BOOK REVIEW

Mosquito Ecology. Field Sampling Methods. M. W. Service. Published in the U.S.A. and Canada by Halsted Press, A Division of John Wiley & Sons, Inc., New York. c Applied Science Publishers Ltd., Ripple Road, Barking Essex, England. 1976. 583 p., 23 tables, 75 illus. $75.00. As the title suggests this volume covers field sampling methods for mosquitoes with information added relating to ecology, life history and population dynamics. It is an excellent and comprehensive review which must have required considerable effort. The volume is divided into 11 chapters. Four deal specifically with sampling methods for the various life stages of mosquitoes—Chapter 1, eggs; 2, larvae; 3, resting adults; and 7, emerging adults. Three deal with the types of trapping systems used—Chapter 4, adults with non-attractant traps; 5, adults, with animals as bait; and 6, carbon dioxide, light, visual and sound traps. The last 4 chapters deal with special subjects: Chapter 8, experimental hut techniques for insecticide evaluations; 9, mark-recapture methods and dispersal; 10, immature and adult mortality; and 11, association and diversity between species.

This volume of 583 pages is not light and entertaining reading. It will serve as an excellent reference work for mosquito researchers and control operators. It includes not only a subject index, but also an author index and a species index. The extent of the coverage provided is best indicated by these indexes. The species index includes 204 species in 16 genera including Aedes (61); Anopheles (63); Armiger (1); Culex (44); Culiseta (7); Deinocerites (1); Eratmapodites (1); Haemagogus (1); Mansonia (11); Mimomyia (1); Arthropodomyia (1); Psorophora (4); Sabethes (1); Toxorhynchites (2); Uranotaenia (3) and Wyeomyia (2). The author index includes 1,416 names of senior and junior authors involved in a total of 1,636 referenced articles or publications. The book covers results throughout the world.

Service describes in detail a multitude of sampling techniques for a variety of species, stages and ecological habitats. He points out advantages and limitations and, in some cases, provides methods of data analysis. He goes into considerable detail in the chapters on mark-recapture, mortality, species association, and evaluation of insecticides applied to huts.

Although the book is too expensive for most individuals, it should be available to mosquito workers as a reference to provide a wealth of detailed information on mosquito sampling techniques, biology, ecology, life history, population dynamics, and other related information. Researchers and control specialists will find the book an excellent reference source when designing experiments or new survey techniques. With a subject matter as complex as this one, all of the answers to specific needs and problems may not be readily available, but this volume provides a wealth of background information.

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