

# Book Reviews

**Book Review Editor's Note:** We are continuing to use the current currency codes. Thus Canadian dollars are CAD, United States dollars are USD, Euros are EUR, China Yuan Remimbi are CNY, Australian dollars are AUD and so on. You will find these are the codes now used by financial institutions and internet currency converters. I will include an updated note for the next few issues as a reminder.

## ZOOLOGY

### The Ecology & Behavior of Amphibians

By Kentwood D. Wells. 2007. University of Chicago Press, 1427 East 60th Street, Chicago, Illinois 60637. 1148 pages. 75.00 USD.

This massive volume synthesizes knowledge gained through researcher Wells' extensive field experience and total immersion in the literature focussed on habitats and habits of a generous sampling from the approximately 6000 species of amphibians now recognized in the world. Its extended gestation time began with conception and partial drafts in the early 1980s. The period since has been one of ever-increasing research and publication by a growing number of researchers resulting in exponential additions to the number of species recognized and, especially, the volume of information on them. But simultaneously, it has been a time of realization of the fragility of the world's amphibian fauna and the decline, sometimes the extinction, of many species in many parts of the world ascribed to a variety of causes. Wells has been long-recognized as one of the most productive and original researchers on amphibians of this period.

His book has 16 chapters, the first on phylogeny, classification, and morphological evolution, followed by ones on water relations, temperature relations, respiration, metabolism and energetics, movements and orientation, anuran vocal communication, mating systems and sexual selection in anurans, communication and social behavior of urodeles and caecilians, the natural history of amphibian reproduction, parental care, ecology and behavior of amphibian larvae, complex life cycles and ecology of amphibian metamorphosis, amphibians and their predators, the ecology of amphibian communities, and, finally, the conservation of am-

phibians. The reference section well reflects the vastness of the information in the volume itself – the two-column format occupies 238 pages, the length of many books. Included are many, but by no means a comprehensive selection of relevant papers by Canadian herpetologists. Finally, a 64-page index concludes the text. It is unfortunate that the initial chapter summarizing classification was completed before Frost and his colleagues (2006 American Museum of Natural History Bulletin 297) published their extensive reassessment of amphibia relationships which proposed many changes in nomenclature that could not be evaluated for possible inclusion here. This is not a serious flaw as the book's overall emphasis is not on systematics.

Wells has deftly managed both a detailed and a readable reference and primer for study of amphibians in nature. Its price and mass (approximately 11×8.5×2.2 inches or 286×220×60 mm) will doubtless keep it from many a naturalist's library shelves, except for the few primarily focussed on amphibians who have ample disposable income (perhaps not a common combination), but it is a must for every university biology and federal and provincial government environment department and should be read by all biology students and conservation-charged public servants. Graduate students focussed on amphibians or vanishing habitats in particular, will find this a treasure of the research to date, and a gold mine of background information to inspire future research projects.

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### The Amphibians and Reptiles of New York State: Identification, Natural History, and Conservation

By James P. Gibbs, Alvin R. Breisch, Peter K. Ducey, Glenn Johnson, John L. Behler, and Richard C. Bothner. 2007. Oxford University Press, 198 Madison Avenue, New York, New York 10016. 422 pages. 34.50 USD.

Lack of an authoritative field guide to the herpetology of the state of New York has been a glaring vacuum in texts on the northeastern United States through-

out the last century. This, despite its relatively large size for a northeastern state (49 108 square miles or 127 189 km<sup>2</sup>), and being the home of many exceptionally prominent herpetologists over the last century. The state had been among the earliest to be given a comprehensive scientific treatment when James DeKay (for whom the snake *Storeria dekayi* is named)

included amphibians and reptiles in his *Zoology of New York* in 1842. Almost 100 years later (in 1941) it received the most thorough state monograph on a single group, the *Salamanders of New York* by Sherman Bishop, Rochester, New York. Bishop followed this with a handbook to all North American salamanders. Others included, in the first half of the 1900s, Raymond Ditmars, New York, who wrote immensely popular and influential books on reptiles of North America and of the world and, Albert and Anna Wright, Ithaca, who used local studies to produce the first comprehensive data on the life histories of eastern North American frogs and toads then went on to produce North American handbooks to frogs and toads in 1933, revised in 1942 and 1949, and to snakes in 1957.

