

SNOW AND GOSS, THE PIONEERS IN KANSAS ORNITHOLOGY

BY MRS. H. J. TAYLOR

A rich full life expresses itself through ever increasing avenues. It discovers the interrelation in all fields of knowledge and enters into them with courage and enthusiasm attaining an ever widening horizon of human understanding. When the spirit of such a life is set free it sheds a radiance on many fields of learning and investigation, and each claims it as the exponent of a particular field.

Francis Huntington Snow's was such a life. During his four college years he became a thorough student of the classics. A theological course at Andover Seminary increased his love for the classics and deepened his human insight. When he was called to Lawrence, Kansas, where the State University was about to open its doors, he looked forward to teaching the language and literature of the classics. Snow understood and met the needs of the fifty-five enrolled students. He taught mathematics, geography, and the beginnings of natural science. His love for and knowledge of Latin and Greek made a rich background but in the university of the world he became a geologist, a zoologist, a botanist, an entomologist, an ornithologist. This paper concerns itself primarily with F. H. Snow, the ornithologist.

Francis Huntington Snow was born in Fitchburg, Massachusetts, June 29, 1840. He died at Delafield, Wisconsin, September 21, 1908. He was buried in Lawrence, Kansas.¹

In 1862, at the age of twenty-two years, Snow was graduated from Williams College. He was appointed valedictorian by the faculty, a singular honor among classmates such as Frank Carter, who in 1881 became president of Williams College, Professor George Raymond, and Professor E. H. Griffin, who with others, have attained distinction. The promise of Snow's young manhood was abundantly fulfilled in his sixty-eight years.

In Kansas the State University was coming into being. Its doors were to open in September, 1866. A call to occupy a chair in the new institution was, through the recommendation of Governor Charles Robinson, extended to F. H. Snow, and he became one of the three men constituting the first faculty of the University of Kansas. He remained active in this university until his death in 1908. He had served forty-two years. In 1881 Professor Snow received the degree of Ph. D. from Williams College, and that of LL. D. from Princeton in 1890. He was a member of the honorary societies of Sigma Xi and Phi Beta Kappa.

¹From a letter received by me in September, 1931, from Professor Snow's daughter, Mrs. Martha Snow Brown.



FRANCIS HUNTINGTON SNOW, 1840-1908

A paper read by Doctor Snow before the Academy of Science at Topeka, January 2, 1903,² follows in part: "When the writer of this paper arrived in Lawrence, Kan., in the last week of August, 1866, about ten days before the opening of the State University, he took the earliest opportunity to call upon the chancellor of the University. He took it for granted that some preliminary arrangements would be necessary before the arrival of the important day which should usher into existence so important an institution as that with which he was to be connected as a member of its first faculty. The chancellor . . . informed him that nothing could be done until the opening day, and advised him to 'get a gun and go shooting'. This advice was conscientiously followed, with the result that the writer soon became deeply interested in the birds of Kansas, and began to prepare a catalogue. He had the entire field to himself, there being no other person in the state for several years who was known to him as having an interest in ornithology. He soon organized among his students an enthusiastic class in zoology, and instituted an ornithological survey. . . In . . . 1872, he published the first edition of his Catalogue of the Birds of Kansas, in the Kansas Educational Journal. The list of birds in this catalogue included 239 species and varieties, of which thirty-two species were inserted on the authority of Dr. T. M. Brewer, of Boston. . . I published no additional complete list of the birds of Kansas, having left the formal continuance of this work to my friend, Col. N. S. Goss, so long as he lived. Thus, all together, the author of this paper, during the last third of the nineteenth century, had catalogued 305 species and nine varieties of Kansas birds, or a total of 314 numbers or entries.

