

UNUSUAL ABUNDANCE OF THE SNOWY OWL
(*NYCTEA NYCTEA*).

BY RUTHVEN DEANE.

DURING the past winter of 1905-6, we have again been visited with an unusual abundance of Snowy Owls. I called attention to this flight in a short note published in 'The Auk' for January, 1906 (p. 100), but at that time I had been unable to obtain sufficient data on the subject. During December, January, and February I received records of some eight hundred specimens from localities scattered from Nova Scotia west to Nebraska and from Manitoba south to Missouri, showing that in this territory, at least, the flight had been quite general. As to the cause of these periodical incursions we have not much more information to enlighten us than we had during their abundance in the winters of 1901-2.¹ The weather during these visits has not been unusually severe and the temperature of the past season was one of marked mildness and considerably above the normal point in most localities. There seems to be little doubt that a scarcity of food must influence these southward movements. In some favorable localities, where in former years these owls were conspicuously represented, this past season but few, if any, have occurred. I have had to rely largely for my information upon the taxidermists who have received them for preservation, and to them I take this occasion to express my obligations, as well as to all others, for their kind assistance.

NOVA SCOTIA.

Mr. J. W. Bouteillier, Marconi Wireless Station, Sable Island, Nova Scotia, writes under date of April 6, 1906, as follows: "For the last three winters we have noticed Snowy Owls here in greater abundance than ever before. In the winter of 1902-3 there were

¹ "The Auk," Vol. XIX, July, 1902, pp. 271-283.

three or four dozen on the island, but the past winter we have had more than usual." Sable Island is about eighty-six miles off the coast of Nova Scotia, the nearest mainland.

Mr. Harry Piers of the Provincial Museum, Halifax, N. S., writes under date of Feb. 5, 1906, that there was a noticeable migration of these owls in the vicinity of Yarmouth, N. S., between the 10th and 20th of November, 1905, and that twenty-four specimens had been received by the taxidermists of that city. He also reported some twenty specimens that had been taken near Halifax. During the flight of 1901-2 but few were reported in these localities.

NEW BRUNSWICK.

Mr. Turner Ingalls, Jr., keeper of Southwest Harbor Light Station, Grand Manan, N. B., informs me under date of Jan. 20, 1906, that twenty-six Snowy Owls had been seen on the island, and many of these had been shot during December, 1905. During the flight of 1901-2 Mr. Ingalls observed only about half this number.

Mr. Howard McAdams of St. Stephen, N. B., writes under date of Dec. 20, 1905, that he had received six Snowy Owls up to that time, but had heard of a number of others having been observed and killed. His specimens were received between Nov. 15 and Dec. 14, 1905.

Mr. Miles D. Emack, taxidermist, Fredrickton, N. B., writes under date of Jan. 16, 1906: "Since we have been in business we have never seen so many Snowy Owls. We have so far this season received twenty-nine, and they appear to be all over the Province. Last winter we received none, but four years ago there were plenty of them. In many cases they were reported as found in pairs. There were but few that were conspicuously white, the majority being quite gray."

PROVINCE OF QUEBEC.

Mr. C. E. Dionne, of Laval University, Quebec, in a letter written Jan. 7, 1906, informs me that Snowy Owls have been quite abundant all the season. About fourteen specimens had been sent in,

—one from Esquimeaux Point late in September, 1905, one from Kamomraska, and several from localities from fifty to one hundred miles from the city, while others were killed in November at near by points. One specimen had been brought in badly soiled by soot. It had been killed with a stick, having descended the chimney into a room. It is presumed that while perching on the chimney top, it had involuntarily fallen into the flue. In a later letter from Mr. Dionne, dated Feb. 15, 1906, he writes that he is still receiving specimens.

Mr. Napoleon A. Comeau, Godbout, P. Q., writes under date of March 19, 1906, that the migration of Snowy Owls the past winter did not compare with the numbers which visited them in the winter of 1901-2. The first one noted was on Oct. 27, 1905, and since that date some had been in evidence most of the time. He shot one specimen on March 17. One man at Pointe de Monts, P. Q., had killed about forty since their arrival in the fall. Mr. Comeau states that within a radius of twenty miles from Godbout about one hundred and fifty of these owls had been killed, and as there was no migration of murrets or dovekeys this year, the want of this food supply may account for their non-appearance in as large numbers as on previous flights. Some of the stomachs examined by Mr. Comeau contained portions of the red squirrel, northern hare, mice, ptarmigan, and the Long-tailed Duck (*Harelda hyemalis*), and one had some remains of a musk-rat; there were also some seeds in the crop, but he presumed these were from some bird whose crop he had swallowed. Mr. Comeau writes that there was a moderate migration of ptarmigan the past winter.

