BioOne COMPLETE

Ants of North America: A Guide to the Genera

Author: Deyrup, M.

Source: Florida Entomologist, 91(1) : 145

Published By: Florida Entomological Society

URL: https://doi.org/10.1653/0015-4040(2008)91[145:AONAAG]2.0.CO;2

BioOne Complete (complete.BioOne.org) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at www.bioone.org/terms-of-use.

Usage of BioOne Complete content is strictly limited to personal, educational, and non - commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

Downloaded From: https://complete.bioone.org/journals/Florida-Entomologist on 28 Mar 2024
Terms of Use: https://complete.bioone.org/terms-of-use

BOOK REVIEWS

FISHER, B. L., AND S. P. COVER. 2007. Ants of North America: A Guide to the Genera. University of California Press, Berkeley, CA. xiv + 194 pp. Paperback. $34.95. ISBN 978-0-520-25422-0.

The genesis of this book explains its content. It is the culmination of a rapidly-evolving lineage of manuals written by Brian Fisher and Stefan Cover for a succession of ant identification workshops at the Southwest Research Station in Arizona's Chiricahua Mountains. Selective pressure on character states of this lineage was exerted by frustrated or skeptical comments from course participants. "What is the 'shield wall' in front of the antennae that I'm supposed to be seeing in *Tetramorium*?" "How come this *Pheidole* keys out so easily to *Aphaenogaster*?" With patient, knowledgeable rewriting, and with abundant, high-quality illustrations, the authors have dealt with these legitimate problems, ignoring, of course, extraneous complaints, such as those about the size of ants. (Most ants are unexpectedly tiny. With respect to the Universe, so are we. Get over it.) If all our teaching materials reflected such a symbiotic relationship between highly motivated, critical students, and adaptive, expert instructors, America's education system would be the wonder of the World. Still, in my view, an exemplary guide to the genera of American ants is a great start.

The book is divided into two principal sections. The first, pp. 1-51, is a key to the genera, with the text interspersed with excellent illustrations by Ginny Kirsch and Jennifer Kane. The key is technical, loaded with terms seldom used outside of myrmecology, so the illustrations and glossary are particularly helpful. I believe these keys make accurate ant identification possible for any patient biologist with access to a good microscope. There is no way, however, to make the process convenient in every case. Counting teeth on the tightly clenched jaws of a minute ant, or determining whether its tibial spurs are simple or comb-like, or even counting the minuscule segments of its little antennae—such tasks are always going to be tough. This book is ant identification made possible, not made easy. The key also appears to be highly inclusive; that is, I have not thought of any aberrant species that do not key out with the other members of their genus. My only complaint about the key is that the book should have come with a brick to hold open the sturdily bound pages while I manipulated ant specimens under the microscope.

The second main section, pp. 54-153, is devoted to diagnostic remarks, natural history notes, and outstanding photographs (the latter created by April Nobile) for each genus. The diagnostic remarks are concise and sometimes entertaining. Those for *Discothyrea* begin, "Like nothing else in the solar system." One could read the rest of the diagnosis for *Discothyrea*, or key out a specimen, but once one has read that first sentence and marveled over the accompanying photographs, one has that genus memorized for life. For the naturalist starting out with ants, I would suggest first reading the section titled "Taxonomic Descriptions" and looking at the photographs. This could save some work with the keys. In this way, for example, when one comes to the part of the couplet leading to the genus *Pseudomyrmex*, one could bypass the couplet (with its annoying comb-like tibial spurs) because one would already know whether the specimen was a *Pseudomyrmex*. Some people (I don't know why) seem to feel this approach is cheating, but with such enormous numbers of species to deal with, entomologists should be allowed to do anything that works.

The natural history notes, while brief, include a remarkable amount of information, much of which appears nowhere else. In these notes, for example, we learn that there is still taxonomic confusion surrounding the small genus *Forelius*, with apparently misapplied names and a couple of undescribed species, and that the species occur in arid, open, habitats, out-forage other ants in the heat of the day, and make extensive use of trunk trails. This little blurb is a distillation of literature and experience that can be found nowhere else in discussions of North American *Forelius*. Any naturalist with a longstanding interest in ants will devour these notes like potato chips.

Ever since the ant workshop was started in Arizona, there have been 60-70 applicants for the 25 or so spots available. Will the excellence of the new ant guide obviate the need for a workshop? Probably not, because, as the authors state, this book is only "a down payment" on a grander enterprise: an overhaul of the complete ant fauna of North America. Moreover, the ant course also emphasizes field natural history and specimen preparation. Nevertheless, any naturalist who is, or might be, interested in ants should not wait around for a course but go out and order this book.

M. Deyrup
Archbold Biological Station
P.O. Box 2057
Lake Placid, FL 33852
e-mail: mdeyrup@archbold-station.org

Downloaded From: https://complete.bioone.org/journals/Florida-Entomologist on 28 Mar 2024
Terms of Use: https://complete.bioone.org/terms-of-use