

result of a symposium at the 2005 American Fisheries Society meeting, includes nine chapters on this topic. Like all symposia, the coverage is a bit uneven, but this problem is ameliorated because so many of the papers have multiple authors from different institutions, and several of the authors contributed to more than one article. Indeed, the nine papers list 76 authors, representing 38 different individuals, and six scientists contributed to at least four papers. In addition, the authors clearly went to considerable effort to standardize their methods as much as possible and to consider methodological differences that occurred so that patterns would not be biased by artifacts of the sampling gear.

The book includes chapters on spatial distribution, migration patterns, diet, growth, mortality, the epipelagic community that salmon are part of, and infestations by parasitic copepods. These chapters provide a wealth of detail with many extensive and useful tables of data, and they emphasize contrasts over the North American range of salmon from California to Alaska, considering the current regimes and other features of the ocean that affect salmon. This volume will be essential reading for anyone working on salmon at sea; those working in freshwater habitats should also read it in order to better understand the ecology of young salmon in the ocean. The historical overview by Percy and McKinnell will be most interesting to readers who are not studying salmon, as it explains how our current knowledge developed around five key themes: population structure, migration patterns, the critical period concept, carrying capacity, and variability in the ocean itself. For each of these topics, early simplistic ideas have given way to deeper knowledge as investigations proceeded and hypotheses were tested, and this overview chapter is especially engaging.

THOMAS P. QUINN, *Aquatic & Fishery Sciences, University of Washington, Seattle, Washington*

THE ALLIGATOR SNAPPING TURTLE: BIOLOGY AND CONSERVATION. *Reprint Edition.*

By Peter C. H. Pritchard. *Malabar (Florida): Krieger Publishing.* \$42.00 (paper). xi + 140 p.; ill.; index. ISBN: 1-57524-275-3. [Originally published by the Milwaukee Public Library, Milwaukee (Wisconsin), 1989.] 2006.

This book on the alligator snapping turtle, the largest species of freshwater turtle in North America, is a reprint and update of a volume that was previously published in 1989 with the same title. The new version is 36 pages longer as a consequence of new material, including citations on the species. With the advent of an emphasis on turtle conservation on a global scale, the book is timely

and will augment the limited information available on the ecology of what many consider a species that is threatened by a variety of human-related activities, including unsustainable commercial removal from natural aquatic habitats.

The volume provides an overview of the geographic range of alligator snappers, including state-by-state coverage of distribution patterns and concentrations. Sections on geographic variation in morphology and size include virtually all that is known about this poorly studied species of turtle. The sections on diet, reproduction, and movement patterns likewise offer all that is currently known about these aspects of alligator snapper life history and ecology. Overall and regional population status of the species is based mostly on personal interviews and perceptions because, as the author notes, research has been limited. In a conclusion section, Pritchard suggests future research priorities, especially in light of conservation considerations.

This volume will be well received by all turtle biologists, by most herpetologists, and by any wildlife manager or conservation biologist concerned with U.S. wetlands where this species occurs.

J. WHITFIELD GIBBONS, *Savannah River Ecology Laboratory, University of Georgia, Aiken, South Carolina*

TIMBER RATTLESNAKES IN VERMONT AND NEW YORK: BIOLOGY, HISTORY, AND THE FATE OF AN ENDANGERED SPECIES.

By Jon Furman. *Hanover (New Hampshire): University Press of New England.* \$24.95 (paper). xv + 207 p. + 11 pl.; ill.; index. ISBN: 978-1-58465-656-2. 2007.

MAMMALOLOGY: ADAPTATION, DIVERSITY, ECOLOGY. *Third Edition.*

By George A. Feldhammer, Lee C. Drickamer, Stephen H. Vessey, Joseph F. Merritt, and Carey Krajewski. *Baltimore (Maryland): Johns Hopkins University Press.* \$99.50. xiii + 643 p.; ill.; subject and scientific names indexes. ISBN: 978-0-8018-8695-9. 2007.

Keeping a textbook up to date in a rapidly progressing field of study is a never-ending task. This third edition updates the previous version (published in 2004) in response to recent major changes in the systematics and taxonomy of mammals. With the publication of the third edition of *Mammal Species of the World: A Taxonomic and Geographic Reference* (D. E. Wilson and D. M. Reeder, 2005. Baltimore (MD): Johns Hopkins University Press), the number of recognized species advanced from 4629 to 5416, and recent morpholog-

ical and molecular studies have changed the mammalian tree of life, resulting in 20 new families and five new orders recognized in this edition of *Mammalogy*.

