

The Herring Gulls arrive from the south just as soon as there is open water in the lake in the spring. This is usually about the last week in March. They remain until the lake is completely frozen in the fall.

At this date, December 27, 1922, they are still here.

26th Infantry, U. S. Army, Plattsburg, N. Y.

EXTRACTS FROM THE FIELD NOTES OF GEORGE B. SENNETT.

BY RUTHVEN DEANE.

I am much indebted to Mr. George L. Fordyce of Youngstown, Ohio, for the privilege of examining one of Mr. Sennett's early note books which has come into his possession, and making a few quotations therefrom. Any personal reminiscences of ornithologists of prominence are always of much interest, especially when they touch upon their early experiences in collecting and field observation.

This note book was started in 1874, evidently when Mr. Sennett first commenced active collecting, and records the specimens collected or sent to him up to February, 1877. The measurements are given in all cases and the descriptions of plumage when a specimen of a species new to him was acquired. A large number of the specimens he mounted. Up to the middle of April, 1876, most of the specimens which he personally collected were taken in Crawford and Erie Counties, Penna.

On April 15, 1876, he started on his first collecting trip and joined his correspondent, Mr. Jasper N. Sanford of Elbow Lake, Grant County, Minn., who in 1878 accompanied him as assistant on his second trip to Texas. Here he remained until the end of May, collecting many of the Ducks, Cranes, Pelicans, Grouse and many species of waders, all new additions to his collection. While his facilities for preparing his specimens were very primitive, he mounted a number of his largest species and sent them home in crates. It was not until May, 1875, that he began to form a col-

lection of nests and eggs, but this note book records eighty-five sets up to February, 1876.

It is interesting to read of the collecting of such birds as the Whooping Crane and Passenger Pigeon, which were not uncommon when Sennett collected in Minnesota nearly fifty years ago, though one is now on the border of extinction, while the other has gone forever. I have never read the journal of a scientist where the writer showed more real enthusiasm in his chosen study, as the following extracts will show.

Nov. 17, 1874.

Having hertofore experienced great difficulty in not knowing names and terms nor even anatomy, I have ordered and received Dr. E. Coues' 'Key to N. A. Birds.' With it to study, I shall hope to be able to classify more correctly and more fully.

Dec. 8, 1874.

This day worked very hard and hunted thoroughly but got only one Merganser, one Downy Woodpecker and two Titmice, last two at one shot, but twenty feet apart. Shot a number of times at long range, but made poor shooting today. Was using up old powder that I know was inferior and presume I had better have thrown it away. Will use none but Orange in future. Season holds on well but game and birds are scarce. I think first severe storm of last month drove everything south. Well, ought I to complain! Here I have already skinned more than double the number of birds I had expected to at this time and I am beginning to feel at home in it, though I am awfully slow at it.

Dec. 16, 1874.

With a southwest wind and clear and three inches of snow, gun in hand, strolled through orchard and back of lot to Rilling's woods. Saw a female Downy Woodpecker within ten feet, backed off as far as I could and still see it, and shot it all to pieces with No. 12 shot, feel the want of dust size but none in the city. I disliked to have to throw it away for I had no female of this variety. Was tempted to shoot a Black-capped Chickadee and shot its bill and one wing to pieces and had to throw it away. It seems as if I am destined today to spoil every specimen.

Feb. 11, 1875.

Saw eight Pine Grosbeaks together on locust tree in front of house and my gun being at factory for repairs I borrowed a muzzle loader of Gloth and followed birds down to mountain ash trees by the large elm, had two fine shots at males which were bright red on head and neck, but both barrels missed fire. I came near getting mad but I watched the birds fly over to the orchard and by pounding and ramming and putting on fresh primers I managed to mark them and quickly firing I got one from each barrel, although both hung fire. They were both females.

March 6, 1875.

Went out this morning before breakfast with gun to see if any Pigeons were flying. Found ground frozen so as to hold up my weight. Saw no Pigeons, shot one Crow on the wing. Before noon had flurries of snow, which ended in a heavy snow storm from the west. The poor birds must have been fooled by their prophets.

March 29, 1875.

Referring to a Crow he had shot, he says: "This is the fattest bird skinned since Mergansers last fall, and the old adage "As poor as a Crow" don't work always.

April 3, 1875.

No. 170, Wild Pigeon, male $16\frac{1}{2}$ x 24 x 8, tail 8, eyes orange red. Found winged in upper lot, bill black, legs pink.

April 14, 1875.

No. 192, Wild Pigeon, female. Shot in orchard. Abandoned, by all odds the fattest bird and when I had it $\frac{2}{3}$ skinned the skin cuts and shot wounds were filled with fat and I knew it would be worthless.

