

M. b. pontia (p. 6) Pulo Laut, off Borneo; *Stachyris nigriceps dipora* (p. 7) Nepal; *Cyanoderma erythroptera eripella* (p. 7) N. E. Sumatra; *C. e. apega* (p. 8) Banka Island; *Anuropsis malaccensis drymodrama* (p. 9) Malay Peninsula; *A. m. driophila* (p. 9) Lower Siam; *A. m. docima* (p. 10) Banka Island; *Drymocapthus nigrocapitatus nyctilampis* (p. 10) Banka Island; *Malacocincla abbotti eritora* (p. 11) Billiton Island; *Aethosoma rostrata aethalea* (p. 12) Eastern Sumatra; and *A. r. paganica* (p. 12) Upper Siak River, eastern Sumatra. The new forms are well and adequately described and compared with allied races.—W. S.

Economic Ornithology in Recent Entomological Publications.—

Bird enemies of a few important insect pests have recently been discussed in entomological bulletins which are here briefly noticed.

Pale western cutworm (*Porosagrotis orthogonia*).—This species is a very injurious one having destroyed more than 30,000 acres of grain in Alberta in one year, and in the last five years done damage in southern Canada amounting to several million dollars. It is said to have caused a loss of \$3,000,000 in Montana in a single season. In the circumstances it is a pleasure to learn that birds are the most important natural enemies of the pest. The authors¹ of the article we cite on the subject say that:

“The common wild birds of the prairie are the most beneficial natural check that we have observed. The Western Grasshopper Sparrow, *Ammodramus savannarum bimaculatus* Swainson, particularly, has been watched while digging out the larvae and carrying them away to its young. In many parts of the cutworm-infested regions it has been a common sight toward the last of June to see thousands of small excavations made by the Western Grasshopper Sparrow, Horned Larks *Otocoris alpestris leucolaema* Coues, and possibly other wild birds in their search for the larvae.”

Green june beetle (*Cotinis nitida*).—The adults of this species are destructive to many kinds of fruits, and the larvae to lawns, pastures, and gardens. In a comprehensive bulletin² relating to this pest 19 kinds of native birds are recorded as feeding upon it. The Crow Blackbird seems to be the most effective of all, with the Crow and Robin probably next in rank. Most of the records cited are from the files of the Biological Survey.

Southern corn rootworm (*Diabrotica 12-punctata*).—This species is said to be one of the leading pests of corn in the south and damages a variety of cultivated plants in other regions. Six bird enemies are mentioned in a recent Farmers' Bulletin³ on this insect but a number of others are known. In 'The Auk' for January 1914 (Vol. 31, No. 1, p. 120) the reviewer noted that 24 species of birds were known to feed on the corn rootworm. This number has now increased to 40. The insect under considera-

¹Parker, J. R., Strand, A. L., and Seamons, H. L., Journ. Agr. Research 22, No. 6, Nov. 5, 1921, p. 313.

²Chittenden, F. H. and Fink, D. E., Bul. 891, U. S. Dept. Agr., July, 1922, p. 37.

³Luginbill, Philip, No. 950. U. S. Dept. Agr., May, 1922, p. 7.

tion is a yellow and black, plant-feeding species, usually assumed to be specially protected. Theorists should take the present case to heart, and bear in mind that while about all that is ever adduced relative to special protection is the initial assumption, knowledge about natural enemies constantly increases. The number of known foes seems to be directly proportional to the amount of study of an organism.

Potato-beetle (*Leptinotarsa decemlineata*).—After numerous invasions of Europe which have promptly been stamped out the potato-beetle has recently become rather well established near Bordeaux, France. Every effort is being made to extirpate the species. To call the attention of the French people to the value of natural enemies of the pest, full particulars are given in a recent comprehensive treatise¹ relative to their activities in the United States. A list of 25 species of American birds from records of the Biological Survey forms an important part of this section of the report.—W. L. M.

The Predaceous Enemies of Ants.—Under this title Dr. J. Bequaert of the American Museum of Natural History discusses at length the whole range of predatory foes of ants. No group of insects has been more frequently and emphatically asserted to be specially protected from possible enemies than ants, but Dr. Bequaert concludes, as have other students of animal food habits, that "There is certainly little or no evidence to show that, as the theory is often expressed, ants are unpalatable to most insectivorous animals."

The section (pp. 297-314) of this paper devoted to birds, which particularly interests us here, is notable for presenting original data on the food habits (especially with relation to ants) of Nicaraguan birds collected by W. de W. Miller and on African species obtained by J. P. Chapin. A colored plate by L. A. Fuertes of three kinds of African birds which follow the columns of driver ants, is given the place of honor as frontispiece of the entire volume of the Bulletin.—W. L. M.

Reestablishment and Value of the Buff-backed Heron in Egypt.—As an instance of bringing back to abundance a nearly extirpated bird, and that for an economic reason, the treatment of *Ardea ibis* or Cattle Egret in Egypt is unique. The species has ornamental plumes, which although inferior to those of the true Egrets, were so tempting to plume-hunters, that the birds were reduced from a widespread and abundant resident to a single colony of about 120 pairs. At this juncture, due chiefly to the efforts of Major S. S. Flower, a law was passed granting absolute protection to the "egret." A warden was employed to guard the existing colony, headmen of villages were notified of the value and protected status of the bird, and attempts were made to establish new colonies.

¹Feytaud, J., Rev. Zool. Agr. et appliquée, Numero special, Aug., 1922, 48 pp., birds pp. 15-16.

²Bul. Am. Mus. Nat. Hist., 45, pp. 271-331, Pls. 24-25, Oct., 1922.