

Three adult males from Andalucia, Eastern Andes, are in worn plumage. All bear the white post-auricular spotting but seem lighter above than typical *bogotensis*.

SPECIMENS EXAMINED

S. i. intermedia.—

BRITISH GUIANA:

"Guiana," 1 ♂.

VENEZUELA:

Altagracia, 6 ♂;
La Prisión, 1 ♂;
Caicara, 7 ♂;
Suapure, 1 ♂;
Cuidad Bolívar, 7 ♂;
Las Trincheras, 1 ♂;
San Antonio,
State of Cumaná, 5 ♂;
Cumanacoa, Bermúdez, 2 ♂;
Cristóbal Colón, 1 ♂;
Mérida, 1 ♂;
Guiria (?), 1 ♂.

COLOMBIA:

Villavicencio, 3 ♂;
Algodonal, 1 ♂.

S. i. insularis.—

TRINIDAD:

Princetown, 2 ♂ (incl. type);
"Trinidad," [1 ♂];
Valencia, 2 ♂;
Caparo, 5 ♂;
Chaguaramas, 1 ♂;
Pointe Gourde, 1 ♂;
Leelet, 2 ♂.

S. i. bogotensis.—

COLOMBIA:

Las Lomitas, 1 ♂ (type);
Media Luna, 2 ♂;
near San Augustin, 1 ♂;
Honda, 1 "♀" [= ♂], 1 ♂;
Medellín, 1 ♂;
Popayán, 1 ♂;
east of Palmira, 2 ♂;
Caldas, 1 ♂;
Yeononzo, Bogotá region,
1 [♂];
Chicoral, 1 ♂;
Andalucia, 3 ♂.

American Museum of Natural History
New York, N. Y.

THOMAS SADLER ROBERTS (1858–1946)

BY W. J. BRECKENRIDGE AND WILLIAM KILGORE

Plate 14

ON the night of Friday, April 19, 1946, at the age of 88 years, death came to Dr. Thomas Sadler Roberts of Minneapolis, Minnesota. Death thus removed still another of that group of older ornithologists who coöperated in laying the foundations of the American Ornithologists' Union, and for us who worked with him for so many years it removed a clear-thinking and capable leader and a loyal friend. The ending of a long and extraordinarily fruitful career is always a sad event. The store of facts Dr. Roberts had at his command; his tales of by-gone events which gave us a personal link with



Thos. F. Roberts,

the past far beyond our own years; the experience-tempered guidance he was always willing and able to give—all these are lost to us in the passing of our friend. The sadness felt in his loss can, however, be tempered by the satisfying thoughts of the eminently successful way in which he utilized his capabilities and by the appreciation of the improvements in men's lives that he left in his wake. So fully did he live that we may refer to his life as comprising two outstandingly successful careers—one medical and one ornithological.

Thomas Sadler Roberts was born of Welsh parentage on February 16, 1858, on a farm near Philadelphia. Soon after his birth the family moved to Germantown where Thomas spent the first nine years of his life. Prior to 1867, John Roberts, his father, contracted pulmonary tuberculosis and was advised to remove to Minnesota and live in the open. He finally chose Minneapolis as his home, purchased a horse and buggy, and set out to regain his health in long rides in the open country. His son thus found himself in an ideal situation for the rapid growth of his interest in birds that he apparently had even at nine years of age. Thomas regularly attended grade school, but on week ends and holidays and after school he scoured the countryside with his father. He often mentioned how his father would be waiting with the horse and buggy near the school to start out the minute Thomas was free.

At about this time (1876) a number of the boys about Minneapolis organized a club which they called the 'Young Naturalists' Society.' Clarence L. Herrick, who later became an outstanding scientist and was the organizer and first president of the University of New Mexico, was the leading spirit of the club, while Thomas Roberts was its secretary (age 18). Robert S. Williams of the group continued in his special interest of botany to become an international authority on mosses and was for years connected with the New York Botanical Society. This club met regularly in Thomas Roberts's bedroom where many of the members' early collections were housed and where papers were read and many topics discussed, apparently on a scientific level rather surprisingly high for youngsters of their immature years. Birds were prominent in their deliberations but botany, mammalogy, geology and other sciences also were taken up.