April 17, 1875.

Wife and I have labeled and completed all up to No. 177 excepting two numbers 23 and 39 which I cannot with certainty name. They are evidently young. I have studied them more or less all winter but must wait until I get more specimens to compare. A change in the weather today, snowing nearly all day and last night, the therm. standing at 10° . Sleighs in town today and Butter Ducks and Geese on the bay in abundance.

April 24, 1875.

Had a big hunt today on island in a driving snow storm and secured a large bag of birds, mostly Ducks. Did not see a Snipe. My man Harrison went along. He has learned of me to skin birds very well and has already about twenty good skins.

Oct. 26, 1875.

No. 421, Bittern, mounted. I think I have mounted this the best of any bird yet, but I get out of conceit with all the birds yet mounted and presume I shall of this when I am better able to see defects.

Jan. 18, 1876.

On Dec. 20, Sennett went to Chicago with some of his family to visit relatives and while there picked up in the markets Pinnated and Sharp-tailed Grouse, Geese, Quail and a poor specimen of the Bohemian Waxwing selected from a bunch of eight. He writes, "Made the acquaintance of Dr. Velie at the Academy of Sciences and was very much pleased with the collections and the Dr. saw also Wood's Museum and the peculiarity there was two very handsome trained and tame Otters from Michigan. Met Master Geo. F. Clingman, an enthusiastic young tyro, who is doing nobly and has shown great perseverance in collecting eggs during the past season. Fred. Kaempfer's bird store is the finest I ever saw.

Mch. 9, 1876.

No. 471, Wild Pigeon, male, mounted. Shot on Gingrich's Farm.

On the 11th the weather was very mild and the air was full of Wild Pigeons and all the trees were alive with Robins, Blue Birds, Blackbirds, Meadow Larks, etc., and today, the 13th, there is 6 inches of snow and freezing cold.

Mch. 29, 1876.

Snow 8 or 9 inches deep and snowing constantly. The heaviest snow since December. In Chicago the drifts were so immense as to blockade completely all street car travel. In New York and New England heavy rains to cause floods. Good sleighing.

April 11, 1876.

No. 482, Wild Pigeon, male, mounted. Shot in yard.

Elbow Lake, Minn., Apl. 27, 1876.

Jasper and I worked faithfully all day skinning the two White Pelicans shot yesterday. Found in the gular sacs of all the Pelicans groups of lice or ticks close up to the head, which seem to eat through the sacs in some places. In one sac I think we took out as many as 25. In specimen 499 found quantities of slender white wiry worms $1\frac{1}{4}$ in. long in air cells on belly where it had been shot. Both ticks and worms I put in alcohol with the lizards. Saved three wing bones of Pelicans. Got three Yellow-headed Blackbirds at one shot.

April 28, 1876.

Saw a large flock of Sandhill Cranes flying high over the house, in which were two Pelicans. I saw the Pelicans leave the straight course they were all taking and commence sailing in their graceful circles and immediately the Cranes followed suit and continued so to sail until out of sight. This is unusual. Jasper had never seen the Cranes follow Pelicans as leaders before.

May 2, 1876.

Took the gun and paddled alone across the lake, which is close by the house, to the woods on opposite side. Saw a Swan and quantities of Bonaparte's Gulls flying over the water. Shot a Pigeon Hawk from door yard. A man from Pomme de Terre brought me a Franklin's Rosy Gull, but it was in the worst condition I ever saw a bird that wanted skinning. Water and plaster soon made it look quite respectable and it is one of the rarest skins to me yet received. The day was fine and warm, but at 10 o'clock P. M. a severe snow storm set in from the north east.

May 20, 1876.

Beautiful morning, up at half past four, breakfast over by six, cleaned guns and loaded shells. Jasper started towards the west, I staid in camp to take care of skins. Had nearly caught up when Jasper came in loaded down with two Whooping Cranes and a beautiful rabbit, a heavy load together with gun to bring over two miles. It was a grand sight to me for

we had been longing for the white beauties for a long time. He crept onto them on the broad open prairie and shot the pair. It is not every one who can shoot these fellows with shot.

May 21, 1876.

Up at six. We had to shoot our breakfast. What we ate was 3 Upland Plover, 1 Godwit, 1 Blue-winged Teal, and 1 Gadwall with coffee, no bread or salt, game roasted on spit, indian fashion. Jasper found yesterday a White Crane's nest and old ones near it. We concluded that I should be concealed close by the nest while he went on to Hanson's, eight miles, for team, and if the Cranes could not count I would get a shot. The nest was in a burnt slough on a small rat house and in plain sight and only a few tufts of short grass anywhere near. By lying flat by one of these tufts and cutting all the rest to cover over me I was partially concealed. I took as comfortable a position as possible and bid good by to Jasper who was soon whistling on his way.

