as to the best way of reaching the areas described. In the course of the tour, clear reasoning shows why certain butterflies are to be found or not to be found in the area described. Notable is the fact that the writing is extremely literate and reveals the author's sensitivity to nature. The book is charming and delightful to read, and will be found equally useful in the adjacent states and British Columbia. In its broader aspects, the perception of butterflies, the creation of butterfly gardens, photography, and the clinal aspects of distribution, this book will be of value to collectors and butterfly watchers in all parts of the country.

Details of taxonomy are deliberately excluded since the emphasis is on field identification; and the author does not go into the subspecies problem. He does, however, mention the lower taxon on occasions where he feels it necessary in order to avoid confusion. In this reviewer's opinion his handling of the subspecific problem is done well and is an added asset. A further comment is that he fails to mark parentheses around the author of such species as have had their specific names changed from their original genera. This, however, is a small point which will affect only those who plan to use the book as a taxonomic treatise, which is not its intention. Adequate references are given in the section on books and collections.

The author is currently undertaking doctoral studies at Yale University's School of Environmental Studies, and is the founder and director of the Xerces Society, the first international organization for the conservation of butterflies.

Without reservation I recommend this as an excellent and thoroughly readable book, packed with carefully researched information on every species of butterfly presently known in the State of Washington.

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This is an aggravating little book. Because it embodies an outstanding idea promoting butterfly-watching (alongside collecting) as a pleasurable and conservation-minded outdoor activity—one wants to praise it. Unfortunately, *Watching Washington Butterflies* is also the first faunistic book for the Pacific Northwest. As such it will probably remain the standard reference for some time—and in that role it leaves much to be desired.

First, the good points. Watching Washington Butterflies has unusually complete descriptive material on ecological regions and butterfly habitats, and attempts to put butterflies in a broader ecological perspective than any butterfly book since Klots. Pyle is the founder of the Xerces Society and is the most articulate and dedicated exponent of butterfly conservation in America, and this theme runs all through the book; there is more information about gardening to attract butterflies than about collecting, mounting, etc.! The field marks, based on the Peterson system, are simply presented and easy to grasp. And the photographs are all in color, beautifully reproduced, and all from life. This is the first American butterfly book since Aretas Saunders' Butterflies of the Allegany State Park (1932) illustrated exclusively with photographs of living specimens in the wild. It's about time!

Now the bad points: first, and most annoyingly, six of the 64 color figures are incorrectly identified. Specifically, fig. 7, supposedly *Pieris sisymbrii*, is *Euchloe hyantis*; figs. 30–31, labeled *Everes comyntas*, are *E. amyntula* (*E. comyntas*, as far as I know, has never been found in Washington at all); figs. 40–41 are *Polygonia faunus*, not *P. zephyrus*; and fig. 64 is certainly not *Erynnis icelus*—it might be *persius*, but is most likely *propertius*.

Second, and almost as annoyingly, the larval host plants are given for many species but there is no indication in most instances where the records come from. Are they actual field data from Washington, or the usual extracts from the literature (where things are "validated" by repetition)? For example, *Lycaena helloides* is listed as feeding on "*Polygonum*, cinquefoil, dock." Since one cinquefoil-feeding

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population is known (in a salt-marsh environment) in California, and the *dorcas*type populations of the far north also feed on these plants, one wants to know—do Washington *helloides* feed on *Potentilla* or not? The host of *Colias occidentalis* is listed as "Legumes." Anyone who has tried to rear this beast knows how fussy it is. *What* Legumes? Almost every host-association ambiguity which plagues California Lepidopterists reappears here, suggesting that not much has happened on the Pacific coast since Comstock's 1927 *magnum opus*.

Third, misspellings appear everywhere. "Crysalis" rears its head at least ten times. Botanical names suffer the most. *Ceanothus* is always given as *Ceonothus*. Less consistently we are treated to *Purschia*, *Gnophalium*, *Arceuthabium*, *Quercas*, *Orthocarpos*, *ad infinitum*, *ad nauseam*.

Fourth and fifth, there is virtually no discussion of variation, be it seasonal or geographic, and all matters taxonomical are given very short shrift. The latter is desirable in a popular natural-history guide, which is what this book is supposed to be, but not in a "standard" faunistic reference, which it is going to be whether or not that was the author's intent.

A few minor changes would make the book easier to use. The figures are numbered independently of the species, and cross-referencing is difficult, especially if one is in a hurry (as one usually is afield). Giving the figures the numbers of the species they portray would speed things up. The system for giving flight seasons is a convenient shorthand, perhaps, but takes some getting used to. A book which has space for Buddhist scripture has space to use words like "early" and "late."

Finally there are questions of "style," and here individual tastes are bound to vary. Popular field guides should be light and fun to read, but Pyle perhaps tries too hard. I find his prose unpleasant reading, often gushy, turgid or cloying. The name he coins for *Philotes battoides*, the "Bat Blue," ranks with Austin Clark's *Cercyonis* folly—"Goggle Eye"—in the competition for the worst vernacular name ever.

One aspect of the book which may be unjustly faulted in some quarters, is its emphasis on non-consumptive "uses" of Nature. Pyle's view of lepidopteran population dynamics and of the impact of collecting is a sensible and balanced one. Butterfly watching is arresting because of its novelty after generations of collecting emphasis; it is an alternative to—not a replacement for—collecting, and each activity has its proper place.

There are lots of distributional "goodies" in this book, which is only to be expected since so little on Washington butterflies has appeared before, but specialists will find themselves constantly frustrated by the absence of any information about phenotypes, subspecies, and the like. Lycaenid enthusiasts will be intrigued by the range extensions for *Lycaena cupreus* and *editha* (to name two), the absence of *L. nivalis* from the western Cascades (when it occurs on the west slope of the Olympic Mountains), etc. Since the basic premise of *Watching Washington Butterflies* is so good, one can only hope its first edition sells out rapidly so a new one—with the kinks taken out—can be ready soon.

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