The club's 'A Systematic List of the Plants of Minnesota' is a carefully indexed compilation of 660 species of plants. These lists were evidently substantiated by collected specimens since the records were later incorporated in Warren Upham's 'Flora of Minnesota.' Surprising scientific skepticism was displayed by these boys as is indi-

cated by an explanatory note following the title page of the catalog: "A question mark (?) following initials indicates that the person entertained a doubt as to the correctness of the identification. A double question mark enclosed in brackets [??] signifies that the society regards the identification with distrust."

June 8, 1874, was a milestone in the ornithological career of Dr. Roberts. It was then that he met a young man from the east, Franklin Benner, who taught him the technique of making bird skins. This seemed to be the needed spark to set off his smouldering interest in birds, and the initial flare of activity in the field resulted in his collecting and preserving 600 bird skins between his 16th and 18th birthdays. Many of these skins are now in the museum collection at the University of Minnesota and are as fine as any skins in the series.

Having completed grade school, Thomas entered the then very youthful University of Minnesota in the fall of 1877 and completed two years of study. His physique had never been rugged, and by this time he showed signs of contracting pulmonary tuberculosis and was advised to live in the open as much as possible. This led to his working as a land examiner for the St. Paul, Minneapolis and Manitoba and the Northern Pacific railroads. This work kept him almost constantly outdoors, camping in the field with horses and wagon as transportation. The regions covered included several central Minnesota counties from Anoka through to Polk in the north-western part of the state. One extensive land check was made in the western Dakotas where both the men and the horses or oxen encountered great physical discomfort from the alkaline drinking water. Whatever the difficulties, however, it seemed that young Roberts was rarely too busy to jot down his daily bird notes.

Having sufficiently recuperated by the fall of 1882, he decided to enter the medical school of the University of Pennsylvania. During the week ends in his college years at Minnesota and on vacations while attending medical school, Thomas made numerous field trips to every corner of Minnesota with his father or other interested companions, and each trip produced another notebook on the birds observed or collected and usually, also, an extensive list of plants. One particularly strenuous trip comprised a scientific exploration of the then wild North Shore of Lake Superior. This was carried on during the late summer of 1879 under the leadership of Prof. C. W. Hall of the University of Minnesota Geology Department and was sponsored by the Minnesota Geological and Natural History Survey. The group of four men secured steamer passage from Duluth with the agreement

that their loaded boat would be put off outside the cove at Grand Marais. As it later developed, the steamer captain actually did not leave his regular course as agreed, but unloaded the party six or eight miles out in Lake Superior in a very heavily-laden, unseaworthy boat at 11:30 at night—a decidedly precarious situation. After pulling alternately at the oars for three hours they finally reached a rocky coast with no suitable landing places but by sheer luck they turned in the right direction to reach finally the cove at Grand Marais. In spite of inhospitable weather and shore conditions plus sickness in the party, they carried on their work en route back to Duluth and arrived with good-sized natural history collections, including 129 bird skins which were mainly, if not entirely, the work of Thomas Roberts.

Dr. Roberts received his degree of M.D. from the University of Pennsylvania in 1885, and after serving internships in two Philadelphia hospitals he returned to Minneapolis where he established a general medical practice. In 1887 he was appointed Chief of Staff of St. Barnabas Hospital, a position he retained until 1902. From 1901 to 1913, he taught at the University of Minnesota Medical School as Professor of Pediatrics and on leaving was designated as Professor Emeritus.

He had a remarkably retentive memory. One story over which he used to chuckle was about the time his anatomy professor called him in for an oral quiz on finding that his answers in the examinations followed the wording of the book so closely. During the interview the professor was astonished at how accurately Thomas could quote the text. With this memory at his command he was able to recall not only the histories of his own cases but symptoms of rare or little-known diseases encountered in his medical reading, and it was not long before he became widely known for his skill at diagnosing puzzling ailments. At the time of his retirement he was regarded by the Mayo Brothers of Rochester as one of the five best diagnosticians in the United States. With this real ability coupled with a personality that engendered immediate confidence on the part of patients, his practice grew rapidly, and a great many of the leading families of Minneapolis soon became his clients. And not only did he justify their confidence, but he did the even more unusual thing of retaining their warm personal friendship through the rest of his life—a fine tribute to the substantial, lasting nature of the man's character.