The six authors who finally have filled the need for a field guide are also New York state residents, scattered among universities, conservation departments and organizations: Gibbs at the State University of New York College of Environmental Science, Syracuse; Breisch at the New York State Department of Environmental Conservation, Albany; Ducey at the State University of New York at Cortland; Johnson at the State University of New York at Potsdam; and Bothner at St. Bonaventure University, Olean. The late John L. Behler (1933-2006) was with the Wildlife Conservation Society, Bronx. The distributional data are from the Amphibians and Reptile Atlas Project of the New York Department of Environmental Conservation which compiled 59 000 reports submitted by 1800 volunteers. The atlas also included 28 000 pre-1990 records from museums, field notes, graduate theses, and published literature.

The text covers 69 native species (18 salamanders, 14 frogs and toads, 17 turtles, 3 lizards and 17 snakes), and includes 65 distribution maps (ranges shaded, but without spot localities) and 72 colour plates (each with one to four superior, sharp photographs of pattern and life stage variants contributed by over 30 photographers). Each species account is headed with English and Scientific names followed by sections on Quick Identification, Description, Habitat, Natural History, Status and Distribution, and Other Intriguing Facts. Statements are referenced to a 39-page Literature Cited section. Many leading Canadian herpetologists are cited, among them classical studies by J. P. Bogart on ambystomid salamanders and R. J. Brooks on Snapping and Wood tur-

tles (both at University of Guelph), M. Berrill on pesticide effects and declines (Trent University), J. Gilhen on Nova Scotia species (Nova Scotia Museum), D. M. Green on hybridization in toads (McGill University), P. J. Weatherhead, K. A. Prior, and G. Blouin-Demers on Rat Snakes (Carleton University, Environment Canada, and Ottawa University, respectively).

But the text is not just species accounts. A brief introduction summarizes the history of state herpetology and stresses the conservation theme found throughout the book. It is followed by a discussion of the state herpetofauna with a table giving, for each species, its New York Natural Heritage Program State Rank, NatureServe Global Rank, and (where applicable) its New York State and Federal Listings, exotic species sometimes reported (alligators in the sewers of New York City and beyond) and similarities and differences between amphibians and reptiles. There is a chapter on New York's environment as habitat for amphibians and reptiles with maps of ecological zones, of major lakes and rivers, of counties and major cities, and "land cover". The ecological zones are described with representative habitat photos and a table of all species and habitat types they occur in. Final chapters are Threats outlining the effects of historic overexploitation (particularly commercial harvest) and habitat loss over time, acid rain, contaminants, disease and deformities. Following chapters discuss legal protection, habitat conservation guidelines, conservation case studies, finding and studying amphibians and reptiles, folklore, and epilogue. Appendices cover the "Herp Atlas" Survey Card, and Resources (organizations and identification and general reference). A Glossary covers terms from amplexus to wetland, followed by Literature Cited and a 20-page index.

Eastern Canadian naturalists will find this book a must for their bookshelves as an excellent reference not just to the species included (species that occur in eastern Canada are also in New York) but also for conservation approaches and philosophy. It lacks only a section on care of captives, and that, I suspect, is not an oversight but deliberate, making a strong statement by its omission.

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## Extreme Birds

By D. Couzens. 2008. Firefly Books Ltd., 66 Leek Crescent, Richmond Hill ON L4B 1H1. 281 pages. 45 CAD Cloth.

When *Extreme Birds* arrived in the mail, it caught my attention with its dramatic, somewhat comical, cover photograph of a Shoebill. I started to nose through, looking first at the remarkable photographs, and wondering who might review this book. Then the chapter titles made me take a second look and I was

hooked! I expected widest wingspan, smallest bird, longest bill and so on, but heaviest testes, biggest belly and smelliest bird took me by surprise. In the author's view the malodorous claimant is the Crested Auklet. These cute beasts are said to emit a potent, tangerine-like stink that carries for miles. I am afraid I missed that pleasure last year when we sailed by their colonies; there is an advantage or disadvantage to having a poor sense of smell.