## Journal of the Lepidopterists' Society 55(4), 2001, 175–177

THE GUIDE TO BUTTERFLIES OF OREGON AND WASH-INGTON, by William Neill, photography by Doug Hepburn and William Neill. Published by Westcliffe Publishers, Inc., Englewood, Colorado, 2001. 160 pp., 155 color photographs. ISBN 1-56579-392-7. Price \$17.95.

Perhaps the most astonishing part of the book is hidden away in a place most would not read—on the back of the title page! Here we find a disclaimer that, perhaps in my naivety, I could never have imagined in a book on butterflies. The last sentence is worth quoting—"The author and publisher disclaim any liability for injury or other damage caused by backcountry traveling or performing any other activity described in this book." As I gaze to the right at the facing full page photograph in living color of a copulating pair of *Glaucopsyche lygdamus*, I must wonder, in my gutter of a mind, if this disclaimer also applies to illustrated activities.

This said, *The Guide to Butterflies of Oregon and Washington* is small and not all encompassing, but a preview of some butterflies of the northwestern United States aimed at the interested novice. The first one-third of the book consists of introductory chapters, is followed by 100 single page (except two pages for *Danaus plexippus*) accounts of species, and ends with a few pages of supplementary information (butterfly gardens, collections, and rearing), a glossary, a short bibliography, and an index.

The introductory sections are rather superficial and could have been improved with a little further research. A few errors leapt into view such as wing fringes being hairs, although these are nothing more than scales at the edges of wings. I am still trying to envisage a butterfly bending "its knees." We are told on p. 15 that "the animal kingdom is dominated by two principal groups: vertebrates and arthropods." True for arthropods, but there are certainly more species of mollusks, and undoubtedly more nematodes than vertebrates. The lock and key genital fit is advocated for "many" species. It seems to me that Shapiro and Porter (1989) and Porter and Shapiro (1990) more or less laid this concept to rest for butterflies. Additionally, the wings are said to "act as heat collectors." This is partially true. They do absorb radiation, but apparently only their bases act in transferring a significant portion of this to the body (Wasserthral 1975, Kammer & Bracchi 1973) and the wings of some pierids actually reflect heat energy to the body (Kingsolver 1985).

The accounts deal with over one-half of the species

occurring in the two state region, and are divided into fifteen groups that are largely taxonomic at the family or subfamily level, although these divisions are not formally noted. Nomenclature is largely conservative. Each account includes a brief description, often a sentence on major variation in the region, distribution, habitat, some hostplants, the author's anecdotes, and photographs of the adult and occasionally early stages (usually larvae). The ventral surface of the wings is called the underside, but the dorsal surface is annoyingly called the "top." What ever happened to upperside? The myth that the spread of Pieris rapae was perhaps detrimental to "related indigenous species," especially P. napi is perpetuated. Decline of these species was much more likely due to habitat alteration (Chew 1981, Shuey et al. 1987). No mention is made that Limenitis archippus may be unpalatable in some areas (Ritland 1991). One of the characters given for distinguishing Vanessa annabella from V. cardui is blue-centered macules on the dorsal hindwing. Many V. cardui also have these, as is shown by the photographed individual on the previous page. Neill says that the forewings and hindwings of Epargyreus clarus are held at different planes. They are not. This is a characteristic of hesperiine skippers as shown a few pages later in the photograph of Hesperia juba. Epargyreus clarus usually perches with both sets of wings closed dorsally (e.g., Scudder 1889).

Larval hostplants off some interesting fodder: Colias philodice feeding on "clover and legumes," Plebejus idas on "lupine and legumes," and Plebejus shasta on "astragalus, legumes." Last time I looked, clover, lupine, and astragalus were all legumes. A similar faux pas was noted for Euchloe ausonides—"mustard family and rock cress." Currant is probably not an important hostplant of Polygonia faunus (Scott 1986); birch or willow may have been better choices here.

Various books (e.g., Scott 1986) would have us believe that *Habrodais grunus* may not feed as an adult on flowers. The text on this hairstreak tells us that "they use chinquipin flowers as a source of food" and lo and behold, the photograph shows an adult apparently feeding on the flowers of this oak. This is an interesting contribution.

The more than 150 photographs are largely excellent and taken in the field with natural light, a result I find very pleasing. A few include habitats and early stages. Some butterflies are out of focus, including *Papilio eurymedon* (p. 19), *Incisalia polios* (p. 92), and *Vanessa atalanta* (p. 134). The first is surprising since a much better photograph of this species appears on p. 50. One wonders why some of the images are used more than once. All six on the cover are repeated within (that of *Papilio multicaudatus*, twice). Four additional photographs are used twice in the book. Either there were no others available to use as fillers or I have nothing better to do than to look for repeats.

A few comments are needed concerning the glossary. The abdomen includes the several posterior segments; the author surely meant the posterior region of the body rather than posterior segment. This also applies to the thorax. The anal angle, apex, and costal margin occur on both wings. It is interesting to learn that a subspecies is "the subset of a population within a species that has its own distinctive features and is usually reproductively isolated." Reproductively isolated from what?

