AMERICAN ENTOMOLOGISTS, by Arnold Mallis. 1971. Rutgers University Press, 30 College Ave., New Brunswick, N.J. 08903. 549 p. & 211 illustrations. $15.00.

My first contact with Arnold Mallis was through a bread-and-butter inquiry, the formulation of a certain insecticide produced by the Gulf Oil Corporation, under his direction, I presume. And of course Arnold's name is linked solidly with Pest Control. But it was not long before I learned he was writing a book about entomologists.

And here it is, a handsome and highly readable volume. The jacket says there are sketches on 203 persons and the trouble is I want to read them all. I find many old friends whom I knew or whom I have read about and many more whom I've known only by name. Only deceased entomologists are included.

There is an interesting organization of chapters: pioneer entomologists, early state entomologists, early federal entomologists, early entomologists of Canada, notable teachers, then eight groups arranged by their chosen fields of taxonomy, and a concluding chapter—Notable entomologists of divers interests.

This is as good a way as any and it points to the author's emphasis on taxonomists, but it creates a little problem. To me J. G. Needham was a great teacher rather than a Neuropterist. His course in Insect Ecology, which I was privileged to take, attracted students from all over Cornell University.

The arrangement of subjects in a chapter is not uniform—sometimes it appears chronological and sometimes alphabetical.

I find accounts of three women, good selections: Anna B. Comstock, Grace Sandhouse, and Edith M. Patch.

Arnold says in his preface that he wishes to include more than accomplishments, to dwell on the men themselves and "flesh" them out a bit". I feel that L. O. Howard in his "History of Applied Entomology" was adept at this too. But Arnold has added much new material.

There is one thing I wish publishers would adopt—chapter titles, as well as numbers, in the list of references. It would save the user a lot of hunting. For example I turn to George D. Hulst, notable lepidopterist, page 303 and see a reference to Weeks (1900). To locate this I must page back to the beginning of the chapter, or to the front of the book to learn that I am in Chapter 10. Then I can find the appropriate page in the back.

It is a splendid book, a credit to the author, to all the proof readers, and to the publishers.

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ICHNEUMON FLIES OF AMERICA NORTH OF MEXICO: 6. SUBFAMILY MESOCHORINAE, by Clement E. Dasch. 1971. Memoirs of the American Entomological Institute, no. 16. 376 p., 131 distribution maps, 462 figs. $15.00 postpaid.

This is a straight taxonomic monograph, based on the specimens in 26 collections. It raises the number of known species from 25 to 127. Since these are small insects that, in spite of their abundance, are usually ignored, one could expect another 70–125 species to be eventually discovered. The author has done his best to make precise identifications possible and has largely succeeded, but the user must, as always, bring some training and perseverance of his own to the task of identifying his specimens. It is not an easy group. The late R. A. Cushman used to remark "Whenever I try to identify a mesochorine, I get an inferiority complex." With Prof. Dasch's monograph identifications will now be less baffling.

The Mesochorinae are reputed to comprise only secondary parasites. They are frequently reared from cocoons of Braconidae, Larvaevoridae, and smaller Ichneumonidae. Sometimes they severely limit the effectiveness of such primary parasites as Microgasterinae and *Meteorus*. The adult females of Mesochorinae insert the ovipositor into a host larva and probe to find and oviposit into a primary parasite larva within. Adult emergence is from the cocoon or puparium of the primary parasite. Prof. Dasch has listed the host records as he has found them on pin labels, without detailed comments or attempts to verify them. About half the host records give the mesochorine parasite as primary rather than secondary. It is possible that some of the Mesochorinae actually are primary parasites, but this must be proved by detailed observations that have not yet been made.

This revision of the Mesochorinae is the sixth in a series of larger monographs on the Nearctic Ichneumonidae, two of them by Dasch, three by Townes and Townes, and one by Townes and Gupta. One should also mention the work by Heinrich on the subfamily Ichneumoninae, but Heinrich's publication has a different scope and scale and is not part of this series. To complete taxonomic monographs of all of the Nearctic Ichneumonidae would require about 40 volumes, as this family is about 80% as large as the entire order Lepidoptera. It can be stated flatly that taxonomic capabilities in North America are not equal to the job. There is neither enough manpower with the required capacity nor enough money to keep at work what manpower there is. The six volumes completed so far were made possible by a grant from the Dow Chemical Co., additional financial assistance from the National Institutes of Health and the National Science Foundation, and by the personal sacrifices of the authors. Financial support for the series has been zero since 1964, and available manpower rests close to zero. Further volumes are not in sight.

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ECOLOGICAL STUDIES 1: ANALYSIS OF TEMPERATE FOREST ECOSYSTEMS, edited by David E. Reichle. 1970. Springer-Verlag New York Inc. 304 p., 91 fig., 2 maps. $14.50.

If the reader considers himself an insect ecologist, an economic entomologist, or a general entomologist, and if terms such as ecosystem, energy budget, primary production, etc., are not completely clear to him, this book is very definitely recommended reading. The volume does a good job of discussing Temperate forest ecosystems, attempting to explain how they function, and explaining how certain biotic and physical factors influence them.

Twenty-four authors, meeting at a Temperate forest productivity workshop hosted at the Oak Ridge National Laboratory, under the sponsorship of the International Biological Program, presented the 18 papers which make up the 18 chapters of the book. These chapters are conveniently grouped into six units—Analysis of an Ecosystem, Primary Producers, Consumer Organisms, Decomposer Populations, Nutrient Cycling, and Hydrologic Cycles. Two of these units should be of special interest to the entomologist, since they deal with insects, either primarily or at least to some degree. Under Consumer Organisms, the reader finds a chapter on Insect Influences on the Forest Canopy. This chapter is very well written and is quite informative. Discouraging to the insect ecologist is the statement "Reliable measurements of insect populations and effect upon growth are almost impossible to obtain." Determined effort, to make possible reliable measurements, should be expended by insect ecologists. This reviewer feels that the term "entomosociology" should not be used in the literature when it apparently means "insect ecology." Estimation of the Effects of Phytophagous Insects on Forest Production is the title of another chapter in this unit. Here the atuhor compares the various kinds of insect destruction (foliage consump-