

## BOOK REVIEW

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SERVICE M.W.: MOSQUITO ECOLOGY. FIELD SAMPLING METHODS. Elsevier Science Publishers Ltd., London & New York, 1993, 988 pp. ISBN 1-85166-798-9.

A large amount of new data from field studies on mosquitoes has accumulated since the first edition of Service's review book of mosquito sampling methods was published 17 years ago. Most authors of this extended literature are working in practical mosquito control, focused on the methods of sampling of various developmental stages of mosquitoes as well as the methods of population growth analysis. Recently, pure ecologists are using mosquitoes as model species in the study of insect population dynamics and behaviour.

The author, working in the Liverpool School of Tropical Medicine, provides a critical, as well as explanatory, review of both theoretical and practical papers, with important new information pinpointed and more complicated mathematical models explained to those with no penchant for the mathematics. Thus, detailed information on sampling methods, trap construction, and analyses is made available to a reader with no need of resorting to the original literature.

The book is divided to chapters upon the sampling of eggs and larvae in water and the sampling of adults, either emerging, resting, or searching for food, by means of non-attractant traps, animal-baited traps, carbon dioxide traps, light-traps, or visual attraction and sound traps. Information on the measurement of population size (or density), mortality, and adult dispersal by mark-recapture techniques follows. Finally, a chapter describing the computation of indices of species diversity and species association and a chapter referencing more general literature unrelated to previous chapters are included. Orientation within this comprehensive book is facilitated by author, mosquito species, and subject indices.

Owing to the generality of the author's interest and his ability to describe complex techniques clearly, the book is a useful guide for students and scientists interested in the study of population structure and dynamics, not only in mosquitoes or other blood-sucking insects, but in a wide variety of invertebrate taxa. I should have entitled this book "Field Ecological Methods: Examples using Mosquitoes" but, hopefully, it will be disseminated among many ecologists.

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