

by the first item in the volume, "AA," under which genus several recent species are recorded. A. B. R.

*Goldfish Culture for Amateurs: How to Breed and Rear Goldfish in Aquaria and Ponds.* By A. E. Hodge and Arthur Derham. Pp. xi + 103 + 11 plates. (London: H. F. and G. Witherby, 1926.) 5s. net.

THIS small book describes a dozen or so of the varieties of goldfish and gives very clear and complete instructions for breeding and rearing them in aquaria. It deserves to be widely read, partly because the goldfish has in the past probably suffered more than any other domesticated creature from neglect, ignorance, and mistaken kindness, and partly because the authors show, in convincing fashion, that their cultivation is of great fascination. Moreover, considerable scientific interest attaches to an animal able to produce such remarkable mutations. This book may well inspire research into the origin and genetic relations of these varieties, with the possibility of results of unexpected value.

*Birds in England: an Account of the State of our Bird-Life and a Criticism of Bird Protection.* By E. M. Nicholson. Pp. xi + 324 + 8 plates. (London: Chapman and Hall, Ltd., 1926.) 12s. 6d. net.

UNDER the somewhat vague title of "Birds in England," Mr. E. M. Nicholson has given us a useful and stimulating book: its scope is better indicated by the sub-title, "An Account of the State of our Bird-Life and a Criticism of Bird Protection." The opening chapters discuss losses and gains in our avifauna and the operative causes. The middle portion of the book centres round an account of the lives and work of famous ornithologists. The final chapters deal with the practical problems of protection—sanctuaries, legislation, and the evils of collecting. The last part of the book, especially, is frankly polemic. The author holds decided personal views on questions of protection, and he presents these with force and skill. Not all his conclusions will be generally accepted, but his arguments always deserve serious consideration and often carry conviction.

Mr. Nicholson takes a rather unusual line, for example, on the subject of bird-sanctuaries, but the truth of many of his contentions must be admitted. He draws a useful distinction between sanctuaries in towns and those in solitary places. The object of the former is to attract birds where none lived before. The country sanctuary, on the other hand, is a retort to persecution, and the author regards it as in many ways an unfortunate one, tending to shelve the question of protection on a national scale. He points out how little can be done by scattered sanctuaries for the preservation of rare species other than those which breed in colonies, and he sees the true remedy in the effective prohibition of collecting. Nor does he omit to notice the unfortunate results which sometimes follow from indiscriminate protection.

From a purely scientific point of view, the earlier chapters, dealing with the "Balance of Birds," are the most valuable. These constitute a careful survey of the subject, from which much that is of interest emerges. In dealing with total gains and losses, Mr. Nicholson counts that fifteen breeding species have been lost, as

such or altogether, since Tudor times, while seventeen have been gained: the figures include three which have been lost and regained and thus appear on both sides of the account. Of the gains, four are due to artificial introduction and the rest to natural colonisation, all within a century, by former purely visitant species, including seven ducks. The account of the decrease and increase of other birds, which have not been either totally lost or gained as breeding species, is perhaps even more interesting, and the thoughtful discussion of the probable parts played by different factors gives evidence of the author's thorough knowledge of the subject.

*A Naturalist's Pilgrimage.* By Richard Kearton. Pp. xiii + 246 + 8 plates. (London, New York, Toronto and Melbourne: Cassell and Co., Ltd., 1926.) 7s. 6d. net.

MR. KEARTON, by his photographs and lectures, has done much to popularise the simpler type of natural history, and he is justly proud of the achievement. This chatty autobiography traces his progress from the fell farm to the study and lecture hall, and with naïveté recounts the experiences, some instructive, many trivial, which he encountered by the way. The naturalist will be interested in the elaborate means sometimes adopted for the delusion of birds, and in the trying adventures of the pioneer days of bird photography; and if the impression is created that the author insists too much on his own cheerfulness and *bonhomie*, it is simply because he realises that here lies one of the secrets of his success.

### Insect Studies.

*The Fauna of British India, including Ceylon and Burma.* Edited by Sir Arthur E. Shipley, assisted by Dr. Hugh Scott. (Published under the Authority of the Secretary of State for India in Council.) *Coleoptera: Chrysomelidæ (Chrysomelinæ and Halticinae).* By S. Maulik. Pp. xiv + 442. (London: Taylor and Francis; Calcutta: Thacker, Spink and Co., Bombay: Thacker and Co., Ltd., 1926.) 25s.

THE family Chrysomelidæ, which comprises the leaf-beetles, is one of the largest in the animal kingdom. It includes to-day probably not far short of 20,000 described species which are grouped into sixteen subfamilies. The first eleven of the latter were dealt with in the "Fauna of British India" series in the volume by the late Mr. Martin Jacoby, published in 1908. In 1919 Mr. Maulik wrote the volume on the Hispinæ and Cassidinæ, while the Chrysomelinæ and Halticinae form the subject of the present contribution. This leaves the Galerucinae for future treatment, and, it may be added, they are exceedingly numerous in species. Of the subfamily Chrysomelinæ, only 63 species are recorded and are comprised in 18 genera. This paucity is remarkable, considering the richness of the faunal area surveyed, and it is evident that there are still far too few resident entomologists to do the necessary intensive collecting over so wide a region.

In the introduction to the Chrysomelinæ an account is given of the external morphology of the larva and imago, notes on the life-histories, and a list of injurious species found in various parts of the world. In the subfamily Halticinae 287 species, in 70 genera, are recorded,