PROVINCE OF ONTARIO.

Mr. J. H. Fleming of Toronto, Ont., informs me, under date of Jan. 2, 1906, that there had been no unusual migration of Snowy Owls in that section and he could only report records of five, all taken near the city at dates between Nov. 13, and Dec. 12, 1905. It is rather surprising that the present flight should have skipped this territory, for during the previous incursion of four years ago, considerably over one hundred were killed and observed in Toronto and vicinity.

Mr. P. A. Taverner of Detroit, Mich., writes that he saw one of these owls on Oct. 27, 1905, on Point Pelée, the most southern point of the Province, projecting into Lake Erie.

PROVINCE OF MANITOBA.

Mr. George E. Atkinson, taxidermist, Portage la Prairie, Man., writes the following interesting communication under date of Dec. 12, 1905: "Snowy Owls are very abundant all over Manitoba and the new Province of Saskatchewan this season. I have already received upwards of thirty specimens for mounting, and they are still coming in from every direction. They made their appearance about the first freeze-up, early in November and have since been generally reported. The number I have received can only be considered a small percentage of those about, as we have fortunately educated our people to protect rather than destroy these birds, and they are seldom killed save for preservation. I have had several opportunities to see these owls, while driving through the country. I have had a great many offered for sale and inquiries from many people stating that if wanted they were available. I have, however, purchased none, as I have no demand. The males seem to predominate, about 7 to 1, over the females, in number, while the number of maturer males is about 3 to 5 of immature or young plumaged birds. All the females, so far, are very dark colored. My specimens were received from Oxbow, Forget, Wolesby, Alameda in Saskatchewan, and Neepawa, Alexander, Brandon, Pipestone, Plumas, Westbourne, and generally over the Portage plains in Manitoba. I did not make any particular notes or dates of their receipt because it is to us only a periodical event, since every two or three years these birds become exceedingly abundant. As an evidence of what we could do I can only note that in one of these seasons (1886) I sought and bought all that were available and handled over one hundred birds from Portage district alone within three months, having seventy-two on hand at one time, all my own, and credited one man with securing nineteen from his own farm in two months. This proceeding has, however, been terminated and though they are equally numerous at some seasons, they are never slaughtered to any extent."

Mr. Alex. Calder, taxidermist, Winnipeg, Man., writes under date of Dec. 15, 1905: "We have been receiving a large number of Snowy Owls for the last two months. They are passing this way in large numbers, and are still coming in. Most of them have been shot within one hundred miles of Winnipeg, west and northwest." Again under date of Dec. 23, 1905, he writes: "Regarding the flight of Snowy Owls, we have had about one hundred sent in to be mounted, and have refused to purchase a number. They were never so plentiful. We are receiving letters every day from people wanting information as to the cost of mounting, or value of the owls shot."

MAINE.

Mr. Walter Hinds, taxidermist, Portland, Me., writes under date of Jan. 13, 1906, that he had received over fifty Snowy Owls this season, five having been received at one time from Richmond Island, off Cape Elizabeth, Me. (the Richmond Island record was given in 'The Auk' for Jan. 1906, p. 100), but the majority were killed along the coast between Portland and Harpswell, Me. A few were sent from Ashland, Fort Kent, and Masardis, in Aroostook Co., Me. One specimen examined contained the remains of fish.

Mr. Frank L. Colton, keeper of Petit Manan Light Station, Me., under date of Jan. 22, 1906, writes that the Snowy Owls were first seen this season about Nov. 15, 1905. During the first week seven were observed scattered over the island. After that date they were usually seen in pairs up to Dec. 17, 1905. About twenty-five were seen in all, nine of which were shot and sent to be mounted.

Mr. Wm. F. Stanley, keeper of the Great Duck Island Light Station, Me., writes me under date of Jan. 5, 1906, that there had been a number of Snowy Owls the present winter on the island. He did not, however, inform me how they compared in numbers to previous seasons when they were abundant. Mr. S. L. Crosby, taxidermist, Bangor, Me., writing under date of Jan. 5, 1906, states that the present flight seemed to be over, as he had not received any Snowy Owls for a week. About forty-five had been received, mostly from the seacoast and in the vicinity of Petit Manan, a

few having come from as far inland as the Rangely Lakes. He reports all the birds as fat and in good condition.

