

RECENT LITERATURE.

Pettingill on the American Woodcock.—Among the notable monographs dealing with a single species of bird will stand that on the American Woodcock by Olin Sewall Pettingill, Jr., which has just been published by the Boston Society of Natural History.¹ This work is an excellent example of what may be accomplished by a concentration of effort upon one subject or area in contrast to the superficial skimming over a wide range of both birds and ornithology that seems characteristic of too many present day bird students bent upon the recording of a long daily list!

Our author began his study when a college undergraduate in 1928, presented the results as a thesis for the degree of Doctor of Philosophy in 1933, and now has brought his monograph up to date. He has given the literature of the Woodcock an exhaustive study and embodied the most important items in his work together with much additional information contributed by many correspondents and his own invaluable personal studies of the bird. The results are presented under three headings: The Bird; The Life History; The Struggle for Existence.

Under the first are discussed the early history of the Woodcock, its technical and common names, its description including tables of measurements and weights and extending to plumages, molts, pterylosis and osteology, its food and feeding habits, its flight and voice, and a detailed account of its distribution and abundance by states and provinces.

Under Life History are considered the spring migration, breeding territory and courtship, mating, nesting, activities of the young and fall migration.

As to its struggle for existence Dr. Pettingill, after a study of the reports submitted by the Game Departments of the various states, concludes that "unless certain radical conservation measures are enacted at once it will be only a matter of years before the species will be lost to us."

It is absolutely essential that more protection be given in order that it may regain enough of its former numbers to withstand any disaster that might occur and thus be reduced to a hopeless few.

This brief summary will indicate the thoroughness of Dr. Pettingill's study but lack of space compels us to limit our comments to but a few of the interesting points that he has brought out. With regard to the long debated question as to how the whistle of the flying Woodcock is produced our author quotes most of the published accounts and concludes with his personal observations. When he reached into a covered box in which a wounded Woodcock was confined the bird uttered several alarm notes of the same pitch and quality as the well known whistle which notes must have been vocal. On the other hand a bird kept in an aviary where it could fly for short distances continually produced the whistle when on the wing but after the three attenuated primary feathers, supposed to be concerned with the whistling, were cut off the sound was no longer produced. Dr. Pettingill therefore concludes that the sound may be made both vocally and mechanically, but evidently regards the latter as the usual method.

With regard to the equally moot question as to whether the Woodcock carries its young between its legs Dr. Pettingill dismisses a number of the accounts as misinterpretations but considers that others are reliable. He, however, does not con-

¹ Memoirs of the Boston Society of Natural History. Volume 9, Number 2. The American Woodcock *Philohela minor* (Gmelin). By Olin Sewall Pettingill, Jr. with ten plates. Boston: Printed for the Society. April, 1936. Pp. 167-391, Ppl. 13-21. Price \$3.50 in paper; \$4.75 bound.

sider that the bird intentionally carries its young in flight but rather that a brooding bird, crouching closer on the approach of danger gets one of the young between its thighs and, flushing in the stiff legged position of the "injury-feigning" flight, lifts the young and carries it for a short distance. The "heavy" flight often cited as evidence that the bird was carrying some burden is merely a part of the "injury-feigning" performance. The latter by the way is attributed, as suggested by Dr. Herbert Friedman, to a conflict of fear and love of nest and young, and not the result of instinct or intelligence in an effort to lead an intruder away from the spot.

Dr. Pettingill finds that the male Woodcock has a domain that is divided into a wooded or brushy feeding area where it spends the day, and an open singing field to which it resorts at evening for its courtship performances. The female seeks the male on the singing field but her nesting area is usually at some distance and is rarely visited by the male who takes no part in the nest building or care of the young. Several females have been found together on the singing field which suggests, with reasonable probability, that the Woodcock "is at times at least polygamous." This seeking of the male by the female on his singing field recalls the similar action of gallinaceous birds which are notoriously polygamous and curiously enough the author's observations on the feeding habits of the young which accompany the female and are assisted by her in obtaining food, are also reminiscent of the gallinaceous birds.

Dr. Pettingill spent a few days during two autumns at Cape May Point, N. J., to observe the concentrated migration of the Woodcock but apparently did not witness a typical flight when the birds come in off the ocean in vast numbers having been blown off shore by the north-west winds. He does not adequately describe the enormous numbers of the birds that are killed by gunners on these occasions nor the difficulty of enforcing either bag or season limits when the entire community is in sympathy with the gunners who cannot withstand the temptation for slaughter which has been their privilege for time immemorial. We are confident that more Woodcock are killed at a few such strategic spots than in all the rest of the country combined and unless shooting there is stopped entirely the Woodcock is doomed.

Local gunners and wardens alike will insist that the Woodcock is as plentiful as ever partly because they really think so, not realizing that the congested flights represent not local birds but the entire Woodcock crop of the east; and partly because they dread more restrictions if they admit that the birds are decreasing.

Dr. Pettingill has given us a splendid summary of the Woodcock and its life history and let us hope has also shown the need of immediate action if this unique and interesting bird is to be saved from extermination.

A good bibliography and many interesting photographs of Woodcock and Woodcock haunts together with an excellent color plate by Sutton complete the monograph, which is well printed and free from typographical errors except that the name of Robert Ridgway is consistently misspelled.—W. S.

van Rossem on Birds of the Charleston Mountains, Nevada.¹—As is generally known Mr. van Rossem has made a number of trips to these interesting mountains in southern Nevada, which rise abruptly from a 3,000 ft. desert to an altitude of 12,000 ft., and in the present paper presents a study of the avifauna and its relationships. We have already noticed his publication of four new forms peculiar to the range.

¹ Cooper Ornithological Club Pacific Coast Avifauna Number 24. Birds of the Charleston Mountains, Nevada. By A. J. van Rossem. San Diego Society of Natural History, Berkeley, California. Published by the Club. May 1, 1936. Pp. 1-65.