"Up to the year 1878 no other citizen of Kansas had published any facts regarding the birds of Kansas. In that year Col. N. S. Goss began his notes upon this subject in an article on the 'Breeding of the Duck Hawk in Trees.' . . . On July 25, 1879, he wrote me that he had in his collection 154 species of Kansas birds. . . . In the same year he made his first addition to the list of Kansas birds—Bonaparte's Gull. . . He continued to increase our knowledge of the bird fauna of Kansas until he had added thirty-one species and races to the list."

In 1881 Prof. Snow reported the capture of a "Snake-bird" in Kansas to Dr. Elliott Coues, who made it the subject of a note in the Bulletin of the Nuttall Ornithological Club.⁴ Col. Goss, in his "His-

²Transactions of the Kansas Academy of Science, Vol. XVIII, p. 154.

⁴Bull. Nutt. Ornith. Club, 1882, Vol. VII, p. 61.

tory of the Birds of Kansas"⁵ makes the following comments on this species:

"A rare summer visitant. . . This species was captured within the State, in the Solomon valley, in August, 1881, by Mr. C. W. Smith, of Stockton; and May 1st, 1888, Mr. Daniel Lambert, of Wilburn, Ford county, shot, in the northern part of Meade county, on Crooked Creek, five of the birds, out of a small flock that arrived a few days before and together. . ."

In 1913, C. D. Bunker published "The Birds of Kansas."⁶ This report merely says of the Water-Turkey: "Catalogued as accidental by Doctor Snow. No Kansas collected specimen in the University Museum."

In the same paper the author says: "The study of Kansas birds, while not having been taken up by the government surveys, has been the subject of considerable work. Doctor Snow was the first scientist in the field. He began his study of Kansas birds upon his arrival at the University in 1866, and continued his interest until his death. . ."

In his paper on "Relation of Birds to Horticulture,"⁷ Professor Snow states the food habits of various species of birds and points out their value as insect eaters. Of the English Sparrow he says: ". . . a colony . . . has been securely established at Topeka. . . I have often been asked my opinion as to the advisability of introducing the English Sparrow into Kansas as a protection against insects . . . authorities differ widely upon this question. . . It is claimed by Dr. Coues . . . that 'there is no occasion for these birds in this country, and that the good they do in destroying certain insects has been over-rated.' Mr. Thomas Gentry, of Germantown, Pa., states that the sparrows . . . 'have become quite common in the surrounding country, and are driving away the robins [and] bluebirds . . . [the sparrows] have been of immense service in ridding our squares of the caterpillars, which were once so prevalent and so annoying. . .' Dr. Brewer says: 'We have the sparrows in great abundance in Boston, and for six years I have day after day, summer and winter, closely watched them. They never molest, attack or try to drive away any birds except their own species. . . The bluebirds do molest and drive off the sparrows, and have been known to take possession of and keep boxes put up for and belonging to the sparrow.' Mr. Stephen Gould, of Newport, R. I., says: '. . . [the sparrow] seems to court the society of other birds, and never have the birds been so abundant on our place. . .' I may add

⁵History of the Birds of Kansas, 1891. By N. S. Goss. P. 37.

⁶Kan. Univ. Sci. Bull., Vol. VII, No. 5, June, 1913, pp. 137-158.

⁷Transactions of the Kansas State Horticultural Society, 1876, pp. 62-75.

that the report of the French parliament, based upon the most thorough scientific observations, places the English Sparrow at the head of the useful birds of France. . . . I cannot close this address without calling your attention to the great advantage which would be derived by the State if in our public schools instruction should be regularly given upon these practical subjects which are so closely related to our daily lives. Much of the time now spent by our children in the school room is wasted in the vain attempt to comprehend abstract principles of arithmetic and grammar, and in memorizing unimportant . . . details.”

Professor Snow was the pioneer in Kansas ornithology. This work brought him recognition among scientific men. He attained in many fields of natural science. It was in the field of entomology that he attained not only national but international scientific recognition.

