

The author also includes a short biography of Linnaeus (Chapter 2), as well as a summary of the herbaria that serve as repositories for specimens that he used (Chapter 5). Chapter 6 presents an alphabetical list of the suppliers of material to Linnaeus. The bulk of this fantastic book (pages 247–934) comprises the listing of Linnaean plant names and their types.

Jarvis has accomplished a Herculean task in this magnificent book, which has seen its birth on the tercentenary of Linnaeus's birthday. This volume showcases the stepwise increase in knowledge through time, which serves as evidence that scientists are no different than ants holding high the concept of serving the colony, in this case, science. *Order Out of Chaos* is a rare combination of art, science, botanical sleuthing, and elegant writing. It is the perfect book.

FERNANDO E VEGA, *Silver Spring, Maryland*



#### ANIMAL SCIENCES

##### HARVESTMEN: THE BIOLOGY OF OPILIONES.

*Edited by Ricardo Pinto-da-Rocha, Glauco Machado, and Gonzalo Giribet. Cambridge (Massachusetts): Harvard University Press. \$125.00. x + 597 p; ill.; taxonomic and subject indexes. ISBN: 0-674-02343-9. 2007.*

The arachnid order Opiliones has a public relations problem. These animals are fairly conspicuous and familiar to people around the world, yet the group is neglected scientifically relative to its respectable species diversity of about 6000. The arachnids as a whole find awkward housing as “orphans” within the world’s university entomology departments, and even among arachnologists, the Opiliones are often given short shrift as an orphan group among orphan groups. They include no pests (unlike mites) and lack the allure of silk and venom that attracts so much attention to spiders and scorpions.

Thankfully, the editors have brought together most of the world’s harvestmen authorities to summarize what is known, and what is shockingly not known, about this group. What emerges is a picture of an underrated group, a taxon that is more diverse systematically, morphologically, ecologically, and behaviorally than most arachnologists probably suspect. What a coup for this taxon, which now has a summary volume that other arachnid groups would envy. Each of the 15 mainly multiauthored chapters contains surprising accounts of ways in which this group of arachnids differs from the oth-

ers. The landmark chapter on taxonomy will be particularly welcome to workers considering studying these animals. For the first time, the family-level diversity of this group is very clearly summarized, with keys, diagnostic characters, etymology, phylogenetic relationships, and plentiful scanning electron micrographs and illustrations, on a worldwide basis.

The result is a summary volume exceeding those of other arachnid orders in breadth and completeness. Massive amounts of information about many aspects of the biology of all known species are summarized in a series of tables, which contain a great deal of accessible information and yet are even more important for readily pointing out sometimes vast deficiencies in our knowledge. The text presents enough unanswered questions to provide an army of graduate students with research topics. By illuminating what makes Opiliones a distinctive taxon, the book sheds much light on the evolution and biology of arachnids as a whole, and anyone with an interest in Arachnida should acquire this work.

MICHAEL L DRANEY, *Natural & Applied Sciences and Cofrin Center for Biodiversity, University of Wisconsin, Green Bay, Wisconsin*

##### THE SAND WASPS: NATURAL HISTORY AND BEHAVIOR.

*By Howard E Evans and Kevin M O'Neill. Cambridge (Massachusetts): Harvard University Press. \$49.95. xix + 340 p; ill.; index. ISBN: 0-674-02462-1. 2007.*

This book represents an update to the late Evans's classic volume, which was admirably completed by O'Neill. An introductory chapter sets the stage by defining the taxa to be covered and describing their basic biology. Solitary wasps are fascinating animals that generally provision their young in underground burrows with paralyzed prey, and have long been valuable models for study. The next six chapters read like encyclopedias of information, covering each tribe of the sand wasps. The final chapter pulls together data on various species in a discussion of comparative ethology.

The volume summarizes a large literature that would be difficult for any single investigator to assemble, given the many obscure, scattered sources cited and the diversity of languages translated. Another value to researchers will be the cross-referencing of phenomena from diverse works, such as wing whir that occur in *Bembix* as well as *Sphecius*.

Although the encyclopedic portion is necessarily a bit repetitive, readers are compensated by frequent, entertaining summaries of wasp biology. The description of the vampire-like behavior of