The book serves its intended audience and the photographs will allow identification of most species. The price is a bit steep and those who have more than a passing interest would want to spend a few more dollars for something like Opler's (1999) western field guide. As I reread this critique, I wonder if maybe I am getting old, picky, and cranky. Maybe. But then again, maybe not. Neill considered a coupled pair as in a predicament. This still sounds like a pretty good predicament to me. Do I need a disclaimer? If so, I take no responsibility.

## LITERATURE CITED

- CHEW, F. S. 1981 Coexistence and local extinction in two pierid butterflies. Amer. Nat. 18:655–672.
- KAMMER, A. E. & J. BRACCHI. 1973. Role of the wings in the absorption of radiant energy by a butterfly. Comp. Biochem. Physiol. 45A:1057–1064.
- KINCSOLVER, J. G. 1985. Thermal ecology of *Pieris* butterflies (Lepidoptera: Pieridae): a new mechanism of behavioral thermoregulation. Oecologia 66:540–545.
- OPLER, P. A. 1999. A field guide to western butterflies. 2nd ed. Houghton Mifflin,Boston.
- PORTER, Ă. H. & A. M. SHAPIRO. 1990. The lock-and-key hypothesis: lack of mechanical isolation in a butterfly hybrid zone. Ann. Entomol. Soc. Amer. 83:107–114.
- RITLAND, D. B. 1991. Revising a classic butterfly mimicry scenario: demonstration of Müllerian mimicry between Florida viceroys (*Limenitis archippus floridensis*) and queens (*Danaus gilippus berenice*). Evol. 45:918–934.
- SCOTT, J. A. 1986. The butterflies of North America, a natural history and field guide. Stanford Univ. Press, Stanford, California.
- SCUDDER, S. H. 1889. The butterflies of the eastern United States and Canada with special reference to New England. Vol. 2. . Publ. by author, Cambridge, Massachusetts.
- SHAPIRO, A. M. & A. H. PORTER. 1989. The lock-and-key hypothesis: evolutionary and biosystematic interpretation of insect genitalia. Ann. Rev. Entomol. 34:231–245.
- SHUEY, J. A., J. V. CALHOUN & D. C. IFTNER. 1987. Butterflies that are endangered, threatened, and of special concern in Ohio. Ohio J. Sci. 87:98–106.
- WASSERTHAL, L. T. 1975. The role of butterfly wings in regulation of body temperature. J. Ins. Physiol. 21:1921–1930.

GEORGE T. AUSTIN, Nevada State Museum and Historical Society, 700 Twin Lakes Drive, Las Vegas, Nevada 89107, USA

## Journal of the Lepidopterists' Society 55(4), 2001. 176–177

THE SESIIDAE OF EUROPE. 2001. Zdeněk Laštůvka & Aleš Laštůvka. Apollo Books. Stenstrup, Denmark. 245 pp., 9 colour plates. 17 cm by 24 cm. ISBN: 87-88757-52-8. Retail cost DKK 370,00 (approximately USD 45.00). Hard cover.

Sesiid moths, bee and wasp mimics, are popular amongst lepidopterists and lay persons alike. Often not seen, these creatures quickly catch the imagination and attention of many people. Lepidopterists, intrigued by the mimicry, anonymity, and diversity of so many species, wonder why they don't see more of the moths. Others, when presented with the true identity of these wasps as harmless moths, are awestruck, often responding with "You've got to be kidding!" For many years in the USA, only Beutenmuller's tome extra ordinaire (Beutenmuller, William, 1901, Monograph of the Sesiidae of America North of Mexico, Memoirs American Museum of Natural History, 1(5):215–352) with one plate reproduced in Holland's Moth Book (Holland, William Jacob, 1903, Doubleday, Page and Company, New York, 479 pp., 48 color plates) was available as the sole source of information. In Europe, as in the Western Hemisphere, the popularity of sesiids did not subside, and two recent books help fill the desire for knowledge. In 1999 Gem Publishing Company delivered a striking volume on Sesiidae (Spatenka, Karel et al. 1999. Handbook of Palaearctic Macrolepidoptera Volume 1 Sesiidae - Clearwing Moths, Gem Publishing Company, Wallingford, England, 569 pages, 57 color plates). Apollo Books now brings us The Sesiidae of Europe, and a fine book it is.

A quick examination of the book reveals a polished colorful hard binding that is Smythe sewn. A Smythe sewn book has threads through the folds of the paper on the inside margin. A Smythe sewn book lies flat when open, and individual pages never fall out. I urge all publishers and authors to take note of the superior quality of Smythe sewn books. The insides are clean, and clearly written with a comfortable typeface and large font. The color illustrations are very sharp. The lighting is so even the specimens appear at first to be paintings, but the pins belie the fact that they are real, nearly perfect specimens. The 1.8× natural size of the specimens allows inspection of all details even on small species. The consistently and artistically drawn interpretations of the genitalia are well done, although I prefer techniques of drawing that show exactly what the genitalia look like. The range maps are easy to use, but the heavily drawn political boundaries compete for attention with the black shading delineating species'