

The Frogs and Toads of North America: A Comprehensive Guide to Their Identification, Behavior, and Calls

By Lang Elliott, Carl Gerhardt, and Carlos Davidson. 2009. Houghton, Mifflin Harcourt, Boston, Massachusetts and New York, New York, USA. 344 pages. USD 19.95.

This is a mini coffee-table book, 8 ½ inches (20.6 cm) high and 12 inches (22.9 cm) wide, an unfriendly size for a bookshelf, but great for spreading open on the table. It focuses largely on two aspects of breeding North American frogs (in the broad sense, inclusive of all Anura, the tailless amphibians): their appearance and their sound. It is sumptuously illustrated with sharp, vivid colour photographs which vary from column, to half page, to full-page width, a treat to the eye at any size. These depict adults in sedentary rest or calling positions, with a sprinkling of pairs in amplexus. There are two of spectacular mating “knots” of Western Toads (page 24) and American Toads (page 317). The only eggs and tadpoles featured are part of a representative life cycle diagram (of the Wood Frog) by Cindy Page (page 17). All 101 species of anurans (97 native and 4 introduced) found North of Mexico are included in photographs and text. Also included is a CD of recordings of vocalizations of 99 of these (the two species of mountain stream dwelling tailed toads are missing because they are mute). Most calls are distinctive at least for groups, but the second last presented, the Mexican Burrowing Toad, will most effectively startle even most veteran herpetologists who have never heard it. Advertisement (mate attracting, both singly and in chorus), territorial (rival male inhibiting) calls, protest notes (given largely in same-sex encounters) and fright screams (reaction to disturbance, particularly when grabbed by a predator) are included. A detailed “Compact Disc Track Descriptions” (pages 324 to 335) gives species, locality, and (usually) time and air (?) temperature for each segment. Almost a quarter (24) of the species covered occur in Canada. Three are represented by recordings taken in Canada (Western Toad at Edmonton, Alberta; Canadian Toad at Wood Buffalo Park and Edmonton, Alberta; Boreal Chorus Frog from Riding Mountain National Park, Manitoba), and a few others are from adjacent United States localities in New York in the east and Washington in the west.

The authors have a mix of backgrounds. Lang Elliott is styled as a recordist, writer, and photographer who has authored several previous book/CD packages including ones on insect and bird sounds. H. Carl Gerhardt is a herpetologist with more than 120 publications mostly emphasizing vocal communication, particularly in frogs, and is a professor at the University of Missouri. Carlos Davidson is a conservation biologist, with a background in ecology and economics, and is the director of environmental studies program at San Francisco State University.

The text begins with a foreword by Joseph T. Collins who stresses that the continued seasonal noise from aquatic breeding anurans is a signal that water still

exists around us. Silence would likely mean it was gone or undrinkable. This is followed by an authors’ introduction characterizing the book as a celebration of the primeval and enchanting vocalizations of frogs. Brief sections discuss classification (picturing the nine family groups included), their natural history (life history, water loss and activity patterns, the challenge of being cold-blooded, diet, defence against predators, amplexus and fertilization, egg-laying and hatching, vocal communication, vocal repertoire, mating systems, female choice, sound production, energy requirements of calling, hearing), evolution and speciation (with a heavy bias for examples from treefrogs, the subject of many of Gerhardt’s publications), modes of speciation, contact zones, conservation issues (causes of amphibian declines and deformities), miscellaneous explanations (the disc, the range maps, lengths, ordering [sequence] of species, number of species, naming of species), and a species and track list of pages for accounts and numbers in recording sequence.

The bulk of the book is species accounts. Each group is introduced by a one-page family account and photographs of a typical member, followed by one-page account and one to three pages of variants of each included species. The accounts start with an introductory paragraph, a range map, and sections on appearance, range and habitat, behavior and voice. The text statements are unreferenced, but have the ease that indicates a great deal of first-hand field experience. The problem of recent unfamiliar generic name changes for some widespread North America frogs and toads is neatly, if uncourageously, solved by putting the long standing name first and the amended one in parenthesis after. The maps are drawn primarily from the U.S., National Amphibian Atlas (www.pwrc.usgs.gov/naa) supplemented for Mexico and Canada by the Peterson Field Guides to eastern and western North America and various local sources. A surprise was the occurrence of the Red-legged Frog, *Rana aurora* in southern coastal Alaska (perhaps as a result of introductions?) depicted as disjunct from its British Columbia populations in the southern mainland coast and Vancouver Island. Partly due to the scale of the maps, Canadian ranges are often carelessly indicated and a common error is repeated from earlier guides in the depiction of distinct separate ranges in southeastern Manitoba, Minnesota and the Dakotas for the toad “species” *Bufo* [*Anaxyrus*] *americanus* and *hemio-phrys*. This pair, wherever studied adequately, appear to interbreed freely where they contact and form populations that are hybrid swarms of intermediates.