My own pioneer days on a Wisconsin farm were vividly recalled when I read of Professor Snow's efforts to save the wheat and corn fields of Kansas from the chinch-bug. We knew this pest in the '70's. Every child in the family knew and dreaded the sign of the chinch-bug. In well headed wheat fields stalks began to fall due to rust on the stem. It was the work of the chinch-bug.

Between the years 1885-1896 Professor Snow published seventeen papers on this destructive insect, four of these appearing in 1892. From a letter I received in September, 1931, from a former student of Snow I quote: “One of his more spectacular pieces of work was to destroy the chinch-bug which was taking heavy tribute from the farmers' crops. To accomplish this he found a fungus which was preying upon the bugs and proceeded to cultivate the fungus and to send it out to the farmers of stricken districts in small parcels, by mail, with instructions that they distribute the fungus where chinch-bugs were thickest. In this way he hoped that the parasite would spread and the bugs would be destroyed. For a number of years the state granted a special appropriation to carry on this work in a special laboratory in the University. Finally it was abandoned as ineffectual.”

Although Professor Snow's experiment failed, it was nevertheless of far reaching and great value in awakening the farmers of the middle west to the thought that in scientific investigation lay the hope of controlling the pests of agriculture and horticulture. I recall my father saying that a professor in the Kansas University had the right idea when he studied practical things like chinch-bugs. I never knew the name of the professor until I began to write this paper.

From 1872-1907 Snow conducted twenty-six collecting expeditions mainly for insects. E. Miller says:⁸ "At the present time the entomological collection contains over 21,000 species and 275,000 specimens of insects, the largest collection in the United States." L. L. Dyche, several times a member of Snow's expedition, says:⁹ "In 1877 Professor Snow conducted an expedition to Wallace county, Kansas . . . the party collected about 1500 specimens of the then rare species of tiger-beetle, *Amblychyla cylindriformis*. In 1876, . . . these beetles were reported to have sold at from five to fifteen dollars for a single specimen. . ." Through exchanges with this beetle many specimens were added to the University Museum. Shortly after the death of Snow, by an act of the regents, the museum collection became The Francis Huntington Snow Entomological Collection.

Vernon L. Kellogg says:¹⁰ "He [Snow] was the pioneer naturalist of Kansas, and for thirty years its most conspicuous representative in meteorology, botany, ornithology, and entomology. . . His enthusiasm and energy were contagious. He made first-class men out of the best of us, and something at least worthwhile out of the worst of us. . ."

As student, teacher, friend, Snow left a deep impress. "I studied under Snow" will be a valued credential so long as an alumnus remains who can say it. Snow's college training was received from rare men. Among his teachers at Williams were Mark Hopkins and his brother Professor Albert Hopkins and that great spiritual force and interpreter of life, John Bascom. He also studied under Agassiz and came under the influence of David Starr Jordan. Men were drawn to Snow by his sincere and charming personality.

Not only to the University of Kansas but to the entire state did Francis Snow give great personal service. He was one of seventeen men to organize the Academy of Science in 1868. Five times was he elected its president. In 1885 the legislature named in his honor Snow Hall of Natural History. At the dedication Professor Snow was carried to and from the building on the shoulders of students.

J. W. Green, student of Professor Snow, says:¹¹ "At his home or at the home of his friend, the instructor and toiler disappeared, and we came into contact with a most genial, lovable, and companionable man. As husband, father, friend, gentleman, and scholar, his life was

⁸Kan. Acad. Sci., Vol. XXII, p. 24, 1908.

⁹Ibid., p. 24.

¹⁰Journal Economic Ent., Vol. 2, p. 84.

¹¹Graduate Mag. Univ. Kan., Vol. VII, January, 1909, p. 128.

not only above reproach, but in him, sweetness of disposition, gentleness of manner, and consideration for others were mingled with perfect integrity."

