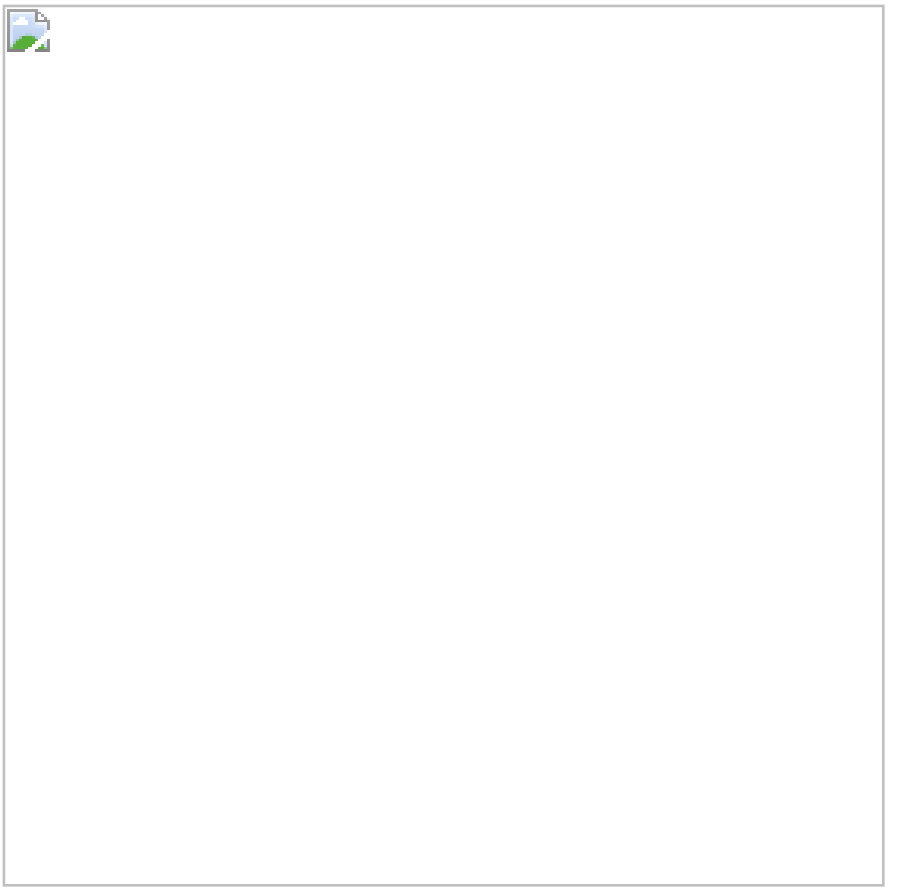

Book Review

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ERWIN, T. L. 2007. A Treatise on the Western Hemisphere Caraboidea (Coleoptera) their Classification, Distributions, and Ways of Life. Volume 1. Trachypachidae, Carabidae–Nebriiformes 1. Pensoft, Sofia, 323 pp. + 22 pls. Hardback, 165 × 240 mm, ISBN 978-954-642-298-9. Euros 95 from www.Pensoft.net or priced in $US from www.alibris.com or www.abebooks.com

This book is the first of 6 or 7 planned volumes that will give accounts of the approximately 9,242 species and subspecies of Caraboidea (ground beetles and allies) known from the New World. This volume deals with 21 genera. Color plates at the end of the book typify an adult or two of each genus and provide a habitat photograph or two for that genus. The adult specimens are photographed from the dorsal aspect, mostly as "extended focus images" meaning that modern digital techniques were used so that all parts of the insect visible from above are in focus. These photographs should allow readers to identify to genus the adults of all taxa listed in this book. The alternative approach is to use the technical keys provided by Ball (2001), but these were designed for use only for specimens from America north of Mexico, and they do not provide accounts of the species.

The organization (with numbers of species in parentheses for each genus, and names of families and tribes in bold font) is: **Trachypachidae: Systolosomatini**: *Systolosoma* (2), **Trachypachini**: *Trachypachus* (3); **Carabidae**: **Pelophilini**: *Pelophila* (2), **Nebriini**: *Leistus* (4), *Nebria* (53), *Nipponebria* (2), **Notiokasiini**: *Notiokasis* (1), **Opisthiini**: *Opisthius* (1), **Notiophilini**: *Notiophilus* (18), **Cicindini**: *Cicindis* (1), **Omophronini**: *Omophron* (17), **Loricerini**: *Loricera* (5), **Carabini**: *Callisthenes* (24), *Calopachys* (4), *Calosoma* (55), *Carabus* (17), *Ceroglossus* (8), **Cychrini**: *Cychrus* (2), *Scaphinotus* (55), *Sphaeroderus* (5): **Collyridini**, *Ctenosoma* (109), for a total of 388 species. Genera are organized alphabetically within tribes, and species are organized alphabetically within genera.

