

serella iliaca mariposae with some tendency toward *brevicauda*. Many other local notes of interest are contained in the paper.

A third contribution¹ deals with the autumn work of the ornithological department of the Academy in Plumas and Yuba Counties in 1922.

Casey Wood's 'The Birds of Fiji.'—Dr. Casey A. Wood who has been travelling widely during the past few years spent some time in Fiji and became quite well acquainted with the avifauna of the islands. In the 'Handbook of Fiji, 1924', we find eight pages devoted to an account² from his pen of the bird life. We learn that there are about 115 species including introductions and migrants, but that this is in spite of the Indian Mongoose and the Mynah, both serious enemies of the native birds and the activities of men in cutting down forests, draining swamps, and burning over cane and brush. It seems to be the same story everywhere and in some of these formerly out of the way spots the native fauna will be gone before we know it.—W. S.

Forbes and Gross on Distribution of Illinois Birds.³—This paper is supplementary to one published previously on 'The Numbers and Local Distribution in Summer of Illinois Land Birds of the Open Country,' and attempts to cover in the same way the birds of winter, spring and fall seen in the open country. It is one of those papers which might be classed as ornithological mathematics dealing largely with figures and percentages. Various trips taken across southern, central and northern Illinois from November to February in the winter of 1906-7 furnish the data for the winter estimates. It seems that 6378 acres were covered in the work and 5193 birds counted or 520 to the square mile as against 644 in the summer. The most abundant winter birds of the open ground were in order of abundance: Crow, Lapland Longspur, Junco, Prairie Horned Lark, English Sparrow and Goldfinch. In the southern section the order was Junco, Meadowlark, Quail, Bluebird, Mourning Dove and Blue Jay; in central Illinois: Crow, Prairie Horned Lark, English Sparrow, Goldfinch, Junco and Tree Sparrow, and in the northern section: Lapland Longspur, Crow, Goldfinch, Tree Sparrow, Prairie Horned Lark and English Sparrow.

The species are then considered with reference to habitat and figures given for fields planted to corn and wheat, stubble, ploughed ground, etc. Then the spring and fall birds are tabulated in somewhat the same way, and there is a table on which all of the species identified during the study are entered with the character of their occurrence in each of the three

¹ Field Work in Plumas and Yuba Counties, California, in 1922. By Joseph Mailliard. *Ibid.*, No. 4, October 15, 1923.

² The Birds of Fiji. By Casey A. Wood, M. D. Reprinted from the Handbook of Fiji, 1924.

³ On the Numbers and Local Distribution of Illinois Birds of the Open Country in Winter, Spring and Fall. By Stephen A. Forbes and Alfred O. Gross. *Bulletin Illinois Natural History Survey*, XIV, Art. X, October, 1923, pp. 397-453.

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 report¹ 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

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