

*Ants of North America—A Guide to the Genera*

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This new guide to the genera of ants north of Mexico, written by two tirelessly enthusiastic ant taxonomists, is a welcome addition to the taxonomic literature of this important group of insects. Formicidae currently contains >12,000 known species worldwide, and perhaps twice that many remain to be described. Of these, close to 1,000 species are temperate North American. The last attempt to present a comprehensive treatment of temperate North American ant genera was that of Creighton (1950), which in fact amounted to a systematic revision of the entire fauna. Creighton's work was revolutionary, in that it dispensed at last with the clumsy quadrinomial system that had plagued ant taxonomy theretofore. Until that point, almost every named North American ant was classified as a subspecies (and variety!) of a European ant species. Creighton brought ant taxonomy closer to the modern concepts by which we infer species boundaries, dispensing with the varietal rank, limiting subspecies to geographically, altitudinally, or ecologically definable entities, and elevating formerly taxonomically conspecific, infraspecific taxa that were sympatric and syntopic to the species level.

In the nearly 60 intervening years since Creighton's *magnum opus* was available, much has changed in the world of systematics, and the classification of ants at all levels has evolved (and continues to evolve) considerably. Even with the many advances in ant taxonomy since Creighton's book, it continues to be no easy matter for nonexperts to identify ants to the genus level, much less to species. As Seifert (2008) noted in his review of Fisher and Cover's book, ant taxonomists rarely use keys to identify ant genera (at least those of their own geographic area of expertise), having learned to recognize them on sight through experience. This pocket size guide to North American ant genera goes a distance toward making genus identification tractable for non-myrmecologists who study North American ants. The keys have been developed and tested over the years by several generations of students of the Ant Course, held in southeastern Arizona since 2000, and of which the authors are the founders and organizers. The keys are clearly written and illustrated with excellent line drawings of diagnostic features, these placed in convenient proximity to the referent key couplets.

The illustrated keys alone might constitute a useful publication, but Fisher and Cover have gone much further. All genera, and in some cases major species groups (subgenera, if you will, but these as formal entities are out of fashion among American ant taxonomists), are treated in an annotated list

that contains diagnostic remarks and major points of their natural history and geographic distribution. Each of these annotations is accompanied by face view and lateral, automontage images of a representative species. Sadly, these small reproductions of the high-resolution images from antweb.org seem more like low-resolution thumbnails and have rather washed out colors. Other useful features of the book are a working list of North American ant species, a glossary, a bibliography of taxonomic literature arranged by genus, and a list of general references.

Although I believe Fisher and Cover's book should be added to the library of any American biologist interested in whole ants, there some minor criticisms I can level at this first edition. First, although I am pleased to be among those acknowledged by name in the preface, I disparage the authors' designating those of us who contributed as the "Ant Mafia," a distasteful and inaccurate term that is in no way descriptive, even jokingly, of our contributions. Second, the work is quite nearly free of errors, but I found a couple of small inaccuracies, and there may be a few more I missed. For example, in contrast to their treatment of subgenera elsewhere in the book, Fisher and Cover use the formal subgenera of *Solenopsis*. These were long ago synonymized with convincing argumentation by Bolton (1987), to whom the authors, incidentally, dedicated the book! Also, authorship of *Formica biophilica* Trager in the working species list includes the three coauthors of the article in which it was described, rather than J. C. Trager alone, who authored the description, as indicated in the original paper (Trager et al. 2007). Last, I agree with Ward (2008) in his recent review of this book, that at a minimum, a useful feature Fisher and Cover might have included would be a section on collection and curation of specimens. All too many of the ant specimens I receive for identification are either poorly preserved, improperly mounted, or both.

Fisher and Cover state that this work is a "down payment" on a full treatment of the ant species of America north of Mexico. Nonetheless, with the reasonable price and evident utility of this current book, one should not wait for the full faunal treatment to get a start on correct identification of ant specimens. Buy this book and buy one for a needy student, too.

## References Cited

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