

Insect Ecology: Behavior, Populations and Communities

By Peter W. Price, Robert F. Denno, Micky D. Eubanks, Deborah L. Finke, and I. Kaplan. 2011. Cambridge University Press, 32 Avenue of the Americas, New York, New York 10013-2473 USA. 801 pages. 87.00 CAD, Paper, 168.00 CAD. Cloth.

In the age of electronic books and tablet-designed texts, there is something to be said for the feeling of picking up a hefty new (or used) textbook at the beginning of an undergraduate course. The intriguing cover art, the long list of authors and the impressive table of contents all add to the experience of diving into a new subject in a truly immersive fashion. Unlike many textbooks, *Insect Ecology* by Price *et al.* is not a barely indistinguishable “new” edition. While three editions of *Insect Ecology* were published between 1975 and 1997, this is a complete rewrite with new figures and new subject areas included. In the introduction, the authors make it clear that the book is constructed as a textbook. The subject matter is carefully arranged to suit a course with fifteen weeks of lectures. The approach is an inductive one, moving from individual insect behavior, through population and community ecology, to global patterns of insect diversity.

The book, itself, is well-constructed and impressive. Text layouts are clear and easy to follow. Summaries, study questions, and further reading lists are provided at the end of each section. Separate author, subject, and taxonomic indices are extremely helpful as is the complete reference list. Figures are ample and informative, but are almost all black and white and sometimes of less-than-ideal quality. A link is provided to access electronic versions of all figures. Undoubtedly, this approach to the figures was employed to keep down the already considerable cost of the book; a move surely appreciated by cash-strapped undergraduates.

Despite the demonstrated high quality of this text-

book, the question remains — is this a course in which you would want to enroll? The authors of *Insect Ecology* make a convincing argument that members of the class Insecta represent the best organisms for the study of ecology. Insects inhabited the terrestrial environment for a full 20-25 million years before vertebrates emerged from the water. Flying insects were the only inhabitants of the aerial realms for over 150 million years. Insects inhabit an incredible breadth of ecological niches, from freshwater to deserts to hot springs to within other organisms. It is this ancient and diverse ecology, in the authors’ opinion, that makes insects such ideal examples of ecological principles. Knowledge of insect ecology also serves to inform any number of other areas of study as well. Insects function as vectors of human and animal disease, pollinators and pests of crops, and vital elements of practically every food chain on Earth. Studying their individual behaviours, species interactions, and global patterns of diversity can help us to better understand our complex relationships with our insect neighbours.

As assigned reading for an advanced undergraduate course, *Insect Ecology* is well worth the trip to the campus bookstore. It is also likely to be the sort of textbook you keep on the shelf for regular future reference. This book is also recommended for those who wish to assign themselves fifteen weeks of reading as a means to brush up on their own knowledge of the invertebrate world.

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