Goannas: The Biology of Varanid Lizard by Dennis King; Brian Green
Review by: Keith Christian
The Quarterly Review of Biology, Vol. 75, No. 3 (Sep., 2000), p. 331
Published by: The University of Chicago Press
Stable URL: http://www.jstor.org/stable/2665245
Accessed: 30/10/2013 22:44

thorough without being exhaustive, allowing interested readers to pursue details on specific records, taxonomic issues, and general biology.

Bull's Birds of New York State fills an important niche for serious birders or ornithologists in the Northeast. Bull's original version has spawned a number of similar state bird books in recent years, but this update arguably stands as the most comprehensive and informative. Other states would do well to follow this model.

CHRISTOPHER RIMMER, *Conservation Biology, Vermont Institute of Natural Science, Woodstock, Vermont*

GOANNAS: THE BIOLOGY OF VARANID LIZARDS. *Second Edition. Australian Natural History Series.*

By Dennis King and Brian Green; illustrated by Frank Knight, Keith Newgrain, and Jo Eberhard. Sydney (Australia): University of New South Wales Press. RRP $29.95 (paper). vi + 116 p + 21 pl; ill.; index. ISBN: 0-86840-456-X. 1999.

This series is intended for readers with a general, but serious, interest in natural history, and students at the secondary and university levels. The authors have done an excellent job of distilling the primary literature into a form appropriate for this audience. Some herpetologists may be left wishing for more details, but the series description is unambiguous. Although the Suggested Reading list is adequate, it is not exhaustive. Perhaps a more comprehensive list may have been a way to serve a wider audience without compromising the aims of the series.

Concepts (such as thermoregulation) and techniques (such as the use of doubly labeled water to measure field metabolic rates) are presented appropriately for students and general readers. One exception is the description of electrophoresis as a tool for determining phylogeny. The description lacks reference to the underlying mechanisms, and uninitiated readers are no wiser for having read it.

The book is generally well written, but there is some repetition. The few typographical errors were mostly associated with tables and figures. The only major problem, however, is with Figure 8.4, in which the information in the key cannot be reconciled with the bars in the figure. Semiaquatic species of varanids have mean activity body temperatures that are cooler than those of terrestrial species. The lower body temperatures are attributed to the animals entering the water and spending less time basking. At least for *Varanus mertensi*, this explanation is not consistent with available information. These lizards spend most of the day out of the water, and they could easily achieve higher body temperatures. Furthermore, the data in Table 6.4 show that the semiaquatic varanids also select relatively low body temperatures in laboratory thermal gradients without the presence of water. The significance of the fact that semiaquatic species behaviorally select lower body temperatures is not known, but it makes the group even more interesting. Some writers have overstated the uniqueness of varanids, but King and Green have done a good job of pointing out what is different about varanids in a credible way by describing their characteristics in a broader reptilian context. The uniqueness of varanids is slightly exaggerated in sections dealing with aerobic metabolism (some whiptail lizards have similarly high aerobic capacities) and the extent to which varanids can protrude their tongues (chameleons are the real champions).

The color plates are used successfully to illustrate points discussed in the text, and they are a nice bonus in a relatively inexpensive book. Although not encyclopedic, this well-written book provides a good overview for general readers, and an excellent starting point for interested students.

KEITH CHRISTIAN, *Biological & Environmental Sciences, Northern Territory University, Darwin, Northern Territory, Australia*

ANNUAL REVIEW OF ENTOMOLOGY. *Volume 45: 2000. Edited by May R Berenbaum, Ring T Cardé, and Gene E Robinson. Palo Alto (California): Annual Reviews.* $140.00. xi + 832 p + 4 pl; ill.; subject index and cumulative indexes (contributing authors and chapter titles, Volumes 36–45). ISBN: 0-8243-0145-5. 2000.

ZOOLOGICAL CATALOGUE OF AUSTRALIA. *Volume 30.1: Diptera: Nematocera. Australian Biological Resources Study.*

By E-M A Bugledich; Volume Editors: A Wells and W W K Houston. Collingwood (Australia): CSIRO Publishing. $120.00. xiii + 627 p; ill.; taxonomic and common name indexes. ISBN: 0-643-06489-3. 1999.

This volume is part of the ongoing *Zoological Catalogue of Australia* and treats the Nematocera, a speciose suborder of primitive flies. The medical and ecological importance of this great assemblage cannot be overestimated, as it contains three families of biting flies, Culicidae (mosquitoes), Ceratopogonidae (the "no-see-ums" or biting midges), and Simuliidae (black flies), and five families whose sheer abundance reflects their importance in freshwater and terrestrial food webs, Chironomidae (midges), Sciaridae and Mycetophilidae (fungus gnats), Cecidomyiidae (gall midges), and Tipulidae (crane flies).

As is appropriate for taxonomic catalogs, Bugledich provides a conservative systematic treatment,