Capt. Herbert L. Spinney, keeper of Sequin Light Station, Me., writes under date of Dec. 11, 1905, as follows: "November 15, the wind blew very hard from the northwest and continued from that quarter for a number of days, and was quite cold. On the morning of the 18th I saw a Snowy Owl, which I shot. In the evening at twilight of the same day, I saw another, which I also secured and when returning to the house saw another poising in the air over my hen-pen. On the 20th another was taken during the forenoon by a gunner who visited the island and in the afternoon I took still another. On Dec. 3, I observed two, one of which I took. I also received a specimen taken at Georgetown, some four miles from the station. They seemed to be in pairs, those which I shot representing three males and three females. Of the four which I have skinned, two had nothing in the stomach, but were in good condition. Of the other two, one contained a small roll of hair, from a mouse I should judge, and the other contained the feathers, legs and feet of a small gull which I identified as those of *Larus philadelphia*. The head and bill were missing, though all the wing feathers and bones were among the remains."

Mr. Robt. W. Bazin, Malden, Mass., reports one specimen from York, Me. Mr. Wm. Cooper, taxidermist, Milo, Me., writes under date of Dec. 24, 1905, that two specimens, received about Nov. 30, 1905, were very fat, while one taken near Milo, Nov. 18, 1905, was very thin and swarming with parasites.

Mr. G. H. Hoxie, taxidermist, Foxcroft, Me., writing under date of Jan. 4, 1906, states that there are quite a number of Snowy Owls in his section. He had received four for mounting which were killed between Dec. 20 and 30, 1905. Mrs. W. R. Gifford of Skowhegan, Me., writing Dec. 19, 1905, reports three having been received from Skowhegan, Athens, and Cambridge, Me., between Nov. 20 and Dec. 11, 1905. Mr. C. R. Combs, of Belfast, Me., received one on Nov. 20, 1905, killed at Ilesboro, Me., and Mr. Homer R. Dill of Gardiner, Me., writes Dec. 11, 1905, that he had received five or six of these owls in the previous three weeks. The average mean temperature at Portland and Eastport, Me., for November and December, 1905, was 32.28°.

NEW HAMPSHIRE.

Dr. Charles W. Townsend, Boston, Mass., under date of Feb. 15, 1906, informs me that three Snowy Owls were killed at Hampton, Nov. 24, 1905.

VERMONT.

Mr. W. P. Conger, taxidermist, Burlington, Vt., writing under date of Jan. 23, 1906, gives me the following data regarding Snowy Owls which he has received this season, all killed in Vermont: South Hero, Nov. 20, 1905, one; North Hero, Nov. 24, 1905, one; Colchester, Nov. 28, and Dec. 22, 1905, two; Orwell, Jan. 23, 1906, one; Shelburne, Dec. 18, 1905, one; Burlington, Dec. 22, 1905, one; Albany, Dec. 27, 1905, one.

The mean temperature at Burlington, Vt., for Nov., 1905, was 36.05°.

MASSACHUSETTS.

Mr. M. Abbott Frazar, Boston, Mass., writing under date of Dec. 2, 1905, informs me that he has received for mounting about forty Snowy Owls. The birds were received between Nov. 23, 1905, and Jan. 1, 1906. While a few were sent from Grand Manan, the majority came from points along the sea coast from Newburyport to Nantucket.

Dr. Chas. W. Townsend, Boston, Mass., under date of Feb. 15, 1906, gives me the following records:

Two seen by himself in the Ipswich dunes, on Nov. 5, 1905, and Feb. 11, 1906; five shot in the Ipswich dunes, Nov. 25, 1905; one seen near Salem, Jan. 1, 1906. At different dates during November and December, 1905, and January, 1906, a gunner from Newburyport shot nineteen specimens, most of them being taken on Plum Island, off Ipswich. Three were shot at Nantucket, Mass., Dec. 1, 1906, and one at Wayland, Mass., Dec. 2, 1905.

Mr. Everett Gordon, taxidermist, Lynn, Mass., on Dec. 13, 1905, reported one from Nahant, Mass., taken Nov. 22, 1905; one from Chatham, Mass., taken Nov. 13, 1905; and one from Gloucester, Mass., taken Nov. 23, 1905.

