Arhopala in Borneo, or at least 22 species of the strange genus Allotinus in the subfamily Miletini, or 12 species of Miletus itself? A host of Celastrina blues, and spectacular long-tailed Drupadia hairstreak species, make one want to take the next plane to Borneo to explore and study the endless variety of these groups there!

In addition to providing an excellent guide to identification and some details of the basic biology of these two major families of butterflies in Borneo, the authors include pictures in color and words of the richness of the Bornean habitats that still remain. Yet they warn that during the two short years since the publication of Volume I, forests have continued to be destroyed for the sake of local economic development, especially for the export of forest timber to Japan. As the editor, Kazuhisa Otsuka, aptly says in his Foreword, "The tropical rain forest and its rich life should last forever for the earth as well as for us. The beautiful green world where birds sing, flowers bloom, and nymphs (butterflies) dance, should not be harmed any more beyond the present state. Otherwise, it will eventually lead to an unnatural extinction of human being."

Together with the plates, this fascinating text (published in full in both Japanese and English) provides a rich introduction to the incredible butterfly fauna of Borneo. The excellent text figures, maps, and separate keys for males and females provide the elements of a model work for others to emulate. Any lepidopterist or scientist interested in the butterflies of southeast Asia will want to add both volumes of this work to his or her library. Naturalists or lepidopterists fortunate enough to visit Borneo will want to take these volumes into the field as a guide to the incredible diversity of butterflies in this fascinating part of Malaysia.

THOMAS C. EMMEL, Division of Lepidoptera Research, Department of Zoology, University of Florida, Gainesville, Florida 32611.

Journal of the Lepidopterists' Society 47(2), 1993, 170–171

THE COMMON NAMES OF NORTH AMERICAN BUTTERFLIES, edited by Jacqueline Y. Miller (Forward by Paul A. Opler). 1992. Smithsonian Institution Press, Washington, DC. ix + 177 pp. Soft cover,  $15 \times 23$  cm., ISBN 1-56098-122-9, \$14.95.

This book presents a taxonomic list of the North American Butterflies, with the common names that have been used for each. Most common names have the source listed, if the source was an important book on the North American butterflies. Common names are even listed for all subspecies.

The book could prove useful to persons wanting to choose among the various common names that have been applied to a species. Where the book disappoints, however, is its designation of recommended common names in boldface. The foreward by Paul Opler even encourages authors to use the recommended names universally, a noble goal if the recommended names were good appropriate names. Unfortunately, in recommending inappropriate or misleading common names for hundreds of species, this book is a backward step. ICZN rules state that misleading or inappropriate or bad-sounding scientific names cannot be replaced, so we are forced to endure for eternity such blatant errors as Plebejus lupinus, a butterfly whose larvae eat Eriogonum and never go near Lupinus and whose adults never visit Lupinus flowers, which can be harvested only by brutish hymenopterans such as bumblebees. The virtue of common names is that they can be corrected, improved, or invented by anyone, so we should not tolerate bad or misleading common names. This book is basically hostile to the idea of common names, because its recommendations are rigidly based on frequency of past usage rather than appropriateness or inappropriateness of the name itself, a procedure surely as heartless as the strict priority mandated by the ICZN; in virtually every case-involving hundreds of names-the book passes up the more appropriate name if the worse name has been used more often. Thus the book recommends the erroneous common name of Lupine Blue for P. lupinus (a

name terrifically applicable to Plebejus icarioides); Sleepy Orange for Eurema nicippe, a butterfly whose flight is both fast and erratic, the antithesis of sleepy; Tawny Crescent for Phyciodes batessi, which is not tawny; Southern Cloudy Wing for Thorybes bathyllus, a name only appropriate for *Thorybes confusis*; Dark Wood Nymph for *Cercyonis oetus*, one of whose subspecies is the Pale Satyr; Sheep Skipper for Atrytonopsis ovinia edwardsi, a name based on the misconception that Navajo sheep occupy the same range as the butterfly (the sheep actually occupy northern, the butterfly southern, Arizona); Dusky Azure for Celastrina nigra, whose wings are not azure. Great Purple Hairstreak for Atlides halesus, whose wings are not purple; Clouded Sulphur for Colias philodice, whose wings are not clouded; the Twin-spot Skipper for Oligoria maculata, which has three spots: the Silver-bordered Fritillary for *Boloria selene*, whose silver spots cover the whole wing; Sonora Blue for Philotes sonorensis, which is not found in Sonora; Reddish Hairstreak for Strymon rufofusca, which is not reddish; Early Hairstreak for Erora laeta, which is not early, the second flight being July-August and the first May-June (the book ignores the far better name Turquoise Hairstreak, which is quite appropriate for the bluegreen, flecked-with-brown underside of this insect, like a little turquoise jewel); Gray Comma for *Polygonia progne*, which is blackish-gray (gray fits only *P. gracilis/zephyrus*); the list goes on and on. Sometimes the book inexplicably passes over a better name that has been used more often in favor of an earlier name used only once (Myscelia ethusa, Lycaena arota, etc.). Tautonyms are uniformly recommended over more appropriate names, another sign of the book's basic hostility against common names. Common names widely accepted in Europe (Lycaena phlaeas, Boloria napaea, Pontia, Pieris, Euchloe, etc.) are ignored. Hundreds of common names are misnamed from one small part of a vast range (West Coast Lady, Shasta Blue, etc.). My own 1986 book (The Butterflies of North America, A Natural History and Field Guide, Stanford University Press, 583 pp.) corrected the misleading and inappropriate names and improved many others, yet the present book rejects nearly all of the corrections and improvements in favor of bad names oft-repeated. The relative inexperience of the author concerning butterflies prevented her from recognizing many of these bad names and from considering the behavior and habitat of each species in recommending a common name. The book is filled with numerous other errors in citations and names: several of the books listed in the literature cited and cited throughout the text (by L. Miller & P. Opler, etc.) do not exist as of this writing; the Sentinel Arctic is not in Pyle (1981, The Audubon Society Field Guide to North American Butterflies, Alfred K. Knopf, New York, 916 pp.) as cited; the name Neonympha sancticrucis does not exist; the species Polygonia silvius does not exist; the same species is listed twice (as Thorybes valeriana and Cogia mysie); Scott used "Sulfur" not "Sulphur" for Coliadinae and used Brown Peacock for Anartia fatima; Lehman's Checkerspot is listed after the wrong subspecies; Scott did not use Anchisiades Swallowtail or use Streamlined Dusky Brown for "Pyrnnis" funeralis, etc. Many scientific names used are ten years out of date.

Lepidopterists should ignore the boldface recommendations in this book and use only good appropriate names. The study of butterflies is young compared to the study of birds (because there are fifty times more ornithologists working on half the number of species), so there is no need to rush into mandating particular common names when so many of them are bad. The lesson from this unfortunate book is this: common names SHOULD be appropriate descriptive names for the common person; they should NOT be the most common error.

JAMES A. SCOTT, 60 Estes Street, Lakewood, Colorado 80226.