

No. 76, *Carpodacus mexicanus* subsp.? = *Carpodacus mexicanus rhodocolpus*, the common resident form at Tepic.

No. 77, *Spizella socialis* subsp.? = *Spizella socialis arizonae*, which is not uncommon about Tepic at certain seasons.—E. W. NELSON, *Biological Survey, U. S. Dept. Agriculture, Washington, D. C.*

**Rare Northern Birds near Chicago, Ill.**—Two miles north of Waukegan, Ill., is a low barren tract of sand interspersed with low sand hills and ridges and small sloughs, the northern end of which is sparingly planted with white pines, the greater part of which, I learn, were placed there in the early seventies, by Mr. T. H. Douglass of Waukegan. The ground is thickly covered with juniper and cedar. From November 5 to 13, this year (1906) I have observed and taken the following birds:

*Penthestes hudsonicus hudsonicus*. Three specimens seen, two taken.

*Spinus pinus*. Several large flocks seen, eight taken.

*Acanthis linaria linaria*. Two large flocks seen, twelve taken.

*Pinicola enucleator leucura*. Two seen, two taken. At Lake Forest, Ill., a flock of six have been feeding on the box-elder trees.

*Loxia curvirostra minor*. Two or three small flocks have been seen and a number taken. Three birds which I have, exceed some measurements of *stricklandi*.

*Loxia leucoptera*. A great many small flocks seen and a number of specimens taken. These birds are feeding on the juniper berries.

*Plectrophenax nivalis*. A few small flocks of this bird were seen on the Lake shore; the first visit we have had for several years of this bird.

*Coccothraustes vespertinus*. A small flock of these birds have been seen at Waukegan by Mr. T. H. Douglass.

*Ampelis garrulus*. A small flock seen by Mr. Douglass in his yard.—FRANK M. WOODRUFF, *Chicago Academy of Science, Lincoln Park, Chicago, Ill.*

**Telescope Observations of Migrating Birds.**—At Urbana, Illinois, between 9.45 and 10.45 p. m. on the seventh of last October, the writer watched migrating birds through a four-inch telescope directed toward the moon. The diversity in the direction of the flight on this evening seems worthy of record. Out of a total of fifty-four birds, forty-two were flying in a general southerly direction, about one-half of these passing directly southward, while others were headed southwest or southeast. A few passed nearly eastward or westward. The remaining twelve, or nearly one-fourth of the entire number, were flying in a general northerly direction. In determining the direction it was assumed that the flight in all cases was horizontal. Between 9 and 9.20 on the same evening Professor Joel Stebbins, of the department of astronomy, counted thirteen birds flying southward and five flying northward. The wind was from the southeast, and had a velocity of only five miles an hour, as shown by an anemometer record. The temperature at 9 p. m. was 52° F.

An attempt was made to measure the speed of the birds by the method described by Professor Stebbins and Mr. Fath in 'Science' for July 13, 1906. Two telescopes are placed a measured distance apart on a line running north and south. The lines joining the telescopes with the moon are practically parallel, and the time taken for a bird to pass between these lines gives the rate of flight. On this evening only two birds were seen by both observers. The birds were flying southward. Professor Stebbins's calculations indicated that the rate of one was about sixty-eight miles an hour and that of the other about ninety-three miles an hour.— F. W. CARPENTER, *University of Illinois*.

**A Migration Disaster in Western Ontario.**—The early days of October, 1906, were warm and damp, but on the 6th came a north wind which carried the night temperature down to nearly freezing. Near there it stayed with little variation until the 10th, and on the 10th, the north wind brought snow through the western part of Ontario. At London there was only 2 or 3 inches, which vanished early next day; and the thermometer fell to only 32 degrees on the night of the 10th, and to 28 on the 11th, but ten miles west, there was 5 inches of snow at 5 P. M., Oct 10, and towards Lake Huron, at the southeast corner, between Goderich and Sarnia, the snow attained a depth of nearly a foot and a half, and the temperature dropped considerably lower than at London. On that night, apparently, there must have been a heavy migration of birds across Lake Huron, and the cold and snow combined overcame many of them, so that they fell in the lake and were drowned.

Thanksgiving day fell on the 18th, and Mr. Newton Tripp of Forest, spent the day on the lake shore, near Port Franks, and observed hundreds of birds on the shore dead, cast up by the waves. He wrote me about it next day, calculating 5000 dead birds to the mile, and I took the first train to the scene of the tragedy and drove out to the lake shore that night. On the morning of the 21st, I patrolled the beach south from Grand Bend, and after covering several miles and seeing only a few dead birds, I came at last to the region of death. At first the birds were not very close together, but eventually became so plentiful that in one place I put my foot on four, and saw as many as a dozen in four or five feet.

I began a census at once, which I continued until the lengthening shadows warned me to hurry on to the river so as to cross in daylight, but in the two or three hours spent in the count I recorded the following:

|                                 |                           |
|---------------------------------|---------------------------|
| 1 Black-throated Green Warbler, | 4 Robins,                 |
| 1 Yellow Rail,                  | 5 Fox Sparrows,           |
| 1 Blue-headed Vireo,            | 5 Savanna Sparrows,       |
| 1 Red-eyed Vireo,               | 5 Palm Warblers,          |
| 1 Yellow-bellied Sapsucker,     | 7 Myrtle Warblers,        |
| 2 Black-throated Blue Warblers, | 12 Lincoln Sparrows,      |
| 3 Flickers,                     | 15 Ruby-crowned Kinglets, |