

sections. This paper is a very important one and much valuable data can be obtained from the figures and grouping, both economic and distributional.—W. S.

**Birds as Factors in the Control of the Fall Webworm.**—Dr. John D. Tothill, whose preliminary papers on the natural control of the fall webworm (*Hyphantria cunea*) have already been noticed in 'The Auk' (25, No. 2, April 1918, p. 252) is doing the best work the reviewer is aware of in bringing to light the actual effect upon insects of the feeding habits of birds.

The present comprehensive report<sup>1</sup> details the results of eight years' study of the fall webworm in New Brunswick, and of shorter periods in Nova Scotia and British Columbia. Careful account was kept each year of the percentage of destruction of the pest by various agencies, and it was found that Red-eyed Vireos destroyed from 11.4 to 89.5 per cent of the broods, averaging more than 68 per cent, far more, of course than any other agency. As a test case 382 caterpillars were placed on a tree and in 9 days the birds had taken all but 6 that had been parasitized. The work of the birds naturally was most effective when the webworm was scarce and in some years it seemed scarcely a worm escaped the Vireos. The insect seemed clearly doomed to local extinction when a flight of adult moths from a distance repopulated the district. In summing up his observations Dr. Tothill refers to the "tremendously important part played by the Vireos in Eastern Canada, and by undetermined birds in British Columbia," and concludes: "They are of least importance when the host insect is very abundant; of greatest importance when the webs are very scarce; and they share with the parasites the task of maintaining a stabilized control when the insect is just moderately abundant. Without the birds, the parasites would not maintain a control . . . and the converse is also true." With their record of destroying 68 per cent of the broods, on the average, the reviewer feels this summary is by no means over-generous to the birds. He wonders also why birds other than Vireos escaped observation as enemies of the webworms. In New Brunswick, Cuckoos, the Baltimore Oriole, and some of the Warblers almost certainly do prey upon these larvae.—W. L. M.

**Birds in Relation to Poison Oak.**—In a book entitled 'Rhus Dermatitis' (June 1923), Prof. James B. McNair has several items dealing with the relations of birds to *Rhus diversiloba*, the western poison oak. First a list of localities where birds which had eaten the fruit were collected is given in the chapter on distribution of the plant, next a table showing the months in which the fruit has been found in the stomachs of California birds, and finally a graph showing the number of species of birds feeding

<sup>1</sup> Bul. 3, n. s. Dominion Dept. of Agriculture, Ottawa, 1922, 107 pp. 99, figs., 6 pls.

on the fruit in each month. All of these items were derived from data furnished by the Biological Survey. It is shown that there is a decrease in toxicity of the fruit to man with ripening, but no assumptions bearing on bird food should be made on that account. The data given of frequency of occurrence of poison oak berries in bird stomachs seem merely to reflect availability.—W. L. M.

### The Ornithological Journals.

**Bird-Lore.** XXVI, No. I. January–February, 1924.

Some Birds of the San Gabriel Wash. By Robert S. Woods. With excellent photographs of southern Californian birds.

A Cedar Waxwing Patient. By Mr. and Mrs. F. D. Hubbard. An interesting X-ray photograph of the living bird showing a fracture of the humerus.

The Christmas bird lists are as numerous and interesting as ever, covering all parts of the United States and Canada as well as Porto Rico and Ceylon.

The Educational Leaflet by T. Gilbert Pearson treats of the Loggerhead Shrike with a colored plate by Allan Brooks.

**The Condor.** XXV, No. 6. November–December, 1923.

The Buff-breasted Flycatcher in the Huachucas. By Frank C. Willard.

Further Observations on the Costa Hummingbird. By Robert S. Woods.

The Cayenne or River Ibis in British Guiana. By Casey A. Wood.

The Phonetics of Bird-sound. By Richard Hunt.—A system based on phonetics. The phonetic elements in bird song are divided into four classes, the vowel sounds, the explosives, the fricatives and the musicals.

A Study of Some Plumages of the Black Tern. By A. J. VanRossem.—The author concludes that two years are necessary to attain the black adult plumage, the first spring plumage being a mottled one somewhat resembling the molting adult in autumn.

The Systematic Status of Some Northwestern Song Sparrows. By Harry S. Swarth.—This is a paper well worthy of special study. The writer rejects two races "*inexpectata*" and "*phaea*" and regards all British Columbian Song Sparrows as belonging to two races *rufina* of the Queen Charlotte Islands, and *morphna* of Vancouver Island and the mainland. That there are variations in the latter which some might regard as subspecies the author admits, but he thinks that they are not subspecies in the sense that the others mentioned are. He makes a plea for laying stress upon the major divisions of a variable group like the Song Sparrows and thinks that observed differences within each of these larger divisions should be regarded in a somewhat different light, and that this principle be carried out in our 'Check-List.'

Mr. Swarth is here advocating exactly the same principle that the reviewer has pled for in the case of genera. "All recognizable subspecies