

However, this seemingly very moderate attack upon butterflies, surpasses in amount of execution all previous records of the destruction of butterflies by birds in the United States combined. Whether they are too dry and dusty to be worth chasing or whether they are too active on the wing to be easily caught, or whether for some entirely different reason, the fact remains that butterflies are very little in demand with birds in the United States. Four records of birds eating butterflies are all that are afforded by the records of the examination of more than 40,000 stomachs in the Biological Survey, and one of these probably relates to the capture of a very recently emerged specimen, or to one torn from the pupa before emergence, as it was accompanied in the stomach by a pupa of the same species. This was an *Epargyreus tityrus* taken by a crow. The other records are *Eudamus* (sp.?) eaten by a yellow-billed cuckoo, and two pierid butterflies captured by kingbirds. Hence the fact that five of the species studied by Mr. Bryant utilized an unpopular kind of food, and that one of them did this to a considerable extent, gives all the more weight to the observation, as proof of the rule that birds usually take advantage of the abundant food supply created by an insect outbreak. On the whole Mr. Bryant's work is well done and his final conclusions are sound. In referring to Professor F. E. L. Beal's account of the Say phoebe, however, he misinterprets the statements there made. Professor Beal says that moths and caterpillars, not *butterflies*, forms ten percent of this bird's annual food. The case of the ash-throated flycatcher is similar. As the data given above shows, neither species was found by Professor Beal to take *butterflies*. The opinion expressed on page 200 that it "will be shown birds have an important part to play in the destruction of the butterflies", is hardly borne out by the facts presented.—W. L. McATEE.

USEFUL BIRDS OF SOUTH AUSTRALIA—Our Feathered Friends. Protected Native Birds. [By A. G. EDQUIST] (=Journ. Dept. Agr. South Australia, XIV, no. 9, April 1911, pp. 848-855; no. 10, May 1911, pp. 936-938; no. 11, June 1911, pp. 1038-1042; no. 12, July 1911, pp. 1136-1140).

In the July-August number of THE CONDOR (XIII, no. 4, p. 142) the reviewer noticed the first of the articles above cited. Apparently the series is now finished. For a work purporting to set forth the economic value of birds, remarkably little is said about the food. On the average less than two printed lines are devoted to a characterization of the food of each species, and for nine out of a total of nineteen species this statement amounts to no more than an assertion that the bird is insectivorous. Of

course the reviewer understands that no specialized work in economic ornithology has been undertaken in Australia, but those whom the author is seeking to impress with the value of certain South Australian birds, have a right to demand more explicit information regarding food habits. Especially justifiable is this demand, since the pages of the *Emu*, and other publications on Australian birds, contain numerous specific references to the food of birds, many of which relate to one or another of the nineteen species treated by our author. It is not unreasonable to expect that these references should be collected by Australians interested in bird protection; but nevertheless, we have several publications on the "useful birds" or the "insectivorous birds" of certain States, which contain very sparing references to bird food.

A few instances from the papers now being discussed will illustrate this unfortunate tendency. The author says of the spotted bowerbird (*Chlamydodera maculata*): "Food; chiefly seeds and berries of native plants" (no. 11, p. 1038). Mr. F. B. Campbell Ford notes that in Queensland this species feeds largely on white-cedar berries (*Emu* II, pt. 2, Oct. 1, 1902, p. 101), and Mr. A. J. North says: "It is very destructive in gardens, eating nearly every kind of cultivated fruit and berries, being especially fond of chilies, and the seeds of the introduced pepper plant (*Schinus molle*). In the stomachs of the specimens I have examined, I also found portions of unripe tomatoes, grape skins and seeds, and whole raisins" (Special Catalog I, Australian Museum, vol. I, part 2, 1902, p. 44). On another page (46) it is noted that the bird is fond of figs and grapes. Mr. Robert Hall adds that it is asserted by some observers that this bird is the greatest pest the orchardist has to contend against. . . . In Queensland they favor small fruits of a bright color, such as guavas, to the detriment of the grower" (The Useful Birds of Southern Australia, 1907, p. 252).

Our author's statement therefore is shown to be not only excessively brief and generalized but also inaccurate.

