

BOOK REVIEW

CAREY J.R.: APPLIED DEMOGRAPHY FOR BIOLOGISTS WITH SPECIAL EMPHASIS TO INSECTS. Oxford University Press, New York, Oxford, 1993, 206 pp. ISBN 0-19-50-6687-1.

Demography is an important part of any population ecological research. Many demographic examples are included in various texts on population ecology. However, the book under review presents a comprehensive review of concepts, methods and models of demography, presented in a manner understandable to any biologist. The book contains many examples, where the reader can follow step by step the calculations – probably the best way to understand the particular methods.

The author himself is an entomologist, and has corroborated probably the largest life table for any non-human species, constructed on his experience with more than 1.2 million medfly adults. Thanks to this, working examples in the book are based on real and valuable data sets.

The book contains six chapters and, in the first, basic concepts are introduced. The second chapter is devoted to life tables, the third to reproduction, the fourth and the fifth to modelling of population processes and the sixth to demographic applications. Each chapter is followed by relevant

bibliography. The chapters are followed by three extensive appendices, where the thorough analysis (life tables etc.) of 1.2 million of medflies is presented.

There are very few errors in formulas, for example on p. 37, the formula for variance of proportion should be $p(1-p)/n$ instead of $np(1-p)$; nevertheless, the result of the example is correct. Further, there is an error in formula for variance owing to environmental stochasticity on p. 114.

The demography is an important part of population biology. As it includes many, often tedious, calculations, many field biologists are not willing to attempt these analyses. This book presents a basic account of the discipline and is written in a very understandable manner and it can be recommended thoroughly as a textbook for courses of demography for field biologists, in general, and for entomologists, in particular. For those, who have been through their university courses many years ago, but now face some problems connected with population biology and demography, the book is an invaluable tool for the understanding of many issues in the field, even in circumstances, where the reader has forgotten good deal of his courses in basic mathematics.

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