

Sept. 1963 (1964)

QRB 38(2): 269

149a

buccal capsule, pharynx (called esophagus), and pharyngeal bulb. The systematic part begins with a list of hosts, followed by a key to the genera of the Thelastomatidae. Illustrated descriptions are given of the various species found in European hosts. Scavenger types of hosts are not subject to oxyuroid infection. Both larval and adult stages of hemimetabolous insects are subject to infection by a given oxyuroid, whereas either stage (but not both) in holometabolous insects may act as host. The article represents a great deal of meticulous work and should be helpful to nematologists.

L. H. HYMAN

THE ANTS OF COLORADO with Reference to Their Ecology, Taxonomy, and Geographic Distribution.

By Robert E. Gregg. University of Colorado Press, Boulder. \$14.00. xvi + 792 pp. + 24 pl.; text ill. 1963.

One of the features of the American literature on ants is the plethora of "annotated lists" of ants for most of the states from coast to coast. In recent years, with the increase in government aid, state lists have tended to expand to book size. In sheer weight of pages, at least, *The Ants of Colorado* marks the extreme of this trend. A more accurate title would have been *Colorado and the Distribution of her Ants*, because one reads to p. 120 before Gregg turns from the geography and ecology of Colorado to the ants themselves. It is his thesis that the Colorado ants show a good "indicator" fit to "biotic zones," and, in particular, to the life zones of Merriam. A careful perusal of the distributional data does not give one much confidence in the reality of the fit, or, for that matter, of the zones themselves.

This book is padded to an almost incredible degree: by rambling, repetitious exposition of trivial points, by species-distribution maps and redundant altitudinal-distribution charts that waste a blank quarter of a page for each species (and sometimes a whole page, as when they indicate a single collection for the state!), and by the frequent repetition in full of numerous collection stations under many species headings. Descriptive material is largely limited to the keys, which are mostly adapted from Creighton. In view of Gregg's considerable skill as an illustrator, the single most disappointing thing about the book for me is that it contains not a single drawing of an ant!

The author professes to adhere to subspecies taxonomy, yet in applying its principles he sometimes has "races" overlapping broadly or occurring at the same stations, apparently without intergrading. In some instances, he even returns to pre-Creighton

taxonomic forms, as in his vague and peevish rejection of most of Wilson's *Lasius* revision, a work that contrasts strongly with Gregg's in its full and explicit, and, above all, in its quantitative treatment of the data for each species.

There is enough real and interesting information scattered through Gregg's big book to indicate that Colorado is a wonderful state with a wonderful ant fauna. But — as in the case of Cook's *The Ants of California* — one wonders who will need the book badly enough to pay the stiff price asked.

W. L. BROWN, JR.

BRITISH PROSOBRANCH MOLLUSCS. *Their Functional Anatomy and Ecology.*

By Vera Fretter and Alastair Graham. The Ray Society, London. £8 8s. xvi + 755 pp.; ill. 1962.

Malacologists the world over will rejoice at this magnificent volume by two outstanding students of gastropods. It opens with a general account of the characteristics of mollusks, followed by a chapter on the anatomy of *Littorina* selected to illustrate prosobranch organization. Successive chapters deal exhaustively with the functional anatomy of the shell, mantle cavity, skin, muscular system, alimentary system (three chapters), vascular system, excretory system, nervous system and sense organs, reproductive system (two chapters), spawn, development, and larval forms. A chapter on feeding follows the account of the digestive system.

A section on ecology comprises three chapters on the life of limpets and other prosobranchs on rocky shores, a chapter on prosobranchs of other marine habitats, and one on the adaptations of prosobranch invaders of brackish, fresh-water, and terrestrial habitats. The parasites of prosobranchs, mostly trematode larvae, are meticulously listed under each host name. One notes the unfortunate retention of the erroneous and abandoned term "parthenitae."

As primary divisions of the group, the authors prefer the older classification into Diotocardia and Monotocardia, since they believe that these names reflect more important features than do divisions based on the form of the radula, as in Pelseneer's classification. Undoubtedly, the evolutionary trend has been from the diotocardian condition with paired auricles, gills, and nephridia to the monotocardian condition with suppression of the right members of these pairs. A detailed classification is provided in an appendix but is limited to the forms dealt with in the book — that is, to the British prosobranchs. A second appendix gives the type of habitat and distribution of the British species.

W.L. Brown, Jr.
COLLECTION