

up again. Mr. Swarth takes exception to Mr. Figin's article, mentioned previously in these reviews, both in treatment and substance. He does not agree to the proposal for regarding *hutchinsi* and *occidentalis* as hybrids between two species, *B. canadensis* and *B. minima*, and, basing his study on fuller breeding data, seems to have the best of the argument. With Mr. Swarth we agree that there is a north-west coast form with well-marked color characteristics. Whether *occidentalis* can be applied to it is not perfectly clear. Unfortunately, as Mr. Swarth states, the type specimen on which that name is founded is one of those puzzling non-descript, perhaps abnormal, birds that are not easy to fit into present recognized divisions. This is a good example of the founding of supposed new races on too few specimens, and the danger of setting up freaks or intermediates as types. In spite of all this discussion the relationships of the various forms of the Canada Goose can hardly be said to be settled, nor is it likely that they will be until we can establish the essential characters of the various geographical breeding groups. We will then have definite standards for the comparison of the heterogeneous flocks that are met with in migration. In the meantime, species and subspecies derived from mixed migrants are as likely to be arbitrary groupings of characters as racial divisions.

Plumages of Gulls in Relation to Age as Illustrated by the Herring Gull (*Larus argentatus*) and Other Species. By Jonathan Dwight, 5 plates, pp. 262-268.

If the geese of the genus *Branta* are in confusion still worse is the state of the gulls of the genus *Larus*. This paper traces out the age sequence of the gulls, taking the Herring Gull as an example, and details the successive plumage characters from birth to maturity, with plates of wing and tail details of each stage. Dr. Dwight concludes that it is not until the fourth winter plumage that all traces of juvenility are lost, making a four year plumage cycle. He closes his paper with lists of all American gulls in two, three and four year plumage cycle groups. This is a most valuable paper, and one that prepares for the foundation of a proper understanding of these puzzling birds.

Fifth Annual List of Proposed Changes in the A.O.U. Check-list of North American Birds. By Harry C. Oberholser, pp. 274-285.

Perhaps it is well for Mr. Oberholser's reputation with the general public to state that these are compilations of suggestions by all authors, and that he is not quite the iconoclast that the title might suggest. The list is a staggering threat against our stable (?) scientific nomenclature. There are about a hundred proposed changes and

twenty rejections and eliminations. We cannot expect that finality can ever be reached in any scientific subject, philological or zoological, but our greatest comfort in inspecting this one year's record of changes is that it is only proposed and not an accepted fact.

Under General Notes,—

Dr. J. C. Phillips, pp. 289-291, describes Habits of the Two Black Ducks, and records differences in the winter distribution and habits of the two much debated subspecies of Black Duck, *rubripes* and *tristis*, that go far to substantiate the validity of the distinction we make between them.

Geo. H. Stuart, p. 292, records the breeding of the Greater Yellow-legs in the vicinity of Grand Lake, Newfoundland, June 20, 1919.

W. E. Saunders, pp. 304-306, gives us Additional Notes on the Birds of Red Deer, Alberta. This constitutes an addenda to the writer's Birds of the Red Deer River, Alta. (*Auk*, 1919). It gives observations on 31 species, and adds seven to the list of that section.

Under Recent Literature is noted a paper On the Protection of Birds in the Province of Quebec, by F. Gaguin, *Revue Française d'Ornithologie*, XII, Dec., 1919.

In Notes and News, p. 346, appears the notice of the death of the late J. M. Macoun, whose obituary appeared in a previous number of this journal.

Pp. 348-352 contain an interesting survey of the location and distribution of complete sets of the *Auk*. As this journal is the most important bird publication in the New World but little work in the field can be accomplished without reference to its files. It is therefore somewhat alarming to note that, so far, only about 150 complete sets have been located in public or private libraries. As those in private hands are steadily being absorbed by institutions where they remain, and there is a constant loss through fire and accident, the question is naturally raised as to what the future student, not situated near any of a certain limited number of institutions, will do for this important literature. It is worth noting both for information and as a warning that but eight complete sets exist in Canada. Two are to be found in each of the following cities, Montreal, Ottawa and Toronto, and one each in London and Quebec. It will be noted that there is not a single complete file west of southern Ontario. Unless this is corrected whilst the opportunity for correction exists it will place future ornithologists in western Canada at a great disadvantage.

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