
M. C. Nielsen
BOOK REVIEWS

MICHIGAN TREES. Burton V. Barnes and Warren H. Wagner, Jr. The University of Michigan Press, Ann Arbor. 384 pages, 120 figures. 1981. $10.95 (cloth), $5.95 (paper).

Nearly all entomologists studying terrestrial insects in the Lake States region find it necessary to recognize and attempt to understand the woody plant communities in which they live. My own great interest in trees was an obvious corollary of my work with forest insects and began with a copy of Michigan Trees by Charles Otis. Three decades have passed since I acquired it, and I have filled a shelf with additional "tree books" without finding one which was really satisfactory. Consequently I welcomed the publication of this completely new edition of Michigan Trees with heartfelt enthusiasm.

This edition has been entirely rewritten by two eminent botanists from The University of Michigan: Burton V. Barnes, forest ecologist of the School of Natural Resources, and Warren H. Wagner, Jr., already a familiar figure to Michigan Entomological Society members as one of our foremost lepidopterists, a Past President of the society, and frequent contributor to this journal.

The tree descriptions include virtually all the native and commonly introduced exotic species to be found in Michigan; 101 are illustrated. Most of these figures appeared in earlier editions, but many have been redrawn and numerous new figures added. The descriptions have been expanded to include a wealth of useful ecological information on distribution, habitat, shade tolerance, reproduction, and other characteristics. There are also helpful summaries of key characters, and background notes on a wide range of topics. A separate section provides similar but less extensive descriptions of most of the shrubs and woody vines of the region. There are keys for both summer and winter use, and perhaps the most important comment to be made on these is that my students had very little trouble using them successfully.

The authors make it relatively simple for the reader to identify a woody plant with considerable confidence, but their book offers much more. The initial chapter, which in similar tree books is usually confined to describing key characteristics, is here expanded to an interesting and concise introduction to the biology of woody plants. This is followed by a chapter on the habitats and forest communities of Michigan which is a veritable treasure for anyone interested in the terrestrial ecology of the state. This section alone would make the purchase of the volume worthwhile. A selection of references from the literature is another valuable feature rarely found in the usual tree book.

I have adopted this book as a standard reference for my biology students and a required text for my class in woody plants. It has been very successful in both applications, and the only student criticism has been regret that the section on shrubs and woody vines is not illustrated. It is, of course, a regional work, but certainly would be useful throughout the Lake States. For the Michigan naturalist it is invaluable.

D. C. L. Gosling


The long awaited guide to the butterflies of the Rocky Mountains will be received with great delight by many lepidopterists who collect butterflies in this rugged and beautiful region. The book’s coverage encompasses the Rocky Mountain states from the Canadian border to northern New Mexico, and from the Great Plains to the Great Basin. This comprehensive work will direct collectors to specific collecting sites and the photographs of each
species will assist amateurs in identification of specimens collected in the region. The latter aid is especially useful in view of the proliferation of subspecies, as in the Nymphalidae, from this region.

In addition to introductory and historical sections by the two well-known editors, the book is divided into three parts, with Part One including a series of contributions by eight thoroughly knowledgeable lepidopterists, all with field experience in the Rockies. This part includes extremely informative sections, with ample figures, on biogeography, butterfly bionomics, external anatomy, taxonomy, and collecting and preserving specimens. In particular, the biogeography section by Scott L. Ellis gives good detailed information, with clear black and white photographs, of the major habitats and specific collecting sites found in the Rocky Mountains.

The main portion of the book, Part Two, deals thoroughly with each nominate species recorded from the Rockies, including diagnosis, range and habitat, bionomics, and subspecies. There are sharp black and white photographs, usually of both sexes, and revealing dorsal and ventral surfaces. Each family and genus is discussed by one of the following specialists: J. Donald Eff, Scott L. Ellis, Clifford D. Ferris, Michael S. Fisher, Lee D. Miller, James A. Scott, and Ray E. Stanford. It may come as a surprise to some lepidopterists that the arrangement of families and nomenclature of genera and species does not follow any currently accepted butterfly checklist. Many experienced collectors may find it a nuisance to re-label the familiar Papilio glaucus L. to Hubner's unfamiliar Euphoeades, or the elfins back to Incisalia, to name a few notable changes. The editors make a poor effort at explaining their rationale for changes in nomenclature in their introductory comments. It would have been more consistent and helpful if the nomenclature had followed the forthcoming Catalogue and Checklist of the Butterflies of America North of Mexico, which is soon to be published by The Lepidopterists' Society.

The last part of the book includes a glossary, bibliography, simple techniques for genital dissection and genitalic sketches, maps, collection locality data, checklist of the butterflies of the Rocky Mountain states, index to general topics, index to butterfly names, and index to butterfly food plants. The data for each specimen figured in one of the black and white photographs are included in the section on collection locality data.

There are few obvious errors of commission except that in Section Five, Collecting and Preserving Specimens, the pages are erroneously indexed "taxonomy," which may annoy some users. The black and white plates on page 173 (P. proterpia) and page 174 (N. ioIe) are half the size indicated (1X). Most of the plates for the Hesperidae and Lycaenidae are more than life size, which should be helpful to many attempting to identify specimens in these two difficult families. The map section, which contains a series of small scale regional maps with county outlines, features dots to indicate county records for each species, but fails to include a larger scale map with county names. The book's format measures 7 by 10 inches, with a buckram cover for the hardbound edition, and plasticized cardboard for the softbound. A serious drawback in the softbound edition appears to be a weak binding; in just a few hours of home use, this reviewer's copy has shown loosening of two pages. While the publisher hails this publication as a "field guide," its size will preclude convenient field use.

Without doubt, this publication is a valuable contribution to the literature, and a "must" for all lepidopterists, amateur or professional. It definitely fills a need felt by many field collectors who annually journey to the Rockies in search of butterflies. It should stand as the main reference of Rocky Mountain butterflies for many years to come.

M. C. Nielsen