



## BOOK REVIEW

INSECT ECOLOGY. Peter W. Price. 1975. John Wiley and Sons, New York. 514 p. \$15.95. This is the first book in 21 years to attempt a comprehensive treatment of insect ecology. Unlike its 2 predecessors—Chapman's *Animal Ecology with Especial Reference to Insects* (1931) and Andrewartha and Birch's *The Distribution and Abundance of Animals* (1954)—this volume's title proclaims that insect ecology is finally subject enough to permit book-length treatment on its own merits.

The reader need go no farther than the table of contents, however, to discover that Price correctly views insect ecology as a subdiscipline of (bio-)ecology. Indeed he has included a chapter on nearly every current enthusiasm of general ecologists—for example, Coevolution of Plants and Herbivores, Strategies in Reproduction, Species Packing, Diversity and Stability. There are 17 other chapters, with the only topics that are conspicuously absent being the ecological aspects of specific physical factors, such as temperature, moisture, and light.

The most impressive features of this book are its scope and its currentness. It cites a staggering number of mostly recent references—over 1,000, approximately half of which are from the past 10 years. The coverage is undiminished through 1973 and into 1974.

Price has arranged his material in 21 chapters of approximately 20 pages each. He precedes each chapter with an outline that identifies the important aspects discussed. He generally gives his topics historical perspective and then launches into a review of ideas and research findings of recent authors. His explanations are often superficial: the reader must refer to the original literature to understand many of the topics that Price introduces. Price does not criticize the ideas of others nor does he attempt to fit them into some organized scheme of his own. He presents a smorgasbord rather than a carefully planned meal.

There are next to no typographical errors nor botched citations, and I detected no wrong or missing bibliographic entries. The illustrations are mostly graphs redrawn from the original papers for this book; they are abundant and helpful. Most errors in content are omissions (I challenge anyone to understand Fig. 15.6 from only what Price has to say about it) but on p. 81 Nicholson and Bailey's "area of discovery" is wrongly defined, and on p. 207 Price presents a graph that misrepresents the data in the paper it cites.

A promise of a modern evolutionary framework goes unfulfilled. On p. 2 Price notes that the reproducing individual is the primary unit of natural selection but subsequently he again and again makes no effort to explain or avoid statements that imply the contrary. For example (p. 144), "a female that produces females contributes more to subsequent population growth than does a female that produces males," and (p. 193) "the best strategy in this situation is for the population to maintain a relatively high magnitude of dispersal at all density levels."

Although *Insect Ecology* has some short-comings, it is remarkably comprehensive and up-to-date. Every entomologist should become familiar with it and can get valuable new ideas from reading it.

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