In 1887, young Dr. Roberts married Jane Cleveland of Minneapolis, and to them were born two sons and a daughter, Thomas,

Catharine, and Carroll. And so to the arduous duties of an active medical career he then added the wholesome but time-consuming activities of a well-rounded social and family life. As a consequence he was forced to lay aside temporarily much of his ornithological work. During several summers he arranged to live with his family in a house overlooking the Long Meadow bottomland of the Minnesota River just south of Minneapolis. Here he was able to sandwich in bits of bird work during spare hours. When an occasional summer vacation could be taken from his medical work, he and his family moved to a cabin in Itasca Park where he became better acquainted with the birds of the coniferous forests. One extensive study of a colony of Yellow-headed Blackbirds was carried on at the Long Meadow marshes in 1900 and 1901. In this he had the able assistance of his office secretary, Miss Mabel Densmore of Red Wing, Minnesota. Miss Densmore was a very keenly interested and well-qualified field observer of birds whose efficient help years later was one of the main factors which enabled him finally to complete his 'Birds of Minnesota.'

It was during the period of his active medical work that Dr. Roberts took up photography of birds—a field in which he really pioneered with relatively primitive equipment, yet produced some very excellent results. At the A. O. U. meeting in Washington, D. C., in 1898, Dr. Roberts presented a series of his photographs of birds as lantern slides. During June of 1899, a study of the nesting of Franklin's Gull at Heron Lake, Jackson County, Minnesota, was carried out, in connection with which a large series of photographs was taken. This material was presented at the annual meeting of the A. O. U. in Philadelphia in the fall of that year. His study of the Yellow-headed Blackbird, published in the *Auk* in 1909, was profusely illustrated by his photographs. By 1915, when he began his work with the University, his collection of negatives numbered about 2,000. Beside pioneering in still photography, Dr. Roberts also undertook motion pictures of birds. Some of these, shown at the Philadelphia meeting of the A. O. U. in November, 1916, were among the first motion pictures of birds to be presented to that organization.

Although Dr. Roberts's early bird work was done in a pioneer country among pioneering people, he was by no means out of touch with the work of other ornithologists. He affiliated himself with the Nuttall Ornithological Club very soon after its organization in 1876 and carried on regular correspondence with several of its leaders. Regarding his connection with the A. O. U., Dr. T. S. Palmer kindly contributed the following:

Dr. Thomas Sadler Roberts was elected an active member of the American Ornithologists' Union at the first meeting, in 1883. Had he been present at this meeting he would have been listed as a 'Founder.' He continued as a member until his death and the period of his membership, nearly 63 years, is exceeded by that of only two Founders, Charles F. Batchelder and A. K. Fisher, both of whom survived him.

He was a member of the Council from 1899 to 1938, but held no other office. Members of the Council are elected annually and thus he had the distinction of having been re-elected to the Council more times than any other member. He was a member of the Index Committee which prepared the General Index of the 8 volumes of the 'Bulletin of the Nuttall Ornithological Club' and the first 17 volumes of the *Auk*, and also assisted in the preparation of the first 'Decennial Index of the Auk' for 1901-1910.

Dr. Roberts took his membership in the Union seriously. He was more regular in attendance than any other member living west of the Mississippi and he seldom came alone. Often he was accompanied by the late Ruthven Deane of Chicago but frequently brought some other member with him. On frequent occasions he contributed to the program and his papers, lantern slides and moving pictures were of the highest quality and always interesting.

W. L. McAtee wrote regarding his contacts with Dr. Roberts in the A. O. U.:

When I became one of the Fellows, nearly all of them seemed older than I. But there were two from the midwest, Ruthven Deane and Doctor Roberts, who were youthful in spirit and with whom I became more rapidly acquainted . . . Later in the Council of the A. O. U., in which as Treasurer, I functioned for 18 years, Doctor Roberts was mostly quiet but when he did speak it was sensibly and to the point. I remember him as a pleasant, friendly gentleman, whom it was a privilege to know.