A section on finding, observing, catching, and keeping, includes the important caution that finding out current local or provincial laws and obtaining required

permits is now essential in most, if not all, areas of the continent. It still is OK to listen and watch in most as long as it does not involve trespassing on private property without permission, but disturbing of animals or habitats is increasingly discouraged. The concluding sections cover the making of the book, acknowledgments, and credits for the photographs, the sound recordings, compact disc track description (mentioned earlier), sources and a sparse list for further reading (five field guides, four reference works, one on keeping frogs and toads as pets, six nonprofit and governmental websites, three volunteer monitoring programs (including Frogwatch Canada), regional websites,

and three audio guides. Finally, a five-page index to species and groups concludes the book.

As a visual and auditory introduction to frogs, toads and their kin in North America, this book is outstanding. It would be a useful and relatively inexpensive addition to any reference shelf, a conversation starter on any coffee tables and a treasured gift for any nature-appreciative and inquisitive relative or friend.

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Shorebirds of the Northern Hemisphere

By R. Chandler. 2009. Andrew Isles. Natural History Books, 115 Greville Street Prahran 3181 Australia. 448 pages, 90 AUD Paper.

Shorebirds of North America, Europe and Asia

By R. Chandler. 2009. Princeton University Press, 41 William Street, Princeton, New Jersey. 448 pages, 35 USD Paper.

I believe these two books are the same although there are differences in the press releases (850 vs. 700 photos, 134 vs. 135 species covered) provided by the two publishers. I think one is the European version and the one I have from Princeton is the North American. [Do not confuse this book with the 2006 *Shorebirds of North America, Europe, and Asia: A Guide to Field Identification*, by Stephen Message and Don Taylor and also published by Princeton.]

That being said, this book has the wow factor. At your first flick through you will see a mass of wonderful photos. After I had finished my initial ogle, I settled into a more systematic review.

The book starts with a section on plumage that is far more detailed than the typical introduction. It is also illustrated with examples of the feather developments. This is followed by a similarly-styled discussion of shorebird behaviour.

The species accounts cover jacanas, Painted Snipe and Crab Plover, oystercatchers, Ibisbill, avocets and stilts, thick-knees, Egyptian Plover and coursers, pratincoles, ringed plovers, small plovers, *Pluvialis* plovers, lapwings, sandpipers, snipe, dowitchers, woodcocks, godwits, curlews, *Tringa* sandpipers, turnstones and phalaropes. This is a little different order than normal, but this does not detract from its use as a reference book. Each species has a thorough explanation of all plumages: juvenile, adult (breeding and non-breeding) and any racial variations. There is a description of status, habitat and a range map of summer, winter and permanent distribution.

Each account has several quarter to half page photos showing the various plumages described. There are some full-page photos too. All of the photos are lovely, crystal clear portraits of birds in habitat or feather

details, including definitive flight shots. Most of them are by the author with additions from many other sources. These photos show more detail than can usually be seen in the field. For example, the Wilson's Snipe uses two tail feathers in its display as compared to the nearly-identical Common Snipe which uses one. This diagnostic feature is difficult to see on a swooping bird. I might try photographing the next displaying snipe I see, just to discover if I can pick out these feathers. [In 12 pages of Internet pictures there was only one flying Wilson's Snipe and its tail was closed]. You can see the variations in the various snipe superciliums very easily, unlike in the field.

Despite the use of North American term Shorebirds in the titles rather than the European Waders, the author uses European names throughout. Where there is an alternative name [Grey vs Black-bellied Plover] this is noted. Species splits are current [all the "golden" plovers for example. I did not have any issues with the range maps and distributions. Personally I have found the Yellow-wattled Lapwing rather hard to find and not "fairly common," but that is not valid basis for comment. Not included in the species accounts are Eskimo Curlew and Black-fronted Plover, as there are no current reliable records for the region covered.

Personally, I think this is a "must have" book for the serious observer. While many shorebirds are showy and easy to identify [avocets] others are a perpetual challenge. I wonder how many Little Stints have been overlooked in North America? Or Eurasian Oystercatchers? This book will provide a very handy reference and, one I am sure, I will be using frequently from now on.

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