Fully half an hour went by and I began to cramp and feel uneasy and was on the point of changing my position at the risk of losing my covering by the wind, when one noble fellow flew over the slough and lit on the opposite side from me about two shots off. Cautiously he began to survey the situation and shortly his mate came swooping down to his side. They kept their eyes well on my bunch of grass and remained a safe distance, yet I could see they knew their eggs were safe. Some fifteen minutes of strutting back and forth when she boldly walked out into the water, some eight or ten inches deep, directly towards me, mounted the rat house and sat down on her two eggs, some twenty five yards from me in plain sight. I could see her wink her eyes watching me and her mate constantly. Her eyes gleamed like fire. How anxious and how handsome, was ever a sight so grand, I forgot all about being tired and was almost spellbound. The male stood on the ridge watching her closely for a few minutes, when feeling all was safe he calmly commenced to plume himself in grand style and shortly walked off away from me the proudest of birds. When nearly out of sight I knew all hope of getting him was gone. If I could have secured him I would not have disturbed her or the eggs until Jasper returned with the team, for I thought of taking the eggs home to the Sanford's to try and hatch them under a hen, but now I concluded to secure her.

I slowly arose, turned and gave her one barrel as she was rising from the nest and the next before she had gone six feet and dropped her in the water. I immediately scratched for grass and tried to hide for I knew her screams would bring her mate and already he had answered and was on wing and came swooping down to where he had parted with her on the bank. I had already put in shells but he was too far and I hoped he would come nearer, but the wounded bird rallied sufficiently to get to him and start off on the prairie with one drooping wing, and catching between her legs would throw her every few steps, I was obliged to give chase, and a lively one it was, but the male kept at a safe distance and such a fuss never was heard. I at

length secured her but her wet feathers on the burnt prairie did not enhance her beauty. I took her back and put her on the nest to remain until the team should come.

Sept. 17, 1876.

Went to Philadelphia with wife and daughter to attend the Centennial Exhibition. Saw a splendid collection of beetles and butterflies in the Brazilian department. In the Kansas and Colorado buildings saw Mrs. Maxwell's collection which was praised by the papers so much. Was disappointed. It was large and showed much energy and skill, but as for art it fell short of its reputation. Many specimens of animals were too poor specimens of the species to be mounted by anyone. Her birds and skins were in poorer shape still. The crowds around it were immense and the praises of the multitude were many, but to one who is anything of a critic they are considered as inferior. In the Agricultural Hall saw some very good work from taxidermists, in fact this building contains all that was very fine excepting Smithsonian and Ward's in the Government building. The exhibit of F. J. Egan of Halifax, N. S., was very good. Splendid Eagles \$75 per pair, by G. F. Nowell, Hamilton, Ont., also Eagle and Blue Heron same price and by same man. Fine pair of Caribboos \$200 and Moose head \$110 by F. J. Egan of Halifax. Mink and Ermine \$15, Wild Cat \$15, by J. H. Cornell, St. Johns, N. B. Fine case of Roseate Spoonbill and ten other common birds, well mounted \$75, by C. K. Howlett, Hudson, Ohio. Best case of fancy birds was by Pertia W. Aldrich, Bluehill, Milton, Mass. But the chief attraction by all odds, the finest show both as science and taxidermy, was that of W. H. Werner of Allentown, Pa. I should think he had about twenty-five groups of pairs, young, nest and eggs, each group under glass globes. At the Zoological Gardens saw a fine Flamingo and Sandhill Crane, also Toucans and Cock-of-the-Rock. All of the birds, animals and reptiles in very fine condition. The number was not as large as I expected to see. Splendid Rhinoceros, also Giraffe, Laughing Hyenas and African and Asiatic Porcupines. Fine village of Prairie Dogs.

Jan. 14, 1877.

Saw more Snowy Owls and had more offered than ever before. I presume at least a dozen were shot in this vicinity in November. Sent a Yellow-head and nest and eggs to H. B. Bailey, Newton, Mass. Have opened a correspondence with him. Have sent some eggs to F. S. Webster of Troy, and expect some in return. Have ordered a large new case, also one for eggs. Am thinking of going to Florida. A. B. Chase of Norwalk is going. Dr. Hatch of Minneapolis made me a fine visit in October. He has a friend in Manatee, Fla., by the name of N. B. Moon and if it is convenient for me to go to him I will do so. Sent J. N. Sanford Coues' 'Birds of the North West' and he is delighted with it, also sent him a lot of paper boxes for shipping. Mink skins with him are only \$1. I have sold some for him to advantage and have sent him some money to buy 50 or 60 for

a cloak for wife. Am to get Jasper a gun and he is to, during the coming season, collect for me birds, eggs, and young. Expect to do wonders this coming spring. In the meanwhile I have an abundance of reading and corresponding besides some of my western animals to mount.