The organization of the new edition is much the same as the second, with minor rearrangements. It has a stronger chapter on molecular techniques and the interpretation of molecular data, as well as updated presentations and discussions of the implications of new taxonomic findings. Among other updated sections, supported by hundreds of new citations, are descriptions of recently discovered fossils, a discussion of recent papers on locomotor behavior, advances in our understanding of diseases (such as AIDS and Lyme disease), and presentations of the vexing problems of wildlife conservation. The book concludes with three optimistic accounts concerning the conservation of Arabian Oryx, whales, and golden lion tamarins.

With 545 large-format pages of text supported by more than 3000 references, this edition is both a good buy for students and a challenge for instructors. Including all 29 chapters in a one-term course may be overwhelming. However, the coverage of the volume will provide students with an excellent survey of mammalian biology and the instructor can select chapters to emphasize. Readers should be alert to problems in the text, however. They range from identification problems, such as the misidentification of macaques (*Macaca sylvanus*) as baboons (*Papio*) in Figure 3.5, to simplistic descriptions, such as in the explanation of the significance of countershading, and misleading discussions, including the consideration of the thermal implications of white hair and the significance of blackbody radiation exchanges. However, such problems detract only slightly from the authoritativeness and usefulness of this publication.

RICHARD W. THORINGTON, JR., *Vertebrate Zoology, National Museum of Natural History, Smithsonian Institution, Washington, DC*

**A FRAGILE BALANCE: THE EXTRAORDINARY STORY OF AUSTRALIAN MARSUPIALS.**

*By Christopher Dickman and Rosemary Woodford Ganf; foreword by Tim Flannery. Chicago (Illinois): University of Chicago Press. \$65.00. x + 246 p.; ill.; index. ISBN: 978-0-226-14630-0. 2007.*

The author is one of the world's leading marsupialologists, and he draws deeply on his own three decades of research experience as he leads us through the evolution, systematics, ecology, ethology, natural history, and conservation of Australian marsupials. The style is friendly and personal, yet scholarly and authoritative. The current state of knowledge is presented with up-to-date research

and reviewed with a critical eye. Where there is controversy (such as the debate over the causes of Pleistocene extinctions), Dickman presents a balanced account, but makes his own views clear (especially in relation to government support for continued broadscale habitat destruction in Australia). The level is introductory, but certainly not dumbed-down: undergraduate biology students will get as much from this book as a keen natural history enthusiast. Professional biologists might prefer something with a more academic inclination, including in-text citations, although the book is still a superb all-round introduction for any researcher who wants to know more about marsupials. I found the encyclopedic species accounts at the end of the volume useful. I also liked the vignettes of selected species written by well-chosen experts; for example, Diana Fisher's synopsis of the Bridled Naitail Wallaby and its remarkable story of recovery from presumed extinction.

Notwithstanding the scholarly content, the large format and rich illustrations push this volume into coffee-table book territory. Rosemary Woodford Ganf's breathtaking portraits of marsupials have a kind of transcendent quality that almost suggests an inherent vulnerability, in corroboration of the book's title. Indeed, the issue of species declines and extinctions is a thread that runs through the entire volume. Australian marsupials have suffered (and continue to suffer) a sustained and heavy onslaught of threats as people have settled and modified their continent. If this book helps to bring their extraordinary story as well as their current plight to a wider audience, it will be a worthwhile achievement.

MARCEL CARDILLO, *School of Botany & Zoology, Australian National University, Canberra, Australia*

**PLATYPUS. Fourth Edition. Australian Natural History Series.**

*By Tom Grant; illustrated by Dominic Fanning. Victoria (Australia): CSIRO Publishing. AU\$39.95 (paper). viii + 159 p.; ill.; index. ISBN: 978-0-643-09370-6. 2007.*

When the first platypus specimens arrived in European museums near the end of the 19th century, they were suspected to be some sort of fake. The combination of a beaver-like body with chicken-like spurs on its feet and a duck-like bill on its face seemed too incongruous with all other known vertebrates to be a real animal.

But it was real, and the wonderfully bizarre aspects of platypus biology have only increased. The skeleton of the platypus retains many bones (such as cervical ribs and an interclavicle bone) absent from placental mammals. Platypus babies hatch from soft eggs, but nurse from their mother's milk,