Under the name of each genus follows an English vernacular name, a list of generic synonyms, and entries **Number of species worldwide**, **Number of Western Hemisphere species**, **Taxonomy**, **Type species**, **Distribution**, **Habitat** (with references), **Notes**, and **References**. There are no keys to species. Under the name of each species follows an English vernacular name, a list of specific synonyms, and entries **Distribution**, **Way of life** (**Macrohabitat**, **Microhabitat**, **Dispersal abilities**, **Seasonal occurrence**, **Behavior**, and **References**). Those entries are the meat of the book. Subspecies are treated just as species in terms of the entries following the name.

A surprise to me is that each species and subspecies is assigned a common (English vernacular) name, many of which were invented just for this book. The author explains "common names are essential for public access to information…" In contrast, the website of the Florida Council of Bromeliad Societies (http://www.fcbs.org) makes it plain that members of this organization use the Latin binomens of ≈3,000 species of bromeliads. No matter that extremely few of these people are professional botanists, they have not invented English vernacular names, perhaps because these would be too unwieldy to memorize if they were long enough to be meaningful. However, I confess that whenever a news-reporter talks to me about an insect or plant species, he or she asks for an English vernacular name.

Introductions of *Calosoma* (*C. chinense* Kirby, *C. inquisitor* (L.), *C. reticulatum* (F.) and *C. sycophanta* (L.)) and *Carabus* (*C. arvensis* F., *C. auratus* L., *C. glabratus* Paykull, *C. violaceus* L. and *C. nemoralis* Müller) were made into northeastern North America in the first half of the 20th century to combat gypsy moth, a pest from Eurasia (Clausen 1978). Three of them became established (*Calosoma sycophanta*, *Carabus auratus*, and *C. nemoralis*) (Clausen 1978). Erwin (this book) lists *Leistus ferrugineus* (L.), *Nebria brevicollis* (F.), *Notiophilus biguttatus* (F.), *N. rufipes* Curtis, *Calosoma sycophanta, Carabus auratus*, *C. cancellatus* Illiger, *C. granulatus* L. and *C. nemoralis* as introduced species, using a different concept of introduction. This totals 9 adventive species (2% of 388) of which 3 were introduced (deliberately) and 6 possibly arrived as stowaways (immigrants) in ballast or cargoes.

For over 40 years, the U.S. Postal Service has used a 2-letter code to abbreviate names of states. More recently, Canada Post followed suit with names of provinces, avoiding duplication of any of the U.S. abbreviations. These abbreviations are widely used by entomologists in recording distributions of insects. Table 1 in this book takes the method a few steps further by inventing 2-letter codes for Mexican states, St Pierre & Miquelon [PM] (the often-neglected French possession off the coast of Newfoundland), and the Aleutian Islands [AI] (part of Alaska). The abbreviations save space in the book. I considered briefly whether there would be any advantage in adding the 2-letter International Standards Organization abbreviations for names of Caribbean island nations, but then realized that the author was correct not to do so; for reasons of internal consistency he spells out names of countries and abbreviates only the names of states or provinces. Brazil likewise has 2-letter abbreviations for names of its states.

One of the best features of this book is a 106-page bibliography, well compiled, and listing only those publications cited in the text. This is a trea-

sure for anyone who is serious about studying these fascinating insects. A valuable bonus is that information from this book (and forthcoming volumes) will be placed on the Tree of Life website (http://tolweb.org).

Completion of this series of books will be a tremendous accomplishment for which beetle enthusiasts should be perpetually grateful to Terry Erwin. The future may be its expansion on WWW with more distributional data, more habitus photographs, and much more information about the immature stages. I do not foresee its expansion as larger printed books with a color photograph of an adult of every species (and subspecies!) because of the cost of production coupled with the probable small market of would-be purchasers of the resultant high-priced book. The exception to this viewpoint may be the forthcoming Volume 2, which will give an account of tiger beetles. They are inordinately popular, almost like butterflies, so this second volume may sell more copies than of the other volumes. It might be hoped that eventually the popularity of tiger beetles will "rub off" on the other groups. I have enthused for decades on this family of beetles, and I think that although tiger beetles have their merits, the other groups show an extraordinary diversity of behavior: read about *Brachinus*, *Lebia*, *Pheropsophus*, *Platynus*, and *Scarites* in upcoming volumes, and *Nebria* and *Scaphinotus* in this volume, to begin to understand this diversity.

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