Unspoken expression may reveal depth of feeling more fully than words. In writing Professor Snow's obituary, Vernon Kellogg says in conclusion:¹² "My personal feelings I have given no rein at all. As student, assistant, colleague and intimate friend of Francis H. Snow for twenty-five years, I have in my mind and heart such a wealth of dear memory that I do not trust myself even a word or phrase of personal appreciation. If I should, it would be too extravagant for publicity, too insufficient for my own satisfaction."

An alumnus is proud of his alma mater. Such as Francis Huntington Snow make alma mater proud of the alumnus. Snow's services made the University of Kansas and the State his debtor. His spirit has enriched the world.

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The names of F. H. Snow and N. S. Goss are linked as pioneers in Kansas ornithology. Goss died over forty years ago. The data on his life contained in this paper are largely from files of the Topeka State Journal, issues of March 10 and 12, 1891, and a "Sketch of Goss" by Mary Jackson of which the Topeka Journal says: It is "the only authorized and authentic biography of Colonel N. S. Goss".

Nathaniel Stickney Goss, the ornithologist and naturalist, was born of Puritan stock in Lancaster, New Hampshire, June 8, 1826. He died at Neosho Falls, Kansas, March 10, 1891. He was buried in Topeka Cemetery in Kansas.

Goss was but a youth when his father lost his property and the family came west and settled in Pewaukee, Wisconsin. Here he attended the district school and the local academy. In 1854, at the age of twenty-eight years, he married Miss Emma F. Brown, of Pewaukee. Two years later he moved to Waverly, Iowa, with a view to entering the banking business. While he was making arrangements for his location, his bride of only two years died. Overcome by this loss he left Iowa in the spring of 1857. With horse and buggy he traveled to Kansas, a recently made territory, and settled on the Neosho river where now stands the city of Neosho Falls. When the little settlement was laid out for a town site Goss became its first postmaster. In 1858 a grist mill was established and he sold flour and meal to the Indians, receiving in payment Indian ponies, buffalo robes, and money.

¹²Journal Economic Ent., Vol. 2, 1909, pp. 83-85.



NATHANIEL STICKNEY GOSS, 1826-1891

Goss had taken a keen interest in the development of this new territory. He was the leader in public affairs. In 1860 he was elected and commissioned major. In 1863 he was made lieutenant-colonel of the Sixteenth Kansas Militia Cavalry. In 1867 he was appointed register of the land office at Humbolt. Two years later he resigned to become attorney for the Missouri, Kansas, and Texas Railway with headquarters at Neosho Falls. Through his efforts the road was put through Neosho Valley. In 1866 the stockholders elected him president. He was called the "Father of Neosho Valley".

The valley of the Neosho River was familiar ground to Goss. Along its banks and over the Kansas prairie he had walked noting the bird life and collecting specimens. From early childhood the deep interest of his life lay in roaming fields and forests to study life in its natural surroundings. When he had made a comfortable fortune he devoted most of his time to the study of birds and the preparation of bird skins. He traveled widely to know birds. From the Everglades of Florida he followed the western coast line to the Gulf of California. He visited the Rockies and the Sierra Nevadas. The fruit of his labors gave a marvelous collection to the State of Kansas. In the fall of 1881 he took up his residence in Topeka. In this same year he donated his entire collection to the state upon the condition that it be known as "The Goss Ornithological Collection" and that he be the custodian during his life time. The offer was accepted. The legislature set apart a room for the collection and also one for Goss's own use.*

In 1883 he published a catalogue of the birds of Kansas, based upon observations in the field and knowledge gathered during a residence of over twenty-six years in Kansas. The catalogue embraced forty-nine families and 320 species and subspecies. In 1886 he revised the catalogue, increasing the species to 335.

The American Ornithologists' Union was established in New York in 1883. "At the first congress forty-seven ornithologists were elected to active membership."¹³ Colonel Goss was one of the original forty-

*The following information concerning the present condition of the Goss Collection is taken from a letter written by Mr. Kirke Mechem, Secretary of the Kansas State Historical Society, at Topeka, April 15, 1932:

"The Goss collection of birds is now housed in the museum of the Kansas State Historical Society on the fourth floor of the Memorial Building. It has been there since 1914. It is in very good condition although the birds at present need a thorough cleaning.

