

among a large straggling flock of Horned Larks, what I thought was an albino, and after a tedious pursuit over ploughed fields, I succeeded in securing the bird which proved to be a Snow Bunting (*Plectrophenax nivalis*). This was the only one in the flock and the only one that I have ever seen in Virginia. The day was extremely disagreeable, with drizzling rain and sleet, and very cold.

The following are some birds which I have observed, and which by some authorities are not ascribed to that section of the country, or else are considered as stragglers:

*Chen hyperboreus*. SNOW GOOSE.—One specimen, winter of 1877.

*Nyctea nyctea*. SNOWY OWL.—One specimen, winter of 1877, Buckingham Co.

*Ægialitis wilsonia*. WILSON'S PLOVER.—One shot on a sand bar in James River, Nelson Co.; it was in company with Spotted and Solitary Sandpipers and Killdeer, August, 1887.

*Protonotaria citrea*. PROTHONOTARY WARBLER.—One seen in King William Co., April 29, 1879.

*Dendroica dominica*. YELLOW-THROATED WARBLER.—Numbers seen in May and June in different portions of the State.

*Lanius ludovicianus*. LOGGERHEAD SHRIKE.—Numbers seen; resident; more seen in December than in any other month. — WIRT ROBINSON, 2d Lieut., 4th Artillery, Fort Adams, R. I.

**Costal Variations in Birds.**—Dr. Shufeldt's valuable paper 'On the Affinities of *Aphriza virgata*' contains the following passage. "Then again it is pretty well agreed that when we come to define the line between cervical and dorsal divisions of the column, we look chiefly to the ribs for assistance; yet these are by no means always to be relied upon; as sometimes in the same species, an additional pair may remain free at the further end of the cervical region, or an additional pair (always at the anterior part of the dorsal division) may connect with the sternum by a pair of hæmapophyses."

In 'The Auk' for July, 1888, allusion was made to the fact that it was by no means unusual for the Great Auk to possess an extra (ninth) pair of ribs, these being attached to the second 'sacral' vertebra, and subsequent examination shows this additional pair of ribs to have been present in no less than twenty-three, out of one hundred and forty-four sacra, pretty nearly one out of every six.

It is extremely difficult to say whether or no extra, free ribs were, or were not, occasionally present in the cervical region, from the fact that series of consecutive vertebræ cannot be obtained, but there is little doubt but that this was the case, although no twelfth vertebra bearing a costal facet has yet been noticed.

The question of the attachment of extra ribs to the sternum can be decided by that bone only, and unfortunately sterna of the Great Auk are much scarcer than almost any other bone. Still thirty sterna are available, and of this number twenty-three have seven pairs of costal facets, while

six have eight pairs. Of these six four have the extra pair of costal articulations at the posterior end of the series while only two have the additional pair at the anterior extremity of the sternum. So it would seem that the chances of finding an extra pair of ribs connected with the sternum at the posterior end of the series are twice as great as of finding an extra pair so attached to the anterior portion of the sternum.

A portion of the definition of the super-family *Microphodoidea* was accidentally omitted from my paper in the January Auk. This is, that of the six pairs of ribs all, save the first, articulate with the margin of the sternum proper and not with the costal process. This seems to be a rather important character, as among the highly specialized Passeres the ribs articulate exclusively with the costal process, while in more generalized forms, such as the water birds, the ribs articulate with the costal margin of the sternum.—F. A. LUCAS, *Washington, D. C.*

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## SCIENTIFIC SOCIETIES.

### Linnæan Society of New York.

THE Society has issued no regular publications since August, 1884, when Vol. II of the 'Transactions' was published. Many papers read before the Society have been printed in 'The Auk,' 'Forest and Stream,' and elsewhere. The following is a résumé of the Proceedings for the official year 1888-89.

*April 13, 1888.*—Mr. Frank M. Chapman, Vice-President, in the chair.

Mr. L. S. Foster presented a paper giving a chronological sketch of the life of John James Audubon.

Mr. William Dutcher reported the capture of a Wilson's Plover (*Ægialitis wilsonia*) several years ago on Long Island. He read a letter from Mr. George Lane, an intelligent and observant gunner from the same locality, stating that about two weeks ago he had seen a bunch of these birds bound east.

Mr. Chapman spoke of the immense size of the flocks of Shore-birds seen on the west coast of Florida, particularly one of Knots (*Tringa canutus*), which were very tame.

A number of specimens of Shore-birds were exhibited by Mr. Jonathan Dwight, Jr.

*May, 11, 1888.*—Mr. Newbold T. Lawrence, Treasurer, in the chair.

An invitation was received from the Linnæan Society of London to attend its centenary the present month.

Mr. L. S. Foster read 'Notes upon the migrating birds of the spring of 1888 as observed near Van Cortlandt, N. Y., and at Woodside, Long Island.'



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