Regarding the grey shrike-thrush (*Collyricichla harmonica*) the author ungrammatically remarks "Its food is chiefly insectivorous, and often consists of caterpillars" (no. 10, p. 936). North says (l. c., p. 93) that it feeds on insects and their larvae, worms, snails, centipedes and small lizards. H. S. Dove specifies hairy caterpillars as part of its diet (*Emu* X, pt. 2, Oct. 1910, pp. 136-137), and Mr. D. Le Souef, the genial ornithologist whom many of us have had the pleasure of meeting in the United States, states that they take the eggs of other birds and that one was seen to pick up a chestnut-bellied quail killed by a hunter (*Emu*

III, pt. 3, Jan. 1904, pp. 185-186). Mr. J. B. Cleland reports the following finds from stomach examinations: Chrysomelid beetles, caterpillars of large hawk moth (*Cequesia triangularis*), banksia moth (*Danima banksiae*), looper caterpillars, beetles (*Elator* sp., *Alicula* sp.), grubs, insect eggs, and bits of grasshoppers (*Emu* IX, pt. 4, April, 1910, p. 222). Hall adds to this list, spiders, snails and lizards (1. c., p. 106).

Our author gives a somewhat longer account of the food of *Graucalus melanops*, but still falls short of an easy possibility. He says "the graucalus lives chiefly upon large insects such as mantids, phasmids and grubs. It is said to be fond of certain native berries and certain species of ants" (no. 10, p. 937). North says: "Stomachs that I have examined contained principally caterpillars, also the smaller species of Phasmidæ and other soft-bodied insects, grasshoppers and a few small seeds and berries. It is very destructive in orchards and vineyards, feeding upon all the softer kinds of fruit, such as mulberries, peaches, apricots, cherries, plums, and bananas. From its fondness for the former fruit it is known in the Upper Clarence District, as the 'Mulberry bird.' About the vineyards at Albury it is one of the first birds to attack the grapes" (1. c., p. 104). Batey also notes that it devours grapes (*Emu* VII, pt. 1, July, 1907, p. 5), another observer notes that it feeds on native figs (*Emu* V, pt. 2, Oct., 1905, p. 86), and Johncock thinks that it distributes mistletoe seeds (*Emu* V, pt. 4, April, 1906, p. 224). C. F. Cole reports it feeding on olives, caterpillars, spiders, beetles, and pickings from a cow skeleton, as well as on larvæ of case moths (*Psychidae*) and of the painted apple moth (*Teia anartoides*) (*Emu* VIII, pt. 3, Jan., 1909, pp. 154-155). Hall found two Coccinellid beetles and more than 100 ants in a single stomach of the "blue jay" (1. c., p. 92.).

These are not all of the notes that could be given on these species, since the reviewer of course has seen by no means all of the economic references in publications on Australian ornithology. Our author's accounts of other species also lack details which a little searching of the *Emu* and other standard publications would have supplied. This is especially noticeable in the case of the yellow-rumped tit (*Acanthiza chrysorrhoa*), the cuckoo (*Cuculus inornatus*), the magpie lark (*Grallina picata*), the white-fronted heron (*Notophoxyx novae-hollandiae*), and the wood swallow (*Artamus tenebrosus*). To be convincing, publications on the value of birds must present detailed proofs and it is regrettable that the comparatively small number available for Australian birds are not collected by the ornithologists most interested in securing their protection.—W. L. MCATEE.

CONSTITUTION OF THE COOPER ORNITHOLOGICAL CLUB

ARTICLE I.

Name and Objects

Sec. 1. This society shall be known as the COOPER ORNITHOLOGICAL CLUB.

Sec. 2. The objects of this Club shall be the study and advancement of Ornithology, with special reference to western North America.

ARTICLE II.

Divisions and Chapters

Sec. 1. This Club shall consist of two coordinate bodies known as the Northern and Southern Division respectively. The Northern Division shall hold its meetings at such places as it may determine upon in the cities about San Francisco Bay, and the Southern Division shall hold its meetings at such places as it may determine upon in the cities of Los Angeles County.

Sec. 2. Local chapters outside the territory described as the home of the two Divisions may be instituted on application made by five or more members so located by residence as to render such chapter meetings a convenience. Such application shall be transmitted in writing to either Division, and the same shall be acted upon by both Divisions in the same manner as upon applications for membership as hereinafter provided for. The powers and privileges of such chapters shall be as subsequently defined.

ARTICLE III.

Members

Sec. 1. There shall be three classes of members of this Club, active, life, and honorary.

Sec. 2. Any person interested in the study of birds and of not less than sixteen years of age shall be eligible to active membership.

Sec. 3. Any active member may become a life member by paying into the treasury of the Club the sum of fifty dollars and notifying the secretary of his Division that he desires to be enrolled as a life member.

Sec. 4. All applications for active or life membership shall be in writing, signed by the applicant and by the member proposing him, and shall state the name and permanent post-office address of the applicant. Such applications shall be forwarded to the Secretary of either Division, and he shall immediately upon receipt of same forward a copy to the Secretary of the other Division. Such applications shall be read at the first subsequent meeting of both