Aside from his A. O. U. connections, Dr. Roberts maintained memberships in the Wilson Ornithological Club, Cooper Ornithological Club, and the Minnesota Ornithologists' Union, of which he was Honorary President for several years prior to his death. He also maintained memberships in numerous state ornithological clubs. His primary interest, however, as far as bird organizations was concerned, was the American Ornithologists' Union.

In 1915, at the age of 57 years, after an outstandingly successful medical career, Dr. Roberts gave up his medical practice to devote his time to ornithological study. His original intention was to do further work on the birds of Minnesota and to write the volumes which later appeared. The immediate accomplishment of this task was made impossible by two developments. First was the request on the part of a group of students that Dr. Roberts teach a class in the recognition of birds. The second was his increasing responsibilities as Director of the Museum of Natural History. The students seemed so thoroughly interested in bird study that he took the class,

which was continued up to a year previous to his death. This unexpected class provided him with a tremendous amount of satisfaction and enjoyment. He took a personal interest in the students' affairs and many of them returned long after the course terminated to get his advice in their professional and private problems as well as ornithological ones. It was the writers' pleasure to assist Dr. Roberts in many of his later classes, and we were thoroughly conscious of the paternal attitude he developed toward his students. For many years the last meeting of the class consisted of a Memorial Day field trip and chicken dinner at the Doctor's expense served at the Long Meadow Gun Club overlooking the Minnesota River bottoms, a club of which Dr. Roberts was long a member. His course in bird study was never intended to turn out professional ornithologists but simply to increase the students' interest in, and information about, birds, and frequent accounts that reached him of the pleasure students had derived in later years from their bird hobby always left him with pleasant thoughts of having accomplished what he had hoped to do.

While Dr. Roberts's medical bibliography contains but seven titles, 253 natural history writings bear his authorship. He was a close personal friend of Dr. Frank Chapman and loyally supported his magazine 'Bird Lore' as is indicated by the fact that 150 of his writings were Season Reports published in that journal (later 'Audubon Magazine'). Of these reports, 110 were later (1938) incorporated into his 'Logbook of Minnesota Birdlife.' His very first article appeared in 'Forest and Stream' in 1875. Five of his early articles appeared in the 'Bulletin of the Nuttall Ornithological Club.' After this was taken over by the A. O. U. as 'The Auk,' ten more articles appeared in it under Dr. Roberts's name. Various other periodicals have printed articles by him, including 'The American Naturalist,' 'Bulletin of the Minnesota Academy of Science,' 'Fins, Feathers and Fur,' 'Minnesota Conservation Volunteer,' and the Minnesota Ornithologists' Union publication, 'The Flicker.'

All through his life Dr. Roberts cherished the idea of publishing a comprehensive book on the birds of Minnesota. All of his own field efforts were directed toward that end, and he made many personal contacts and accumulated many files of correspondence with other Minnesota observers about Minnesota birds. In fact, some of his friends used to joke with him about how his interest in birds dwindled the moment he left Minnesota soil. By so narrowing his field, however, he succeeded in doing thoroughly the job he set out

to accomplish. To aid him in his work, he began early in life to acquire an ornithological library. This grew rapidly during his successful medical years until it numbered about 1,200 volumes at the time he presented it to the University (1941) as the nucleus of a reference library for the Museum. When the time came to publish his 'Birds of Minnesota' he found that two large quarto volumes would be needed to carry his material. This disturbed him greatly since it would make its purchase prohibitive to many people. Here a group of his friends came to his aid and with a gift of \$30,500.00 made it possible for him to sell his two-volume work for but \$6.00—less than half the cost of publication. It is probably a fact that nothing Dr. Roberts's friends ever did gave him more pleasure than the making of his 'Birds of Minnesota' so easily available to even the most impecunious amateur bird student. And the real quality of his book is attested by the fact that the later edition (1936) is rapidly being exhausted in spite of its higher selling price of \$15.00.