Jan. 30, 1877.

Went to Rochester, saw Ward's collections, also met Prof. Howell who is now a partner of Mr. Ward. Saw their very complete work shops employing 18 hands. Mr. Ward is now in Africa collecting. They have few birds and do not wish them. They have, I should judge, a hundred Rocky Mt. Sheep just received and skins by the hundred of other animals. Their great specialties are minerals, antiquities and skeletons. Prof. Howell was very obliging and I was greatly benefited. Went from there to Troy and found Mr. Webster with open arms to receive me. Our correspondence has been quite animated and profitable and for the first time we met. Found him not only a good taxidermist but an observing and careful naturalist and scientist. He is a great worker and has some very fine specimens. Staid one day with Mr. and Mrs. Tucker. I could get away with difficulty. Mr. Webster went with me to the State collection at Albany. It was very good but not as good in birds as in other departments. Met there Prof. James Hall and presented him with two specimens from Dr. Ingersoll of Erie. Met also Mr. J. A. Lintner the entomologist and there beheld the finest collection of moths and butterflies I ever saw. I think his system of arranging complete and Mr. Webster and I both agreed to adopt it forthwith and begin the study of insects with more ardor.

Went to New York and spent half a day in the aquarium, was delighted with it. Saw the two live Vampire Bats which I supposed could not be domesticated. Many and choice were the fish and radiates. The next day spent the entire day at the American Museum and Menagerie at Central Park. It was the closed day but I was admitted and met Prof. Bickmore and Dr. Holder of the Museum and they gave me much attention and made me interested beyond expression in their work and collections. I was indeed surprised to find so much. They are over crowded and expect to get into their new building in the spring. Mr. Conkling, Supt. of the Menagerie, also gave me special attention and I was much pleased with the animals. I received the reports from all and was delighted with my day's study. I neglected to mention that at the Troy Cemetery I saw the finest lot of live water fowl I ever saw. Five or six species I knew, several of the Geese, among them were Snow and Egyptian, Brant and among many ducks were the beautiful Wood and above all the exquisite Mandarin. They were all huddled together, at least a hundred, in a small open space in the ice, and were tame and well. Arrived home and found a letter from Dr. Elliott Coues urging me to go to Texas, and I have concluded to do so, and Mr. Webster will go with me.

Feb. 15, 1877.

My correspondents are Dr. P. L. Hatch, Minneapolis, Mr. H. B. Bailey, Newton, Mass., William Brewster, Cambridge, Mass., Dr. J. C. Merrill, Fort Brown, Texas, who welcomes me to his section, and last but not least Dr. Elliott Coues of the Smithsonian. Received a letter through Mr. Bailey from Mr. J. A. Allen of Cambridge. Sent Dr. Coues a fine Pelican and he was pleased with it and gave it to the Smithsonian, also sent him a juv. rabbit which he decides to be the young of northern Jack. He sent it to Prof. Allen who is making a study of Rabbits.

Feb. 19, 1877.

Received a letter from Spencer F. Baird of Smithsonian Inst. thanking Dr. Coues and me for the Pelican skin I sent the latter, and saying he had sent me a check list of birds.

Feb. 21, 1877.

Have been ready and waiting for two days for Mr. Webster, expect him every train. Was today studying Audubon about the Mammals and Birds of Texas and have hopes of getting great quantities of valuable skins. Every thing arranged at home, debts and accounts all settled up and every thing put away in good shape.

112 W. Adams St., Chicago, Ill.

SOME OBSERVATIONS ON THE STRUTHIOUS BIRDS.

BY W. HENRY SHEAK.

For seven months in 1918, from the first of April to the end of October, I had charge of the Ostrich house at the Philadelphia Zoölogical Garden. This paper is based almost exclusively on notes made at that time.

When I took charge there were in the house three specimens of the South African Ostrich (*Struthio australis*), two males and one female; two Somali Ostriches (*S. molybdophanes*), a male and a female; two Rheas (*Rhea americana*), both males; one male Australian Cassuary (*Casuarius australis*); two Papuan Cassuaries (*C. papuanus*), a male and a female; and two Emus (*Dromæus novæ-hollandiæ*), both males. During the seven months I was there I had no death and not a case of serious sickness among the ratite birds.

Toward the end of the summer, however, we received from an Ostrich farm in California three specimens of the Somali Ostrich,