## **GENERAL NOTES**

Unusual occurrences of Pied-billed Grebes.—On April 19, 1940, I had the opportunity to examine an adult Pied-billed Grebe (Podilymbus podiceps podiceps). The bird had been captured by a motorist the day before on a macadam highway near Franklin, Warren County, Ohio. While traveling along, the motorist's attention was attracted by a movement on the road. He was amazed to find that the cause of the disturbance was an adult Pied-billed Grebe attempting to take off from the roadway. The motorist claims that the bird was able to fly about sixty yards when tossed into the air, but it apparently was unable to continue its flight beyond a short distance. There were no streams within 300 yards of the site where the grebe was found, and there were no power lines above this portion of the highway that the bird might have struck during flight. When I examined the grebe the following day it acted and looked as though it were in good physical condition. It bore no signs that would indicate injury.

Later, during the cold, rainy day of April 19, 1940, I saw another Pied-billed Grebe that had been killed on U. S. Highway Route 42 about halfway between Lebanon and Xenia in Greene County, Ohio. Judging from the condition of the body the grebe had been killed but an hour or so before, during the daytime. This bird, likewise, was some distance from a lake or watercourse. This specimen was an adult male. Its gizzard contained a snail shell, a small amount of an aquatic plant, probably duckweed, and a large quantity of grebe feathers.

About two days later (April 20, 1940) another adult grebe of the same species was taken captive from a small stream near Mt. Carmel in Clermont County, Ohio. The stream was not more than three feet wide and six inches deep. The farm boy who captured it saw the grebe swimming on the surface of the brook and only when he attempted to catch it did the bird make repeated efforts to dive. This grebe was kept a captive for two days before it finally died; the sex and condition of the internal organs were not determined. Residents in the vicinity where the grebe was captured claim that this was the first time they had ever seen this species of bird.

That three Pied-billed Grebes were found under such strange and similar circumstances at rather widely separated areas and within a period of three days seems worthy of record.—Hubert Bezdek, Ohio Division of Conservation, Batavia, Ohio.

Southward Migration of Greater Snow Geese in 1940.—Through correspondence between the authors, the following detailed information concerning a part of the autumn migration of the Greater Snow Goose (Chen hyperborea atlantica) in 1940, has been pieced together.

On their customary feeding-ground on the marshy tidal shore between Cap Tourmente and St. Joachim, Quebec, on the north side of the St. Lawrence estuary, about thirty miles northeast of Quebec City, Greater Snow Geese were first observed in the autumn of 1940 on September 13, when eleven individuals were present. No additional birds of this species were noted there until September 23, when the number present was between 300 and 400. Immediately after the latter date, Greater Snow Geese arrived on this feeding-ground in great numbers.

Mr. Ivers S. Adams reports that at the small islands called Les Battures aux Loups-marins, which are situated in mid-stream of the St. Lawrence estuary, about

eighteen miles northeast of Cap Tourmente, the first Greater Snow Geese seen in the autumn of 1940 were 32 on September 13. On September 15, there were 425 of these birds at that place and, on September 19, 1500.

It is of interest to note, in comparison with the data for 1940, that on September 8, 1939, 5000 Greater Snow Geese had already arrived at Cap Tourmente and vicinity. There were very few young birds in the flock in 1939, but in 1940, young birds were exceptionally numerous. If there is a correlation between the reproductive success of these geese and their time of arrival, southbound, at the St. Lawrence estuary, it may conceivably be due, on the one hand, as in 1939, to the fact that a late-summer blizzard on their Arctic breeding-grounds may simultaneously destroy the insufficiently developed young and stimulate their parents to early departure, and, on the other hand, as in 1940, to the fact that, in a successful year, need for awaiting development of adequate ability for flight in the numerous and generally distributed young may cause some delay of the greater part of the flock.

The total number of Greater Snow Geese at Cap Tourmente and vicinity in the autumn of 1940 was estimated locally to be about 18,000.

The principal flock of Greater Snow Geese left their feeding ground near Cap Tourmente during the night of November 22–23, 1940. Their departure was not due to the arrival of a cold wave, for the minimum temperature at Quebec City, on both the night of departure and the previous night, was 34° F. Rain fell on November 22 until 4.30 p.m. The wind was northeast, with a velocity of about 30 miles an hour, and was therefore nearly fair for birds whose presumed course was about south-southwest.