Mr. Robt. W. Bazin, Malden, Mass., on Jan. 11, 1906, reported a specimen killed at Lakeville, Mass.

Angell and Cash, taxidermists, Providence, R. I., under date of Jan. 25, 1906, sent me the following data of specimens which had passed through their hands.

Nov. 20, 1905, ♂ Fall River, Mass. Dec. 8, 1905, ♂ Nantucket, Mass.
 " 20, " ♀ Monomoy Pt., Mass. " 19, " ♀ Nantucket, Mass.
 " 28, " ♂ New Bedford, Mass. " 21, " ♂ New Bedford, Mass.
 Dec. 1, " ♀ Nantucket, Mass. " 23, " ♀ Monomoy Pt., Mass.

Mr. Owen Durfee, Fall River, Mass., writing under date of Feb. 21, 1906, states that one Snowy Owl was killed at Marthas Vineyard, Mass., in December, 1905, and five more in February, the last one seen being on Feb. 7, 1906.

The mean temperature at Boston, Mass., for November, 1905, was 41.06°; for December, 1905, 35.01°.

RHODE ISLAND.

Mr. Harry S. Hathaway, Providence, R. I., on Dec. 5, 1905, reported four Snowy Owls taken at Newport, R. I., Nov. 16 and 18, 1905, and three at Warren, R. I., at about the same date. (This record was included in 'The Auk' for January, 1906.)

Angell and Cash, taxidermists, Providence, R. I., have, at my request, very kindly kept careful records of all the Snowy Owls which have passed through their hands between Nov. 18, 1905, and Jan. 1, 1906. The following were killed in Rhode Island.

Nov. 18, ♂, Wickford.	Dec. 6, ♀, East Greenwich.
" 18, ♂, Narragansett Bay, near Providence. ¹	" 12, ♀, Portsmouth.
" 21, ♀, Block Island. ²	" 12, ♂, Newport.
" 27, ♀, Newport. ³	" 14, ♂, Portsmouth.
" 27, ♀, Newport.	" 14, ♂, Situate.
" 28, ♀, Prudence Island, Narragansett Bay.	" 19, ♀, Block Island.
" 29, ♀, Newport.	" 19, ♀, Point Judith.
Dec. 1, ♀, Sachnest Point.	" 20, ♀, Newport.
" 1, ♂, Seaconnet Point.	Dec. 21, ♀, Seaconnet Point.
	Jan. 1, 1906, ♀, Woonsocket.

¹ Contents of stomach, pellets of rat fur and bones.

² Contents of stomach, breast feathers of Black Duck and small quantity of dark colored flesh.

³ Contents of stomach, entire rat about half grown.

Where no mention is made of the contents of stomach it was empty or not examined.

The mean temperature at Providence, R. I., for Nov., 1905, was 41.04°; Dec., 1905, 34.06°.

CONNECTICUT.

Angell and Cash, taxidermists, Providence, R. I., have given me the following data of specimens received by them from Connecticut.

Nov. 20, 1905,	♀,	New London, Conn.
" 28,	♂,	" " "
" 28,	♀,	" " "
Dec. 30,	♀,	" " "

Mr. P. D. Stannard, taxidermist, Norwalk, Conn., informs me of one specimen taken at Norwalk, Conn., Dec. 15, 1905. He also writes that he has heard of a number of others having been taken.

In a letter from Mr. James J. Hill, New London, Conn., dated March 10, 1906, he refers to a Snowy Owl having been seen in New London harbor, Conn., and to another that was captured in Niantic, Conn., during the present season.

NEW YORK.

Mr. James G. Scott, keeper of the Montauk Light Station, Montauk Point, L. I., writes me under date of Jan. 11, 1906, that about ten Snowy Owls were seen in his locality and that he shot four of them between Nov. 3 and 19, 1905. He reports that they appeared about a month earlier than he has seen them in former years.

Mr. A. M. Church, taxidermist, Boonville, N. Y., writes under date of March 3, 1906, that there had been a very unusual flight of Snowy Owls during the winter. Fifteen specimens had been sent to him, and he could have secured many more if he had needed them. Those that passed through his hands were taken in a rich farming district within three miles of town. The sexes were about evenly divided. Mr. Church states that there were still a good many about the country, and that there had been an unusual abundance of field mice.

