

Life Histories of Cascadia Butterflies

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Book Review

From Egg to Adult: A Landmark Book on Northwest Butterflies

Life Histories of Cascadia Butterflies, David G. James and David Nunnallee. OSU Press, Corvallis, Oregon (2011). 447 pages, \$35.00 (US) paperback.

I start with a context for this monumental work. In 1938-39, Stanley S. Nicolay began compiling records of the butterflies then known to occur in Washington state, the heart of Cascadia (NW USA, SW Canada). This 15-page work was completed and published by Ben V. Leighton in 1946 under the supervision of Melville H. Hatch (my own graduate school advisor) (University of Washington Press). Thus began the recording of knowledge about the Cascadian butterfly fauna. Leighton's publication recorded only distribution data (collection records) for each of the known species. He referred his readers to Holland's 381-page The Butterfly Book (1898 and later editions) for species identification, illustration, and available biological information.

Since then, at least six books have been published on the butterflies of this region. One of these should be mentioned as a supplement to James and Nunnallee, because it fills in distribution data (habitat and range) and elaborates on geographic variation within the region. This is Robert Michael Pyle's *The Butterflies of Cascadia* (420 pages, Seattle Audubon Society, 2002).

Life Histories of Cascadia Butterflies is unique among any regional treatments in its completeness in life history stage illustration and in the quality of its photographic illustrations. Indeed, this monumental work sets the bar high for any subsequent regional works. All of the life history stages, egg through to adult, of essentially all of the species of butterflies now known to occur in Cascadia are illustrated with superb color photographs. However, possible geographic variations, for the most part, are beyond its goal. Generally only one view of the adult, dorsal or ventral (not both) is provided. For each species, treatment of the adult biology, immature stage biology, and description of these is stages are given followed by a brief general discussion section. Together with the illustrations, the treatment of each species typically does not exceed two pages.

The authors report on their own observations, as well as drawing upon information they derived from the pertinent scientific literature. Their literature references are not necessarily complete. For example, they omitted reference to a paper on the biology of *Parnassius clodius* which expands on their questioning of the possible mimicry of the larvae of this species of a sympatric millipede. But then, if none of the literature were missing, their treatment would be even more remarkable!

Much remains to be done in further research on Cascadia butterflies, and the authors often suggest such knowledge gaps for various species. Hopefully, this book will inspire biologists to provide an even more complete understanding of this diverse group of insects.

> —David V. McCorkle Professor of Biology, Emeritus Western Oregon University mccorkd@mail.wou.edu