During Dr. Roberts's medical practice he gained one staunch friend, Mr. James Ford Bell, who was an outdoor enthusiast and who became a major factor in the success of his later ornithological work. As soon as Dr. Roberts retired from medical work, Mr. Bell came forward with a promise of financial aid if he would supervise the making of the University's rather dilapidated Zoological Museum into a really fine, small, state museum. This Dr. Roberts decided to do and, with the help of a few friends, maintained and enlarged the museum in the face of many discouraging circumstances until it finally outgrew its quarters in the zoology building. Mr. Bell then offered to pay the major part of the expenses of a beautiful new Bedford limestone building to be erected on the campus at a cost of \$272,000.00. The results of Dr. Roberts's work impressed the University Regents favorably and they approved the structure. As a consequence the present Minnesota Museum of Natural History, completed in 1940, stands as a grand tribute to the vision, energy and wise direction of Dr. T. S. Roberts and the appreciative philanthropy of Mr. James Ford Bell. This museum and the book, 'Birds of Minnesota,' stand out as climaxing the ornithological career of Dr. Roberts.

During the later years of Dr. Roberts's life, his wife, Jane Cleveland Roberts, died (October 7, 1932), and five years later (October 9, 1937) he married Mrs. Agnes Williams Harley of New Hope, Bucks County, Pennsylvania. The second Mrs. Roberts was a friend of his medical school days and a botanist of some ability. In her early years

she had collaborated with Dr. Roberts's sister, Emma, in producing a magnificent series of botanical watercolors which are today preserved in the Museum's collections. Mrs. Roberts, only two years younger than the Doctor, survived him by only three months, passing away on July 14, 1946.

Undoubtedly in all Dr. Roberts's admirable qualities, his unwavering regard for the truth was outstanding. It made trustworthy his scientific work and, carried on into his personal life, held him steadfastly to the right in all his words and dealings. Many a dealer in half truths has been exposed and offended by his penetrating questioning. And often the non-critical, unscientific reporter of what he thought were facts has discovered how really inadequate his statements were after being challenged, often not too tactfully, by Dr. Roberts. The results of his years of training himself to make positive decisions in medical work often came to the surface in later years and rendered difficult the discussion of controversial questions with him. His stated opinions, however, were so often sound that discussion was usually superfluous. His systematic thoroughness and meticulous regard for detail were cornerstones of his ornithological work, and in his social life, as well, everything was as orderly as seemed humanly possible to have it. A notebook in his pocket recorded reminders of every little duty to be performed and seldom was anyone disappointed who counted on Dr. Roberts to do even the smallest task. His loyalty was another of his qualities that secured and retained for him such a wide circle of friends. And with the Doctor there seemed a rather sharp line separating friends from others. Usually, at a first meeting, he formed an estimate of a person's worth, and should it be unfavorable a great many good works were required to alter this judgment.

The fact that Dr. Roberts was not actively a member of any church, seldom attended services, and had little concern over such matters as life after death, did not mean that he was not a thoroughly Christian gentleman. In fact, all through his life his many admirable Christian traits of character definitely placed his moral and ethical living on a vastly higher plane than many people who professed to live highly religious lives.

Some deserving people are sincere in asking for no public acclaim of their accomplishments while others are constantly struggling to gain recognition for even their smallest deeds. In this regard Dr. Roberts was concerned primarily with accomplishing goals and let recognition come or not as the public saw fit. Inwardly he enjoyed

having numerous scientific organizations honor him in his later years, but he made no show of his honors. The A. O. U. in 1938 awarded his 'Birds of Minnesota' the Brewster Medal as one of the outstanding American ornithological publications of the preceding six years. The Minnesota chapter of the honorary scientific society, Sigma XI, in 1941 presented him with a special letter of commendation for his services to science and to the state. He probably felt that the climax of his scientific career came, however, when the University of Minnesota, at its commencement in June, 1940, conferred upon him the coveted honorary degree of Doctor of Science—not for the completion of prescribed studies but for the outstanding contribution that his work had made toward improvement in men's lives. Certainly in this he achieved the ultimate in any man's career.

In recounting his life and deeds we seem for the moment to have again enjoyed a visit with him, but the fact remains that our friend is gone, and in the final balancing of accounts there can be no doubt that far in excess of his few shortcomings will be Dr. Roberts's very considerable contributions toward a better life for his fellow men and those to follow him. And as we see the true and lasting values of living, he constantly struggled for and attained them in a very large measure. May we all make a valiant attempt to do likewise.