

BOOK REVIEW

Dondale, Charles D. & James H. Redner. 1990. **The Insects and Arachnids of Canada.** Part 17. The Wolf Spiders, Nurseryweb Spiders, and Lynx Spiders of Canada and Alaska (Araneae: Lycosidae, Pisauridae, and Oxyopidae). Agriculture Canada Publication No. 1856. 383 pages. (\$20.00 in Canada, \$24.00 elsewhere). Available from Canadian Government Publishing Centre, Supply and Services Canada, Ottawa, Canada K1A 0S9.

This, the third in a series of identification manuals for the spiders of Canada, treats the members of the superfamily Lycosoidea, which are recognized by the unique, grate-shaped form of the tapeta of the indirect eyes. Included are Lycosidae, with 14 genera and 107 species recorded or believed to occur in Canada, Pisauridae, with two genera and seven species, and Oxyopidae, with two species in the lone genus *Oxyopes*. The organization and format follow that of previous contributions (Dondale & Redner 1978; Dondale & Redner 1982). The introductory and anatomy sections are detailed, allowing this volume to "stand alone," and there is an extensive glossary. Methodology is admirably explicit. As with previous volumes, geographic scope is limited to Canada and Alaska, and toward this end even previously published figures were remounted and renumbered, and new maps made providing no new information but serving only to exclude the continental United States.

Descriptions are concise, and effective diagnoses are presented under "Comments." Biological information is provided wherever possible and, drawing on an extensive bibliography of 273 entries, is comprehensive. Illustrations are many (596 in all), including dorsal views of the carapace and abdomen for all genera. Male palpi are illustrated whole in ventral view and details of the terminal division are supplied; epigyna and vulvae are illustrated for females of all species. Representative illustrations are labelled so that the application of morphological terms is clear. The illustrations are excellent for species identification and more than adequate for those who wish a source of data on the genital morphology of the taxa involved. Many figures are provided

with unlabelled arrows, which presumably point out important features discussed in the text. New keys are provided, in both official languages of Canada, to genera within families and species within genera. Keys are detailed with numerous references to figures, and work well. In some cases (e.g., *Pardosa*, *Pirata*), the new keys are a great improvement. Given the rather strict geographic demarcation of the work, utility of the keys except in the immediate vicinity of Canada and Alaska will probably be limited.

There are some minor nomenclatural problems. *Hogna* and *Varacosa*, both previously considered junior synonyms (the former of *Lycosa* and the latter of *Trochosa*: Platnick 1989), are treated as valid, though no discussions of their new status are provided. How is *Hogna* to be diagnosed from the European *Lycosa*, and what are their relationships? What happened to *Rabidosia*, which was still a valid genus at last look (Platnick 1989)? But these are technical points reflecting validity (a scientific decision), which is beyond the scope of an identification manual, and as an identification manual this work succeeds admirably.

A review of a work of this nature would be incomplete without consideration of the pros and cons of such regional faunal studies. More to the point, in view of the American Arachnological Society's endorsement of the proposal for a biotic survey of the United States (Kosztarab 1988), a proposal that is slowly but inexorably making its way toward realization, all readers of the Journal of Arachnology should take time to consider whether the scarce resources available for systematic biology are best utilized to produce regional "faunas" of this kind. Whereas stated benefits of regional surveys (e.g., Kosztarab 1988) run the gamut from providing baseline data necessary for monitoring environmental quality to enhancing national security (!), three arguments state the case forcefully: 1. they provide widely available keys and means for identification that are useful to land-use planners and biologists of all persuasions, specialists and novices alike; 2. insofar as they accurately reflect the taxonomy and distribution of species treated, they offer a baseline for monitoring environmental changes, and may provide data on endemism and poten-

tial endangered status; and 3. regional emphasis leads to decentralization, which appeals to legislators and makes such studies potentially fundable (pork barrel systematics). These are not arguments to be dismissed lightly! On the other hand, arguments against the regional approach are many (see especially Liebherr 1989; Pakaluk & Wahl 1989). Regional studies generally offer an incomplete treatment of natural groups or areas; and distributional data, while accurate for the region treated, may not reflect the whole picture. Students participating in such studies are often ill-prepared to compete for jobs, grants, and tenure. Resources are focussed on countries relatively rich in money (and poor in biodiversity) while monetarily poor (and diversity-rich) countries are neglected. Finally, regional studies perpetuate the stereotype that systematics consists largely of naming species, rather than its more important contribution of a phylogenetic context within which comparative biology becomes meaningful, and they divert scarce resources from the latter pursuit.

In many ways this work represents a "best case" scenario for a regional study. Dondale and Redner have published six up-to-date monographs of North American Lycosidae which, when added to Brady's work on lycosids and oxyopids and Carico's work on pisaurids, provides the sound monographic taxonomy necessary to underpin such a regional study. The first author has also produced an exemplary study of lycosid higher classification (Dondale 1986). In view of the quality and scope of that monographic work, one may lament that Agriculture Canada BRC has mandated that their researchers contribute to this national series, and reflect that the considerable talents and resources herein displayed might have been better utilized to finish monographing the Lycosidae of North America rather than to prepare this handsome but largely redundant volume.

Needless to say, as an identification manual this work is superior, and it will be indispensable to any student of the terrestrial arthropods of Canada and Alaska who has no access to the primary literature.

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