

POWELL J. A., AND OPLER P. A. 2009. *Moths of Western North America*. University of California Press, 369 pp., 64 pls, 254 figs. ISBN 978-0-520-25197-7. Hardback, \$78.55 (amazon.com).

I will start my review of the recently published book *Moths of Western North America* (MWNA) with the color plates, because I suspect most readers will look at the plates first, when confronted with the volume. Expertly photographed plates of pinned adult moths are appropriately located in the middle of the book, which makes it much easier to keep the volume open on the correct page while using the plates for identification. Frequently, the plates in modern identification guides that are composed of Photoshop-processed pictures of the individual specimens make the specimens appear as if cut out of paper. In this respect, MWNA stands out, as the plates in this volume are designed with taste: gray background and the mild shadows give specimens realistic three-dimensional appearance. The individual specimens chosen for photography and their color reproductions are of the highest quality.

Upon examining the plates, it becomes apparent that they do not represent all the species known from the region, which led me to read the page immediately preceding the plates (p. 114), where the contents of the plates are described. I did not find the information on the scope of the book here, but instead was referred to the "Preface" at the beginning of the book (page ix). Here, one could learn that there are up to 8,000 named species of moths and 3,000 more unnamed ones found in western North America. It turns out that 45% of these species are micros, and that MWNA illustrates 2,350 moth species irrespective of their size. Hence, if one is looking for an identification source, this book is probably less useful than the website of the Moth Photographers Group: <http://mothphotographersgroup.msstate.edu/>. On the other hand, if one wanted to use a book, not a computer, it would be hard to find anything even remotely as comprehensive as MWNA, as far as the plates are concerned.

One should not judge the book by its cover or even by its plates, because words rather than images remain the way an educated person thinks and communicates (despite the current general trend towards the latter). To really appreciate the importance and the quality of the scientific contents of MWNA, one should read the Acknowledgements. Even before receiving the book, it was obvious to me that 2 authors as respected in their field as Powell and Opler would have consulted the specialists in less known moth groups to make sure that no misinformation was included. Indeed, the list of people who contributed specimens, identification, wrote and reviewed chapters, and provided images extends for an entire page (p. 10). This book is truly a joint effort of

many people, which speaks highly of the collaborative and enthusiastic nature of the North American lepidopterists!

When one reads the title, an immediate question concerning the geographic coverage of the book arises. The question "What do the authors call "western"?" is answered on page xii in the form of a map of North America divided by a line roughly traversing along the Rocky Mountains. The general "Morphology" section is brief, 11 pages located at the beginning of the book. However, its brevity is compensated by the fact that the morphology of individual families is featured in the main section of the book, "Classification and Natural History." The genitalic drawings found throughout this section (e.g., p. 72) appear slightly too small and too schematic, as if they were transplanted into the book from previous publications in scientific journals. For a book of such high quality as MWNA, it would be better if the renderings of the same drawings were created by a professional artist. In contrast, the pen and ink drawings of adult micros (e.g., p. 69) are magnificent.

I found the modern view of the moth classification and phylogenetic position of individual families as well as the biological information on individual species to be 2 of the most intriguing aspects of the "Classification and Natural History" section, which occupies most of the book (p. 33-319). The numerous references provided at the end of each superfamily's treatment (e.g., p. 200) also make MWNA a priceless bibliographic resource. The extensive and very well-written section on collecting and observing moths (p. 321-328) is not only full of useful advice for the beginners, but also contains some very interesting suggestions that even a seasoned moth collector will undoubtedly find useful. For instance, the diagrams and descriptions of various methods of pinning and spreading micros (p. 324-326) would greatly simplify the task for those who would like to engage in collecting these Lepidoptera, which normally are underrepresented in collections. A short glossary and comprehensive insect and plant indexes conclude the volume. All-in-all, I recommend the *Moths of Western North America* for purchase by anyone even remotely interested in Lepidoptera systematics, conservation, biology, photography, or collecting.

Andrei Sourakov  
Florida Museum of Natural History  
University of Florida  
Gainesville, FL 32611  
[sourakov@ufl.edu](mailto:sourakov@ufl.edu)