

# BOOK REVIEWS

## Preying Insects

**Parasitic Insects.** R. R. Askew, D.Phil., F.R.E.S. (Pp. 316; £3.50.) Heinemann. 1971.

The author wrote this book because, as he says in his preface, there is no other devoted exclusively to parasitic insects, which prey upon animals of other phyla and upon other insects. It is intended primarily for undergraduate and postgraduate students specializing in entomology, parasitology, and related subjects. It is concerned chiefly with ecology, but there is some anatomy, much physiology, and description of insect habits. The writing is clear, and most of the many line drawings are exquisite.

Naturally, the author describes insects of medical and veterinary importance. Most of these are parasites in their adult stage, usually on birds or mammals, which they do not kill. Some of them are vectors of pathogenic organisms, though this is not an essential function. Other insects are parasitic in their immature stages, usually on other insects, which are almost invariably killed in the process. The author describes the whole subject in a broad way, discussing the various orders briefly but tellingly in a setting which far exceeds the narrow reference to man.

He reminds us, indirectly, that biology, like any other subject, is extremely complicated, and that simple answers to biological problems are very rare indeed. For this reason I think that medical and veterinary librarians should consider buying this book.

There are some errors: *Hymenolepis nana* is said to be transmitted by fleas, but it has no vector; epidemic typhus is equated with Brill's disease, which is only one, non-epidemic, form; *Triatoma* species are said to transmit encephalomyelitis, *Stomoxys* to transmit poliomyelitis, and *Culicoides* to transmit *Onchocerca*; monkeys are said not to be affected by yellow fever, whereas they die from it in large numbers in Central America; yellow fever is said not to be present from West Africa eastwards to South America, whereas there have been at least two enormous epidemics in the Sudan and Ethiopia in recent years, and it is enzootic in the monkeys of tropical Africa. Spellings are not always accurate: *Xenopsylla cheopsis* for *cheopis*, *Phlebotomus parfiliewi* for *perfiliewi*, *Eretmopodites* for *Eretmapodites*.

Insects have no consciences. "The queens of *Bothriomyrmex decapitans* . . . allow themselves to be carried into the nests of

*Tapinoma nigerrimum* by workers of that species. Once inside the *Tapinoma* nest, the queen *Bothriomyrmex* takes refuge on the back of the queen *Tapinoma* and starts to chew at the neck of its host, eventually decapitating it." The ant *Formica sanguinea* makes slaves of another ant, *F. fusca*, using press-gang methods—and yet it need not do so.

But foraging insects are sometimes cunningly deceived. The ant-lion larva is a predator, and a chalcid (*Lasiochalcidia igliensis*) provokes it into emerging from its burrow and seizing its (the chalcid's) legs, whereupon the chalcid retaliates by inserting its ovipositor into the membrane between the head and the thorax of its assailant, and depositing its egg there. Instances are multiplied. No wonder that T. H. Huxley was revolted at the (unconscious) cruelty of the cosmic process, and contended that the ethical progress of society depends in combating this process.

But to read this interesting book has a fascination, and to study such habits must be a delight. To achieve a philosophy is more difficult.

CHARLES WILCOCKS

## Medical Manpower in the U.S.A.

**Financing Medical Education.** An Analysis of Alternative Policies and Mechanisms. Rashi Fein and Gerald I. Weber. (Pp. 279; \$6.95.) McGraw-Hill. 1971.

Since the United States has no health service it is less surprising that American hospitals depend on graduates from Taiwan and South Korea than that the casualty departments for which our Health Department is responsible operate only by courtesy of the universities of Madras and Dacca. And if the American shortfall of doctors is more daunting than ours, the vigour of the efforts made to meet it is much more impressive: between 1951 and 1967 the number of full-time members of medical faculties increased from 3,600 to no less than 22,200.

This book presents the economic problems concerned in training the increased number of doctors required to meet America's needs and outlines various ways in which these problems could be met. Some of the difficulties are much the same on both sides of

the Atlantic, others are more specific to the American situation. Even in Britain medical schools have too few students from low-income families, but in the United States medical students' fees alone average more than 1,000 dollars a year in State and nearly 2,000 in private medical schools. There is no general student grant system, and despite the possibly astronomical earnings of the big-city specialist, uncertainty about early income deters many who might otherwise enter medicine. In this context things are easier in Britain, though some features of the American situation can be recognized here in recruitment for entrepreneurial professions like the Bar and architecture.

The authors emphasize the need for medicine to cast a wider net to obtain enough recruits of adequate quality, quite apart from the cardinal American principle of equality in educational opportunity. All medical schools should receive increased financial support from the State in which they are situated, geared to the State's physician

requirements. Increased Federal aid is also required especially in the poorer States where the need is greatest, and for a nation-wide scheme of postgraduate training. Medical education grants are needed for students from the lower income groups and particularly to encourage the black and underprivileged. For any who wish to make use of it, a long-term loan system should be organized on the basis of an "educational opportunity bank." Finally, the salaries of junior doctors should be substantially raised by charging the hospitals a realistic rate for their services.

These recommendations and the data on which they are based are presented with a wealth of factual and statistical detail. The problems of medical man-power in the United States are formidable, but they are the subject of intense public concern, expert study, and massive investment. By comparison our own efforts in this field seem somewhat half-hearted.

HENRY MILLER

## Experts Talking to Non-experts

**The Scientific Basis of Medicine Annual Reviews 1971.** Ed. Ian Gilliland, M.D., F.R.C.P., and Jill Francis. (Pp. 397; £3.50.) The Athlone Press. 1971.

Invite an articulate expert in a developing or otherwise fashionable field to give a highly

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