Mr. James H. Hill, New London, Conn., writes under date of March 10, 1906, as follows: "There has been another unusual influx of Snowy Owls the past season (1905), no less than nineteen having been captured on Munnatawket, or Fisher's Island, Suffolk County, N. Y., and two more were seen but eluded capture. One was also taken by the lighthouse keeper of Little Gull Island. One was taken just in time by an indignant duck hunter to save his decoy duck. Another was seen at the same time, but escaped. The first specimen was taken Nov. 20, and the last Dec. 28, 1905. Hares were as usual the *pièce de résistance* of the Fisher's Island Nyc-teas." In the flight of 1901-2¹ Mr. Hill sent a report of fifteen Snowy Owls which had been shot on this island and referred at that time to the abundance of hares being a great attraction for these northern visitors.

Mr. Thos. Rowland, taxidermist, New York City, writes that he received four specimens from Long Island in Dec., 1905, and had had a number offered for sale. Mr. Fred Sauter, taxidermist, New York City, informs me that he has received a few specimens which were in good condition. Dr. Wm. C. Braislin of Brooklyn, N. Y., reports a specimen from Rockaway Beach, killed about Dec. 1, 1905. Mr. Edward Neal, taxidermist, Rochester, N. Y., reports receiving three Dec. 19 and 20, 1905, all from Monroe Co., N. Y., and Mr. G. W. Altman, taxidermist, Buffalo, N. Y., received two from Niagara River, Nov. 25, 1905.

The mean temperature for New York for November, 1905, was 35.06°; for December, 1905, 29.07°.

PENNSYLVANIA.

Mr. Louis Weber, taxidermist, Philadelphia, Pa., writes me under date of Jan. 31, 1906, that he had received nine Snowy Owls taken in the city and near by points and one taken at Chester, Pa. He had also received thirteen from Winnipeg.

Mr. John Clark, Erie, Pa., reports one taken south of the city on Nov. 25, 1905.

¹ Auk, Vol. XLX, 1902, p. 276.

OHIO.

Mr. W. W. Woodruff, taxidermist, Cleveland, O., informs me that these owls appeared earlier this season than in previous years. He had received four specimens, two of each sex, between Nov. 20 and 25, 1905.

Mr. E. L. Mosely, Sandusky, O., writes under date of Feb. 3, 1906, giving the following records which had come to his notice: one from Marblehead, O.; one from Port Clinton, O.; and one from Put-in Bay, O., all taken within twenty miles of Sandusky, between Nov. 21 and 27, 1905.

Prof. Lynds Jones, Oberlin, O., writing under date of Feb. 10, 1906, reports the following records. Five taken in Ashtabula Co., one in Lake Co., six in Mahoning Co., and six received by a taxidermist in Columbus, from localities south of that city, no data for these records being given. The mean temperature for Ohio for November, 1905, was 39.06°.

MICHIGAN.

Mr. Peter Lepp, taxidermist, Saginaw, Mich., writes me that he received fifteen Snowy Owls between Nov. 20 and Dec. 28, 1905. Referring to the last large migration in 1901-2, he stated that he had sixty-two specimens in his show window at one time.

Mr. Fred. Kaempfer, taxidermist, Chicago, Ill., received two specimens from Ironwood, Mich., Oct. 31, 1905.

Mr. Hugo Englehardt, taxidermist, Iron River, Mich., received five specimens, all from Iron Co., Mich., during the late fall of 1905, and Mr. W. H. Kress, of Cheboygan, Mich., received three.

Mr. Lou J. Eppinger, taxidermist, Detroit, Mich., under date of Feb. 5, 1906, writes that he had received some ten specimens from the vicinity of Detroit, two from the Upper Peninsula, Mich., and several from Iowa and the Dakotas. He stated that around Detroit this flight did not compare as to numbers with the one a few years previous.

Mr. P. A. Taverner of Detroit, Mich., under date of April 18, 1906, reports late records of three Snowy Owls, as follows: One

killed at River Rouge (near Detroit), Mich., March 27, 1906; one small light colored bird, killed on Saint Claire Flats, April 1, 1906; and one very large bird, also killed on Saint Claire Flats, April 5, 1906.

Mr. F. H. W. Bailey, taxidermist, Marquette, Mich., writes me that he had only received a single specimen, and that he had not heard of any others having been seen. He reports that during the flight of 1901-2 they were very abundant in his locality.

