



Biology of the Reptilia. Volume 6: Morphology E.

Review Author[s]:
David B. Wake

The Quarterly Review of Biology, Vol. 53, No. 4 (Dec., 1978), 470.

Stable URL:

<http://links.jstor.org/sici?sici=0033-5770%28197812%2953%3A4%3C470%3ABOTRV6%3E2.0.CO%3B2-Q>

The Quarterly Review of Biology is currently published by The University of Chicago Press.

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at <http://www.jstor.org/about/terms.html>. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at <http://www.jstor.org/journals/ucpress.html>.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is an independent not-for-profit organization dedicated to creating and preserving a digital archive of scholarly journals. For more information regarding JSTOR, please contact jstor-info@umich.edu.

out by the author, and physiological sections have been revised and extended by I. W. Henderson.] 1977.

HANDBOOK OF FRESHWATER FISHERY BIOLOGY. *Volume 2: Life History Data on Centrarchid Fishes of the United States and Canada. A Publication of the Iowa Cooperative Fishery Research Unit, sponsored by the Iowa State Conservation Commission, the Fish and Wildlife Service (U.S. Dept. of Interior), and the Iowa Agricultural and Home Economics Experiment Station, Iowa State University.*

By Kenneth D. Carlander. The Iowa State University Press, Ames. \$18.00. vii + 431 p.; ill.; author and subject indexes. 1977.

This is the second of a projected three-volume revision of the author's 1953 *Handbook of Freshwater Fishery Biology*. Volume 1 appeared in 1969 (same publisher, \$15.00) and Volume 3 will hopefully appear by 1981. This volume contains life-history data on centrarchid fishes of the United States and Canada (Vol. 1 excluded the Perciformes, and Vol. 3 is to include the remaining families of this large order). The wealth of information that has appeared on this important group of food and game fishes is compiled from the scattered North American literature (including unpublished reports). Included are data on age and rate of growth, length conversions, weight-length relationships, condition factors, age at maturity and spawning, behavior, food habits, population estimates, and other life-history information. Where known, chromosome numbers are cited; 18 pages are devoted to hybrids. Literature citations take up 72 pages, with coverage up to mid-1975. Complete coverage of the subject area is not claimed, but the new volumes include several phases of life-history data not covered in the earlier editions.

The ichthyologist and fishery biologist and others working in fish conservation owe a debt of gratitude to Prof. Carlander for the tedious work necessary to the preparation of these very useful volumes.

ROBERT RUSH MILLER, *Museum of Zoology, The University of Michigan, Ann Arbor*

BIOLOGY OF THE REPTILIA. *Volume 6: Morphology E.*

Edited by Carl Gans; Coeditor: Thomas S. Parsons. Academic Press, London and New York. \$36.00. xiii + 505 p.; ill.; author and subject indexes. 1977.

This volume includes four papers, one of which is a review and three of which contain appreciable amounts of unpublished data. Harold Fox presents a scholarly review (gleaned from over 800 literature sources) of the morphology (as well as pertinent aspects of the embryology, physiology, and physiological ecology) of the reptilian urinogenital system. This is a very direct treatment featuring much critical analysis of the literature. Specific aspects of published work are treated analytically, and areas where more

work is needed are identified. Much current research, especially that which is endocrinological in approach, centers on the reptilian urinogenital system, and it is unfortunate that no references past 1975 could be used.

All of the other papers feature a descriptive comparative anatomical approach. All are presented in a review format, with little discussion, but all have large amounts of new information.

Parsons and Cameron deal with the internal relief of the digestive tract. There has been little work on this topic, and the authors challenge the main interpretations of the dominant worker of the past (Jacobshagen), without offering any new synthesis. The chapter seems to have been included only for the sake of completeness.

Luppa reviews histology and histochemistry of the digestive tract without reference to the preceding paper and with no attempt at correlation. In contrast to many other studies of modern reptiles, Luppa finds a number of points of general similarity among taxa, but also many inexplicable differences.

Ottaviani and Tazzi review the lymphatic system in exhaustive detail. Original information is provided for all major groups except rhynchocephalians. Emphasis is on description, with very little analysis.

While upholding the standard of quality for production and editing characteristic of this series (for example, current taxonomy is used as much as possible), this volume has less general appeal than some of the earlier ones. There seems to be a determination to prepare reviews of areas that warrant none, whereas the analytical summaries that would be of great value are absent from reviews that often exceed 100 pages in length. Nonetheless, the editors are to be congratulated for persevering with this ambitious and generally worthwhile project.

DAVID B. WAKE, *Museum of Vertebrate Zoology, University of California, Berkeley*

HANDBOOK OF THE BIRDS OF EUROPE, THE MIDDLE EAST AND NORTH AFRICA: THE BIRDS OF THE WESTERN PALEARCTIC. *Volume 1: Ostrich to Ducks.*

Chief Editor: Stanley Cramp. Oxford University Press, Oxford and New York. \$55.00. vii + 722 p. + 40 pl.; ill.; scientific, English, French, and German names indexes. 1977.

Witherby's famous *Handbook of British Birds*, the first edition of which was published in 1924, started a successful tradition and has resulted in the publication of several series of handbooks covering other parts of the world. Even though a new edition was published between 1938 and 1941, avian research has been so active in the last 35 years that a completely revised edition has again become necessary. This time the editors decided to cover the entire Western Palearctic region, requiring the inclusion of about twice as many species (141 vs 86). This first volume,