

FUNCTIONAL DYNAMICS OF PHYTOPHAGOUS INSECTS.

Edited by T. N. Ananthakrishnan. Science Publishers, Lebanon (New Hampshire). \$79.00. viii + 304 p.; ill.; general, insect species, and plant species indexes. ISBN: 1-886106-01-0. 1994.

It is hard to tell exactly why this book was published or what exactly functional dynamics means. There are eleven chapters on diverse topics, relating in some general sense to insect herbivores. Two chapters address phytochemicals, one chapter deals with physiology of moths, another with plant chemicals that act together in stimulating moth oviposition; two chapters are on cotton pests, two on plant interactions with insect parasitoids and predators, and one chapter each on carnivory in herbivores, some gall-forming insects, and aspects of host specificity in a *Drosophila* species.

Among this assortment there is great diversity in quality or usefulness of the offerings, but most suffer from lack of critical use of the literature, and obvious lack of critical editing. The overall absence of focus in the book presumably had an effect on the individual chapters. The majority of chapters seem to deal with personal approaches and emphasize work from the authors' own laboratories. Some attempt to present controversial hypotheses as fact, or deal with topics that are more thoroughly reviewed elsewhere. Some chapters are useful, however, and present some new work or thoughtful comparisons, but overall the book cannot be recommended. In addition, spelling and grammatical errors abound, and the indexes are quite inadequate.

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BACULOVIRUS EXPRESSION SYSTEMS AND BIOPESTICIDES.

Edited by Michael L. Shuler, H. Alan Wood, Robert R. Granados, and Daniel A. Hammer. Wiley-Liss, New York. \$85.00. x + 259 p.; ill.; index. ISBN: 0-471-06580-3. 1995.

LIZARD ECOLOGY: HISTORICAL AND EXPERIMENTAL PERSPECTIVES.

Edited by Laurie J. Vitt and Eric R. Pianka. Princeton University Press, Princeton (New Jersey). \$39.50. xii + 403 p.; ill.; author and species indexes. ISBN: 0-691-03649-7. 1994.

The third in an unofficial series resulting from independent symposia on lizard ecology, this book continues the tradition of its predecessors admirably. The book is divided into four parts devoted to reproductive, behavioral, evolutionary and population and community ecology. Each section is introduced by an established lizard ecologist (or "pio-

neer" as they are described in the introduction) who helps to tie together the three or four chapters that follow and put them into a broader context.

As the subtitle suggests, the focus of this volume is primarily experimental, unlike the previous two where reviews dominated. The current popularity of phylogenetic comparative techniques is also reflected in the subtitle and the majority of the remaining chapters make use of these "historical" techniques. The success of these latter chapters varies, depending primarily upon the strength of the data sets and phylogenies upon which they are based. As pointed out by the editors in their introduction, one of the problems faced by lizard ecologists is the lack of even minimal data on most species. However, long-term studies of lizards do exist, an extraordinary example being Mike Bull's work on Australia's sleepy lizards. Over a decade of research has allowed Bull to get at the heart of their private lives, and his chapter reveals that they show year-to-year monogamy.

Lizard ecology may be a young discipline compared to that of other groups, but, as the section on reproductive ecology shows, it is not lacking in vigor. The introduction by Art Dunham highlights the healthy disagreement and "diversity of opinions" that exist among researchers investigating life history evolution in lizards, and the chapters that follow reflect this diversity. They include comprehensive reviews of past work and descriptions of new and innovative experimental techniques, and each chapter opens up a huge vista of opportunities for future investigation of lizard life histories.

This book is not only a must for new students, giving them a thorough overview of what and where the different branches of lizard ecology are, but is also highly recommended for more established lizard ecologists, who will gain insights into areas of lizard ecology other than their own. Researchers from other disciplines may also find this work interesting, and it may serve to convert a few to the oft-repeated philosophy that lizards are indeed "model" organisms for ecological research.

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SEXUAL SELECTION AND THE BARN SWALLOW. *Oxford Series in Ecology and Evolution.*

By Anders Pape Møller; illustrated by Jens Gregersen; Series Editors: Robert M. May and Paul H. Harvey. Oxford University Press, Oxford and New York. \$49.95 (hardcover); \$24.95 (paper). x + 365 p.; ill.; author and subject indexes. ISBN: 0-19-854029-9 (hc); 0-19-854028-0 (pb). 1994.

For those of us actively engaged in research programs in behavioral ecology and trying to stay abreast of the literature, there are no two greater sources of