The mean temperature for Michigan for Nov., 1905, was 35.01°; for Dec., 1905, 28.04°.

WISCONSIN.

Mr. Albert Nemeč, taxidermist, Cable, Wis., writes under date of Dec. 12, 1905, that he had received eight Snowy Owls from Bayfield and Washburn Counties, also a single specimen from Eau Claire. They were all sent in between Nov. 30 and Dec. 12, 1905. One killed close to the town of Cable was in very white plumage.

Mr. E. D. Ochsmer, taxidermist, Prairie du Sac, Wis., received two specimens from Sumpter, Wis., Nov. 17 and 22, 1905, and one from Prairie du Sac, Wis., Nov. 10, 1905. One specimen was nearly white in plumage, but all were very poor in flesh. Mr. J. N. Clark, taxidermist, Meridian, Wis., reports one specimen shot in that town Oct. 28, 1905.

The mean temperature for Wisconsin for November, 1905, was 34.04°; for December, 1905, 24.01°.

MINNESOTA.

✓ Mr. T. J. Storey, taxidermist, Duluth, Minn., writing under date of Dec. 19, 1905, states that the Snowy Owls usually appear about Oct. 20, and some remain until the approach of spring. He reports them as very abundant this winter, and up to Dec. 19, 1905, he had received thirty-two for mounting. About a dozen had been killed in the city.

Mr. H. W. Howling, taxidermist, Minneapolis, Minn., under

date of Jan. 17, 1906, writes that he had received fifty-seven Snowy Owls in the past four weeks, which was more than the receipts for the past three years together. These owls were sent in from points in the western, northwestern, and southern parts of the State.

Mr. W. A. Deggeller, taxidermist, Stillwater, Minn., writes that he had received four specimens up to Jan. 9, 1906, from Watertown, St. Paul, and Withrow.

Mr. Julius Brandt, Jr., taxidermist, New Ulm, Minn., received four specimens from Martin County, near the Iowa border, previous to Dec. 23, 1905.

Mr. Albert Boehm, taxidermist, La Crosse, Wis., under date of Dec. 19, 1905, reports having received three Snowy Owls from Minnesota, — one from Lake City, early in November, one from Harmony, Nov. 24, and one from Wyoming, Dec. 10.

The mean temperature for Minnesota for Nov., 1905, was 33.01°; for December, 1905, 20.06°.

SOUTH DAKOTA.

Mr. Otto Munson, taxidermist, Custer, S. Dak., received one Snowy Owl on Dec. 16, 1905, which had been taken at Edgemont, S. Dak., and Mr. Julius Brandt, Jr., of New Ulm, Minn., received three from points in South Dakota prior to Dec. 23, 1905.

NEBRASKA.

Mr. J. W. Elwood, manager of the Northwestern School of Taxidermy, at Omaha, Nebr., writes under date of April 9, 1906, that he had received more Snowy Owls for mounting during the past winter than ever before, the flight having been exceptionally large. From twenty-six to thirty were received, principally from western Nebraska and the Dakotas, while a few were from Iowa and Minnesota.

Mr. Myron H. Swenk, Lincoln, Neb., writes under date of Jan. 10, 1906: "I have received within a few weeks a specimen of Snowy Owl from Ulysses, Butler Co., shot Dec. 8, 1905, and have records of a specimen from Crawford, Sioux Co., two from Omaha,

Douglas Co., and of others from Idaho, Iowa, and Wisconsin, showing the flight to be general over this middle western country. All these were taken in November or early December."

Mr. John A. Lord, taxidermist, Portland, Me., informs me that while in Omaha, Neb., in December, 1905, he saw about ten Snowy Owls in one taxidermist's store, which had been recently received.

IOWA.

Mr. Wm. White, taxidermist, Rolfe, Iowa, writes that he received two Snowy Owls which were killed a few miles from that city about Dec. 1, 1905.

MISSOURI.

Mr. Otto Widmann, St. Louis, Mo., writes that Frank Schwarz, taxidermist, St. Louis, Mo., had received a Snowy Owl, female, which was shot from a stable roof at Wellston, Mo. Mr. Widmann also informs me that a Mr. Johnson observed two specimens in Jasper Co., Mo., near the Kansas border on Jan. 23, 1906. One of them was shot.

The mean temperature for Missouri for November, 1905, was 30.08°; for December, 1905, 33.03°.

INDIANA.