"The collection comprises 1523 birds of 756 species. The collection is unique in that each species of birds is mated. I understand that Col. Goss sometimes had to wait several years before he could mate some of these birds. There have been no additions to the collection since it was given to the Society."

seven members. This honor came to him unsought and without his knowledge. "Since the organization of the A. O. U. Colonel Goss has never failed to attend its meetings. . . . At the last meeting when the place of the next Congress was under discussion . . . he said . . . 'wherever it is held, Colonel Goss will be there if he is alive.'"¹⁴

The one ambition of his life was the completion and publication of the "History of the Birds of Kansas." This book came from the press a few days before his death. It was the summing up and completion of his life. "As a hand book or manual of the birds of a definite area, Colonel Goss's 'History of the Birds of Kansas' might in many ways serve as a model to future writers of similar works. As its title indicates, the work is strictly limited to the birds known to occur within the State of Kansas, which now number 343 species and subspecies . . . the plates are a novel feature, and, as an inexpensive method of illustration, may be regarded as a success, quite excelling in effectiveness any previous attempt at photo-engraving in ornithology we have seen. In fact, the plates are little less than a revelation respecting the possibilities of photogravure as an aid in ornithological illustration. The figures are all from mounted specimens in the 'Goss Ornithological Collection' . . ."¹⁵

In the preface to his "History of the Birds of Kansas", Colonel Goss says: ". . . It embraces 343 species and subspecies. . . . The photogravure illustrations represent 529 mounted birds (my own work) in 'The Goss Ornithological Collection.' The characteristic descriptions of the different orders, families, genera, species and races are chiefly from 'North American Land and Water Birds,' by Baird, Brewer and Ridgway . . . I have also quoted freely from Mr. Ridgway's 'Manual' and 'Birds of Illinois,' and occasionally from Dr. Elliott Coues' 'Key to North American Birds.'"

Goss's "History of the Birds of Kansas" is pleasant as well as instructive reading. He says of the Whistling Swan: "I have one in the 'Goss Ornithological Collection,' shot March 12th, 1875, in the Neosho valley. . . . In olden times, when credulity largely prevailed among the people, the most fabulous and absurd stories were readily believed. The Swans were supposed to sing sweetly, especially when dying. This belief seems to have been based upon the fable, that the soul of Orpheus was transmigrated into a Swan, and for this reason these birds were held in veneration. The Greek and Latin poets

¹³Bird-Lore, Vol. I, 1899, p. 147.

¹⁴Auk, Vol. VIII, 1891, p. 246.

¹⁵Auk, Vol. VIII, 1891, pp. 228-229.

praised its song, and the philosophers and historians recorded it as a fact. I quote from three of the most noted. Socrates says: 'When Swans perceive approaching death, they sing more merrily than before, because of the joy they have in going to the God they serve.' Aristotle says: 'Swans are wont to sing, particularly when about to die.' And Cicero says of Lucius Crassus, that 'He spake with the divine voice of a Swan about to die.' Pliny, one of the first to doubt, says: 'Some affirm that Swans sing lamentably a little before death, but untruly, I suppose, for experience in many has shown the contrary.' (Page 106-107.)

Colonel Goss's friends were unnumbered, a few were intimate. Not many days after the death of General Sherman, in 1879, Colonel Goss said to Judge Humphrey: "All I wish when I am dead is that some friend will stand beside my grave and say that I have led an honest life, and have not been without good deeds or lasting friendships, for no man of whom that can be said in truth has lived in vain." The Judge replied: "I love you as a brother, and you have been my true kind friend, and if I should survive you I shall . . . say that you have not only not lived in vain but the world has been better for your existence."

