In their early development they resemble echinoderms and chordates, but in other ways they show many dissimilarities.

Finally, there are excellent author, taxonomic and subject indexes. John S. Colman

INSECTS FOR NATURE-LOVERS



An attractive ant-lion fly, Callistoleon erythrocephalus (Myrmelionidae, Neuroptera) found in Australia. The shape and structure of the wings—well formed, venous, transparent, and each of about the same size—are diagnostic characters of these insects. While the life of the larvae is closely associated with ants, hence the name ant-lion, the group has no evolutionary connexions with the ant family. From Harry Frauca's Book of Insects (Jacaranda Press: Brisbane, 1968, S4.5C).

HELMINTHS IN MARINE MAMMALS

Helminthofauna of Marine Mammals

(Ecology and Phylogeny.) By S. L. Delyamure. Edited by K. I. Skrjabin. Translated from the Russian. Pp. ix + 522. (Israel Program for Scientific Translations: Jerusalem. Distributed by H. A. Humphrey: London, January 1969.) 160s.

THIS is a translation of a Russian monograph originally published in 1955, and one of a series on the helminthology of the Soviet Union. The author's objective, however, extends beyond this field and analyses all available data on helminths of marine mammals, excluding the Sirenia, published before 1952. After the aims of the book have been outlined and research on helminths of marine mammals inhabiting Soviet waters has been reviewed, the text is divided into two parts. The first, occupying about two-thirds of the volume, is devoted to the taxonomy of the helminths, and keys for the differentiation of families and genera are provided. Of 168 species mentioned, original observations are made on 48, including 4 new cestodes, while the remainder are dealt with in a compilatory manner, each species having its host, habitat, geographical distribution and bibliography indicated, and many with figures. A number of typographical errors of scientific names in the Russian version are repeated, including the constant use of "*Tetrabothrium*" for *Tetrabothrius* and "*macrocephalus*" for *macrophallus*.

The second part of the book, entitled "Helminthofauna and Zoogeography", begins with a comparison of the helminths and their geographical distribution for each host family. This is followed by stimulating discussions in which the author endeavours to elucidate some problems of helminth dispersal by the application of Dogel's concepts on the distribution of parasitic worms and a modification of the "Ekman-Pusanov scheme" of zoogeographical regions, with the result that the helminths of marine mammals are disposed in regional groups. An analysis of the composition of each of these groups induces the author, despite the paucity of helminthological examination of hosts, particularly in the southern hemisphere, to suggest "General rules governing the distribution of helminths of pinnipeds and cotaceans". These rules are, however, mainly derived from the fact that helminth distribution is ultimately limited by the availability of suitable environments for the intermediate hosts. Further interesting discussions include the ecological and phylogenetic relationships of the helminths. In his deliberations the author embraces doubtful records and obviously accidental occurrences of helminths in marine mammals, thus introducing a lot of unnecessary discussion and some surprising conclusions, such as the nematodes Contracaecum rectangulum and C. radiatum being "common to pinnipeds and marine birds", as well as the implication that a species of Fasciola is specific to whales. Moreover, by using helminths as indicators of the relationships of mammalian groups, the author considers that the occurrence of pseudaliid nematodes in delphinid cetaceans and mustelid carnivores may be "viewed as proof of the phylogenetic relationship between" these mammals.

There is an account of the pathogenicity of the helminths and their possible effects on the economics of the hosts. In view of the widespread use of cetaceans for research and public exhibition, this chapter should interest many, other than helminthologists. Finally, there is a host-parasite list, indices to helminth genera and species, and a list of about 400 references, including many originally printed in the cyrillic alphabet.

The original book was clearly intended only for Russian students, but non-Russian helminthologists will welcome the present translation as a valuable work of reference and, even if not agreeing with some of Delyamure's opinions, will be given much to think about.

S. PRUDHOE

CREEPY CRAWLIES

Spiders, Scorpions, Centipedes and Mites

By J. L. Cloudsley-Thompson. (The Commonwealth and International Library of Science, Technology, Engineering and Liberal Studies: Biology Division.) Pp. xv + 278 + 17plates. (Pergamon: Oxford, London and New York, February 1969.) 25s; \$4.50.

WHEN this book appeared in 1958 the reviewer in *Nature* pointed out that it differed from the majority of books about animals because, in the first place, it dealt with classes that are soldom described as attractive and, in the second, it was written by a professor of repute who had no intention of decorating his science for popular consumption. The question was asked: Was not the author too optimistic, the publisher too confident? The question has been answered by the demand for a second edition.

It follows closely the lines of its predecessor. Each of the classes or orders with which it deals is given a separate chapter, and the design of each chapter is the same, with