Mr. Amos W. Butler, Indianapolis, Ind., under date of Jan. 20, 1906, sends me a list of the Snowy Owls which have been observed and killed in various parts of the State, as follows.

Lake County: 4 reported by LeGrand T. Myer, Hammond, in November, 1905.

Benton County: 1 shot in Bolivar township, November 10, 1905; 1 seen about Otterbein about November 24, 1905; 1 of two seen, was shot nine miles north of Fowler, November 4, 1905, and the other was taken afterwards.

Earl Park: On January 4, 1906, there is a report of one observed some days before at Earl Park. J. R. Opp has a specimen taken four miles

west of Otterbein, the latter part of December, 1905. Another was found in the same vicinity about three weeks before.

Fountain County: 1 was shot November 4, 1905, two miles southeast of Mellott.

Lake County: 1 was shot about December 1, 1905, near Shelby.

Miami County: 1 male was killed in Erie township, December 17, 1905. The next day a female was killed in that vicinity.

Montgomery County: 1 was shot three miles northwest of Linden, November 22, 1905; 1 was killed near Darlington on November 21, 1905.

Warren County: 1 killed on December 21, 1905.

Hancock County: 1 shot one mile northwest of Fortville.

Johnson County: 1 taken about six miles south of Franklin.

Shelby County: 1 killed about December 1, 1905, below Shelbyville, by Frank Hoffman; 1 killed by Isom Kelsey two and one-half miles west of Shelbyville December 30, 1905; 1 killed by John Tucker about December 16, 1905.

Marion County: 1 taken near Southport December 20, 1905.

Mr. Fletcher M. Noe, Indianapolis, Ind., informs me that Snowy Owls had been very generally taken at many central points in the State. He had received seven during December, 1905, and had heard of twice that number having been taken close by. Some of these records may refer to those given in detail by Mr. Butler.

The mean temperature for Indiana for November, 1905, was 41.07°; for December, 1905, 32.08°.

ILLINOIS.

Mr. Fred. Kæmpfer, taxidermist, Chicago, Ill., received twenty-two Snowy Owls which were sent in from various localities in the northern part of the State. (This record was given in part in 'The Auk,' Jan., 1906.) I examined all these specimens and the majority were dark colored females.

Mr. Rud Haman, taxidermist, Chicago, Ill., has received seven Snowy Owls from Fox Lake, Grass Lake, Barrington, and Evanston, Ill. Three were killed between Nov. 24 and Dec. 8, 1905.

Mr. Harry S. Swarth, Field Museum Natural History, Chicago, Ill., saw a Snowy Owl Feb. 2, 1906, in Jackson Park, within the City limits. The bird flew over him within gun shot. On Jan. 17, 1906, another was seen in the same locality and was not fifty feet away from the observer.

Prof. S. A. Forbes, State Laboratory of Natural History, Urbana, Ill., writing under date of Jan. 25, 1906, gives records of five specimens of Snowy Owls as follows: "Four have been brought to us this winter from this neighborhood, the furthest one from Danville, Ill., and the last from Urbana. A fifth one has been reported from Tuscola, Ill., a short distance south."

Mr. Amos W. Butler of Indianapolis, Ind., reports that one of two seen, was killed two miles north of Kansas, Ill., on Dec. 2, 1905, by Earley Dulep.

Mr. Otto Widmann, St. Louis, Mo., writes under date of Jan. 7, 1906: "Mr. Frank Schwarz, the taxidermist, informs me that he received two Snowy Owls this fall, a male and female, from Albion, Ill. (not far from Mt. Carmel), Nov. 21, 1905."

On Nov. 17, 1905, I saw a specimen at Highland Park, Ill., and watched it for an hour. (Recorded in 'The Auk' for Jan., 1906.)

The mean temperature for Illinois for November, 1905, was 42.02°; for December, 1905, 31.04°.

A BIBLIOGRAPHY AND NOMENCLATOR OF THE ORNITHOLOGICAL WORKS OF JOHN JAMES AUDUBON.

BY WITMER STONE.

NOTWITHSTANDING their preëminence in American ornithological literature and their historic interest, there has not appeared, so far as I am aware, any comprehensive review of the editions, dates of publication, and new species of the works of John James Audubon. While it is probably generally known that the elephant folio plates bear the scientific names of the birds represented upon them, and that they were published from one to four years prior to the descriptions in the 'Ornithological Biography,' it will be found that the new species are all dated from the latter in the A. O. U. Check-