Salton Sea, California. Condor, XXXIV, September, 1932:228.

1933

69. A Revised List of the Birds of Southwestern California. Pac. Coast Avif. No. 21, December, 1933:1-204.

1934

- 70. Two New Cingulas from Alaska. Nautilus, XLVII, January, 1934:103-104, pl. 8, figs. 8-9.
- 71. The Plain Titmouse of Northern Santa Barbara County, California. Condor, XXXVI, March, 1934:86.
- 72. Additional Fall and Winter Records for the Lutescent Warbler in California. Condor, XXXVI, May, 1934:114-115.
- 73. The Lower California Say Phoebe in Southeastern California. Condor, XXXVI, May, 1934:117.
- 74. Characters Differentiating Certain Species of Stercolarius [G. Willett and H. Howard]. Condor, XXXVI, July, 1934:158-160.
- 75. Spring Notes from Mount Pinos, Kern County, California. Condor, XXXVI, July, 1934:178.
- A New Helminthoglypta from the East Slope of the Sierra Nevada, California. Bull. So. Calif. Acad. Sci., XXXIII, August, 1934:57-58.

1935

- 77. A New Kangaroo Rat from Northeastern California. Jour. Mamm., 16, February, 1935:63-64.
- Further Notes on the Desert Snails of Riverside County, California. Bull. So. Calif. Acad. Sci., XXXIV, May, 1935:1-2.
- 79. Three New Micrariontas from the Central Colorado Desert, California. Nautilus, XLIX, July, 1935:14-16.
- 80. Some Superfluous Names in West American Chitons. Nautilus, XLIX, October, 1935:42-44.

1937

- 81. Summer Tanager at Wilmington, Los Angeles County. Condor, XXXIX, January, 1937:39.
- 82. Buccinum baeri morchianum (Fischer) not a Tenable Name. Nautilus, 50, January, 1937:101-102.
- 83. Dipodomys deserti sonoriensis in Arizona. Jour. Mamm., 18, February, 1937:101.
- 84. Micrariontas of the Southwestern Colorado Desert. Nautilus, 50, April, 1937:122-125.
- A New Land Shell from the Riverside Mountains, Colorado Desert. Bull. So. Calif. Acad. Sci., XXXVI, May, 1937:6-7, pl. 1.
- 86. Ring-necked Duck in Ventura County, California. Condor, XXXIX, May, 1937:125.
- 87. A New Callistochiton from Lower California. Nautilus, 51, July, 1937:25-26, pl. 2, fig. 13.
- 88. Off-shore Bird Notes. Condor, XXXIX, September, 1937:226.
- 89. Additions to Knowledge of the Fossil Invertebrate Fauna of California. Bull. So. Calif. Acad. Sci., XXXVII, September, 1937:61-64, pl. 25.
- 90. An Upper Pleistocene Fauna from the Baldwin Hills, Los Angeles County, California. Trans. San Diego Soc. Nat. Hist., VIII, No. 30, December, 1937:379-406, pls. 25-26.

1938

- Report on Pleistocene Molluscan Fauna at Capistrano Beach, Orange County, California. Bull. So. Calif. Acad. Sci., XXXVI, January, 1938:105-107.
- 92. Another Saw-whet Owl from the San Bernardino Mountains, California. Condor, XL, March, 1938:87.
- 93. Remarks on Some West American Mollusks. Nautilus, 52, July, 1938:10-11, pl. 1, figs. 1-7.
- Two New Land Shells from Kern County, California. Bull. So. Calif. Acad. Sci., XXXVII, October, 1938:52-54, pls. 11-12.
- 95. A New Pseudochama from Clarion Island, Mexico. Nautilus, 52, October, 1938:48-49.
- 96. Winter and Spring Gull Records from the West Coast of Mexico. Condor, XL, November, 1938:257.

