

BOOK REVIEW

KARJALAINEN S. & HÄMÄLÄINEN M. 2013: DEMOISELLE DAMSELFLIES: WINGED JEWELS OF SILVERY STREAMS. Caloptera, Helsinki, 223 pp. (bilingual, Finnish and English). ISBN 978-952-93-1045-6. Price EUR 36.00 (hardcover).

Odonata is a complex and large group of insects that inhabit a diversity of freshwater ecosystems. There has been an increase in the interest in odonatology, the study of Odonata, over the last fifty years, which resulted in a huge literature describing the biology, ecology, and behaviour of several species from different biogeographical regions. One of the most beautiful and spectacular odonates are the Calopterygidae. Representatives of this small group of about 112 species worldwide have one of the most complex reproductive behaviours of all insects.

This book provides a comprehensive overview of all aspects of the biology, behaviour and ecology of Calopterygidae based on 169 references, 102 species and 185 high quality pictures, which are used to illustrate the text that is in both Finnish and English. The book consists of 21 small sections (excluding the introduction and references), which can be divided into three main parts. The first (pp. 20–110) introduces us to the calopterygids in terms of their morphology, preferred habitats and life cycle including all stages, i.e., egg, larva and adult. Even if the reader is not familiar with Odonata, the latter sections of this book are relevant to all damselflies and endophytic dragonflies. In addition, adult habits are described in more detail with special references to the reproductive behaviour in terms of territoriality, courtship, copulation, sperm competition and oviposition. All these behavioral sequences highlight the complexity of the displays and movements that mature males carry out in order to obtain access to females and increase their reproductive success. Strategies of females for choosing high-quality males and

avoiding harassment from males are also given and supported with references. In addition, examples of potential natural enemies, like predators and parasites, and occurrence of adult polymorphism are presented and illustrated with explicit examples. The second part (pp. 110–207), which I consider to be the most important, contains summaries of the distributions, ecology, and aspects of the biology and behaviour of several European and Asian species. All worldwide genera are briefly described in a separate section followed by an overview of three closely related families, namely Hetaeriniidae, Chlorocyphidae and Euphaeidae. A list of the 112 currently known species distributed across 17 genera is also presented. Unfortunately, this part does not contain information on how species or genera can be identified. Even though species of Calopterygidae, especially males, can easily be recognized, a small identification key to genera would have been useful. The final, smallest and concluding part of this book (pp. 208–215) examines the historical and cultural importance of these insects to human society and the recent catastrophic effect of the latter on their natural habitat.

As a person passionate about Calopterygidae, I found this book interesting as it provides information and illustrations of a hundred species from around the world, in addition to the five well known western Palearctic species. In summary, although this book is not a technical one I recommend it not only to odonatologists but also to other entomologists, amateur naturalists and photographers. In addition, it is a very useful source of information on the global diversity of Calopterygidae, which will undoubtedly increase the interest in these natural beauties and stimulate people to protect their habitats.

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