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**The Mayflies, or Ephemeroptera, of Illinois. B. D. Burks, 1975
reprint of Bulletin of the Illinois Natural History Survey, Vol. 26,
1953. Entomological Reprint Specialists, Los Angeles, California,
viii + 216 p., 395 figs. \$15.00.**

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the family Podapolipidae should be found on Lepidoptera. Dr. Treat and I have discussed this possibility but none have been found so far. *Mites of Moths and Butterflies* comes at an appropriate time to aid new workers in the study of insect mites. The literature cited and historical survey alone should be worth the price of the book. I recommend this book to anyone interested in the little creatures carried by insects.

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THE WORLD OF MOTHS. Michael Dickens and Eric Storey. Macmillan Publishing Co., Inc., New York, 1974. 128 p., 103 plates. \$6.95.

This little book will undoubtedly please the amateur collector and rearer of the exotically and exquisitely colored species such as found in the Saturniidae and Sphingidae. Of the 103 colored photographic plates, 69 illustrate species from these two popular families. Each species is figured on a white background in sharp and vivid color. One species is figured on a page, except for *Epicopeia polydora*, which includes a figure of its mimetic model *Papilio rhetenor*. There is a brief text for each species citing the scientific name, family, common name, wingspan, range, habits and habitat, larval foodplants, sexual dimorphism, variations, and similar species. The differences in the size of moths figured, and lack of any scale, detracts from the book and may confuse its users. For example, the Spanish Moon Moth, *Graellsia isabellae* (10-12 cm) is shown as large on plate 39 as the Golden Plusia, *Polychrysis moneta* (3.5-4 cm) on plate 94.

After a preface stressing conservation and education in the study of moths, and brief acknowledgments, the introduction includes sections on life-history, rearing moths, structure and senses, light traps and lamps, education and conservation, classification, regions of the world, and explanation of text notes. The authors admit they have borrowed information from many well-known sources in preparing the book. Yet, there are no specific literature citations anywhere in the text, nor is there any bibliography. The authors consistently omit the author's name after each species which tends to detract from the book as a scientific reference. Following the British custom, there is an index to the common names used with each plate.

While there is little new information here to offer the scientist, the book will undoubtedly enjoy some appeal to the many amateurs who avidly collect and rear moths, especially those from exotic regions. In addition, this book will match the authors' earlier publication *The World of Butterflies*, which was completed in this same format.

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THE MAYFLIES, OR EPHEMEROPTERA, OF ILLINOIS. B. D. Burks, 1975 reprint of Bulletin of the Illinois Natural History Survey, Vol. 26, 1953. Entomological Reprint Specialists, Los Angeles, California, viii + 216 p., 395 figs. \$15.00.

The continuing demand for general references and aids to identification of Ephemeroptera has undoubtedly prompted the recent reprinting of *The Mayflies . . . of Illinois*. A two-page preface by George F. Edmunds, Jr. dealing with taxonomic and nomenclatural changes since the original 1953 publication has been added and will serve as an adequate aid to those unfamiliar with changing concepts in mayfly systematics. The reprinting is of high quality with the large number of figures having been excellently reproduced in this hard-bound edition.

Although over 20 years old, this treatise remains as one of the most cited works dealing with North American mayflies, primarily because it is one of the few works

attempting a comprehensive treatment at the species level. Another factor contributing to its broad usage is the fact that although it is oriented to the Illinois fauna, it is of much broader geographic applicability, and on a species level is of use for most of the eastern United States and Canada.

The multifaceted introduction serves as a very good, short introduction to the study of mayflies in general, keeping in mind recent classificatory changes and recent advances in collecting, rearing, and study techniques. Keys to adult male mayflies are helpful but must be used with caution for areas outside Illinois and, especially, the Midwest. Without prior knowledge it is difficult to determine how comprehensively any genus is covered, e.g., in some genera, all of the species are treated, while in others, some of the species outside Illinois are not treated. Also, in most cases, descriptions are apparently based only on Illinois material (and type material when studied) with little attention given to variability. To the large number of aquatic biologists who deal with benthic insects and are forever searching for keys to identify species of mayflies in the immature stage, this work will not satisfy their needs in many cases. Little emphasis is given to larvae (there presently remains a dearth of information on this stage), and often it cannot be determined if the larvae are even described for a particular species. Keys to the larvae of species of genera such as *Stenonema*, *Heptagenia*, and *Baetis* are of only limited usefulness and determination may not always be reliable.

I can recommend this work to all students of Nearctic Ephemeroptera; and entomologists and aquatic biologists in general will find many aspects of it worthwhile, especially until such time that more complete data have been compiled on the larvae at the species level.

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1973 EVALUATIONS OF SOME PESTICIDE RESIDUES IN FOOD: THE MONOGRAPHS. Food and Agriculture Organization of the United Nations, Rome, 1975. 491 p. Available from Unipub, Box 433, Murray Hill Station, New York, NY 10016. \$15.00.

The evaluations of residues on foodstuffs contained in these monographs were prepared by a joint meeting of an FAO expert committee and a WHO expert committee on pesticide residues that met in Geneva and produced its report "Pesticide Residues in Food" published as WHO Technical Report Series No. 545 and FAO Agricultural Studies No. 92 in 1974. The monographs give the relevant data obtained from feeding tests with laboratory animals to make a decision as to the Acceptable Daily Intake of each pesticide, and thence to make recommendations as to the Residue Limits (Tolerances for residual contamination in ppm), from which member states of the UN can decide on their own Tolerance, and state the Pre-Harvest Interval from the last application to ensure that the residue will be below that tolerance.

The monographs cover 23 pesticides, of which 8 are fungicides and 2 are used as acaricides; of the 13 insecticides, 3 are organochlorines, 8 are organophosphorus compounds, and 2 are carbamates. Besides the data on mammalian toxicity, they contain information on metabolites of the pesticide, on the dosages used and residues found under field conditions, and on analytical methods. The pesticides that are of particular interest to growers in the Great Lakes region are benomyl and captan among the fungicides and lindane, toxaphene, malathion, azinphosmethyl and carbaryl among the insecticides.

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