Colonel Goss was not a churchman. He believed in the religion of humanity and never let an opportunity pass to do a kind act or help a fellow being in distress. When the "History of the Birds of Kansas" came from the press Goss said to Judge Humphrey: "I wish that book to be my monument. I care nothing for a shaft of stone to mark my resting place, I want to leave my monument to humanity. My work is now ended and hereafter I will play."

Colonel Goss was in splendid spirit when his book came from the press, and he went to Neosho Falls to spend a few days with his nephew, C. W. Waterman. A few days later, on the morning of March 10, 1891, the governor's office in Topeka received a dispatch from C. W. Waterman of Neosho Falls. It stated that Colonel Goss was stricken down, presumably with heart disease, while walking along the street.

After passing resolutions on the death of Colonel Goss the legislature adjourned. Upon its arrival, the body was taken directly to the senate chamber where it was placed in state in front of the president's desk. Upon the casket, surrounded by a wealth of flowers, was placed the "History of the Birds of Kansas". The room containing The Goss Ornithological Collection, as well as Colonel Goss's private room, was draped in mourning. The State House was closed on the

day of the funeral. At the service Dr. F. H. Snow, then Chancellor of the University of Kansas, spoke eloquently upon the life of Colonel Goss and the heritage he left to the state.

When Colonel Goss took up his residence in Topeka in 1881 he bought a lot in the Topeka Cemetery. The remains of his wife, which for twenty-five years had rested in Pewaukee, Wisconsin, he had had reinterred in Topeka with the expressed wish that he be laid by her side.

On March 12, 1891, the remains of Nathaniel Stickney Goss were laid to rest in the Topeka Cemetery beside those of the companion he had lost long since and loved the while.

The following paragraphs, taken from the Topeka State Journal for March 12, 1891, are self-explanatory, and are probably of sufficient interest to justify reproducing in full:

"A special from Atchison to the 'Globe-Democrat' says: Ex-State superintendent of insurance, R. B. Morris, of this city, who was a close personal friend of the late Col. N. S. Goss, of Topeka, relates an interesting circumstance of that gentleman's life in connection with the gift of his ornithological collection to the state.

"When Col. Goss gave the state the collection, he exacted a condition that the state should provide a suitable room in which to keep the collection and also a room for his own private use. This the state faithfully complied with. Soon after making the gift, Col. Goss, who was a wealthy man, made a will in which he bequeathed a large sum of money for the maintenance and increase of the collection.

"Unfortunately this was afterward changed and the item of maintenance cut out. It came about in this way: A little more than a year ago Secretary of State Higgins gave an old soldier a lunch-stand privilege in the main hall of the State House. The old soldier set up his stand in close proximity to the ornithological room, and the crowds that daily visited the collection were always loaded with edibles.

"This offended Col. Goss, and he protested against the presence of the lunch-stand, but Mr. Higgins refused to yield and the old soldier held possession. Col. Goss, who took great pride in the collection, regarded the act of Mr. Higgins as a lack of appreciation of the gift, and he at once had his friend, Railroad Commissioner Humphrey, prepare a new will omitting the bequest to the state.

"Had he not given his word that the ornithological collection should become the property of the state, this, too, would have been withdrawn. The story as here told was received by Mr. Morris from Col. Goss himself."

And at another place in the same issue occurs the following version:

"It is stated that Colonel Goss a few weeks since added a codicil to his will, in which he willed his library and a large collection of relics and curios which he had gathered on his trips to various sections, to the state university, and that he changed the provision which he had previously made, giving the state a large sum of money for the maintenance of the 'Goss Ornithological Collection', willing the amount to his nephew, C. W. Waterman, of Neosho Falls.

"He made the latter change, it is said, because the secretary of state allowed a cigar stand to be maintained in the hall of the east wing of the capitol. Colonel Goss detested tobacco and was much perturbed when the cigar stand was established there by the guide. He protested against it, and his wishes not being complied with, he considered it a personal affront."

BERKELEY, CALIFORNIA.