1939

- 97. Another Specimen of Sooty Fox Sparrow from Southern California. Condor, XLI, January, 1939:33-34.
- 98. An Extension of the Known Range of Notiosorex crawfordi. Jour. Mamm., 20, February, 1939:102.
- 99. Control of Predatory Birds. Modern Game Breeding, 9, February, 1939:12-13.
- 100. Remarks on Alaskan Savannah Sparrows. Condor, XLI, March, 1939:86.
- 101. Description of a New Mollusk from California. Nautilus, 52, April, 1939:123-124, pl. 9, 3 figs.
- 102. Guadalupe Island Xantus Murrelet in California Waters. Condor, XLI, May, 1939:121.
- 103. Micrariontas of Desert Ranges Bordering the East Side of Coachella Valley and Salton Sink, California. Bull. So. Calif. Acad. Sci., XXXVIII, May, 1939:14-16, pl. 2.
- 104. July Records from San Pedro, California. Condor, XLI, November, 1939:255.

1940

105. A New Species of Mollusk from the San Pedro Pleistocene. Bull. So. Calif. Acad. Sci., XXXVIII, February, 1940:202-203, pl. 54.

106. A New Land Shell from Lower California. Bull. So. Calif. Acad. Sci., XXXIX, June, 1940:80-82, pl. 12.

1941

- 107. A New Ischnochiton from Catalina Island, California. Bull. So. Calif. Acad. Sci., XXXIX, March, 1941:185-186, pl. 31.
- 108. Variation in North American Ravens. Auk, 58, April, 1941:246-249.
- 109. Faunal Changes in Los Angeles County. Quarterly, L.A. Co. Mus., October, 1941:19-23.

1942

110. Common Birds of the Los Angeles County Coast. L. A. Co. Mus. Sci. Ser., No. 5, Zool. Publ. No. 1, September 29, 1942:1-39, illus.

1943

- 111. Common Birds of the Los Angeles County Mountains. L. A. Co. Mus. Sci. Ser., No. 6, Zool. Publ. No. 2, January 15, 1943:1-40, illus.
- 112. Another Southern California Record for the Tennessee Warbler. Condor, 45, March, 1943:74.

113. Joseph Grinnell's Philosophy of Nature [Review]. Condor, 45, March, 1943:80-83.

- 114. Ten-Year Index to The Auk [H. S. Swarth and G. Willett]. Amer. Ornith. Union, March, 1943: 1-374.
- 115. The Birds of the Urban Districts of Los Angeles County. No. 1. L. A. Co. Mus. Sci. Ser., No. 7, Zool. Publ. No. 3, August, 1943:1-39, illus.
- 116. Elephant Seal in Southeastern Alaska. Jour. Mamm., 24, November, 1943:500.

1944

- 117. Northwest American Species of Glycimeris. Bull. So. Calif. Acad. Sci., XLII, January 15, 1944: 107-114, pls. 11-12.
- 118. Two New West American Pelecypods. Bull. So. Calif. Acad. Sci., XLIII, May, 1944:19-22, pls. 7-8.

119. Herbert Brandt's Alaska Bird Trails [Review]. Condor, 46, September, 1944:247-248.

- 120. New Species of Mollusks from Redondo, California. Bull. So. Calif. Acad. Sci., XLIII, September, 1944:71-73, pl. 14.
- 121. Age of a Red-vented Bulbul. Auk, 61, October, 1944:645-546.
- 122. Mammals of Los Angeles County, California. L. A. Co. Mus. Sci. Ser., No. 9, Zool. No. 4, October, 1944:1-34, illus.

1945

- 123. The Type of Telespiza ultima Bryan. Auk, 62, January, 1945:139.
- 124. The Acteocina of Salton Sink, Colorado Desert, California. Bull. So. Calif. Sci., XLIV, June, 1945:28-29.
- 125. Herbert Newby McCoy. Condor, 47, July, 1945:174-175, fig. 32.
- 126. Remarks on Some Resident Birds of the Santa Barbara Islands. Bull. So. Calif. Acad. Sci., XLIV, August, 1945:51-54.
- 127. Does the Russet-backed Thrush Have Defective Eyesight? Condor, 47, September, 1945:216.

1946

- 128. Additional Notes on the Pliocene Molluscan Fauna of Los Angeles City. Bull. So. Calif. Acad. Sci. (In Press).
- 129. Migration of North American Birds. Quarterly, L. A. Co. Mus., 5, No. 2 (In Press).

130. An Upper Pleistocene Fauna from Newport Bay Mesas (In Press).

131. A New Mollusk of the Genus Solariella from Alaska (In Press).

Los Angeles Museum, Exposition Park, Los Angeles, February 25, 1946.