The manager of the Bombay Hook National Wildlife Refuge, in Delaware, reports that the first authentic record of Greater Snow Geese on that refuge in 1940 was made on November 11, when 210 of these birds in one flock were observed. On the morning of November 12, the number of these geese on the Bombay Hook Refuge had increased to 750. Mounting totals recorded on later dates are as follows:

November	13	 3,000
November	16	 6,000
November	28	 7,000
December	3	 9,000
December	26	 11.000

Many of the Greater Snow Geese, however, migrated to more southern refuges. The manager of the Back Bay National Wildlife Refuge, in Virginia, reports that 3,000 Greater Snow Geese were present there during the period November 24–30, 1940, but does not state the date of their arrival.

The manager of the Pea Island National Wildlife Refuge, at Manteo, North Carolina, reports that five Greater Snow Geese, the first of the season, arrived there on October 23 and that the number of birds of this species present there slowly increased up to November 19, when 185 were noted. On November 26, about 2,000 of these geese had arrived there. A flock of 500 additional birds came in on the following day. The total number of Greater Snow Geese present on this refuge had increased to 3,000 by December 2 and to 5,000 by December 5.

As there is every reason to believe that the flocks reported at Bombay Hook, Back Bay, and Pea Island are separate and distinct, it appears that some 19,000 Greater Snow Geese were present in these three refuges in the latter part of 1940.

A few other Greater Snow Geese were probably to be found at the same time on other areas along the Atlantic coast of the United States. An estimate of the total population of Greater Snow Geese arrived at from these data is somewhat in excess of the estimate of 18,000 formed at Cap Tourmente, Quebec. The difference may be due to differences in methods of forming estimates of large numbers of wild geese, or it may be that not all of the Greater Snow Geese were present in the vicinity of Cap Tourmente at any one time.—Charles Frémont, Harrison F. Lewis, and Frederick C. Lincoln.

Greater Snow and Blue Geese in New Jersey.—During the last few years, members of the Urner Ornithological Club have found Garret Mountain Reservation in Paterson, New Jersey, an advantageous place to observe migrating hawks and crows and lesser birds. Occasionally waterfowl have been seen passing over various spots along the Watchung Mountains and vicinity. On Sunday, April 13, 1941, Messrs. E. B. Lang, R. Burkhart and F. P. Wolfarth were watching for passing hawks which had proved all too scarce that morning. In the distance we caught a glimpse of long wavy lines of approaching waterfowl and in a few moments saw the birds overhead, many of them calling in typical goose fashion. They were Snow Geese, presumably Greater Snow Geese (Chen hyperborea atlantica), and flew at about 800 feet above the rock lookout. The birds were continually changing formations, with no distinct leader, and some of the geese were bunching in dense groups. This was at 9.12 a.m., and the estimated number was 350 birds. No effort was made at that time to determine whether any Blue Geese were among them but the light was good and the white and black contrasts were very showy as the geese moved past the sun.

However, this was not to be the last of the Snow Geese for this day and at 10.04 a.m. a sight met our eyes which we had never before beheld. A great V with about a 30° angle appeared in the distance—one outside line of the V was judged to have at least 100 geese in it. Extending from this line and the other side of the V were lesser lines all forming the same angle toward the inside of the V. Not far behind came another V but somewhat smaller in length. These geese were not sounding off and flew at about 1000 feet above the rock, which lies at about 600 feet above sea-level. This time birds in one line were scrutinized closely and at least three geese with all-dark wings were noticed, which we presumed were Blue Geese (Chen caerulescens); these were of about the same size with identical methods of flight. The estimated number of these two flocks was about 550 birds making an approximate total of 900 geese. In these last two groups all birds remained in this beautiful symmetrical pattern and disappeared to the north-east without change. The day was fair and the temperature at that time about 50° F.; the wind blew from the west at about 15 to 20 m.p.h.; there were scattered cumulus formations with visibility of about three miles. In the past there have been reports of Snow and Blue Geese in this area but in smaller numbers.-Floyd P. Wolfarth, Newark Museum, Newark, New Jersey.

Blue Geese in South Carolina.—It may be of interest to note the following in connection with the records of the Santee Club on the Santee River, South Carolina. In 1926, I saw there four Blue Geese (Chen caerulescens) which remained together for some time.

The Santee Club records show the following: November 14, 1930, Paul Thompson, Jr., 1 Blue Goose; December 11, 1933, George D. Macbeth, 2 Blue Geese;