## Peterson Field Guide to Reptiles and Amphibians of Eastern and Central North America. Fourth Edition

By Robert Powell, Roger Conant, and Joseph T. Collins. 2016. Houghton Mifflin Harcourt, 125 High Street, Boston, MA, USA, 02110. 512 pages, 21.00 USD, Paper.

The Peterson field guide series began in 1934 with jacket pocket coverage of eastern North American birds, which progressed through successive revisions to a sixth edition in 2010. Its approach was used for other vertebrates, invertebrates, plants, minerals, and

astronomy and these have become the "Gold Standard" among field guides. In 1958, the addition of reptiles and amphibians of eastern North America was an instant success and greatly accelerated their accurate field identification. In 1975, the second edition expanded cover-

age to include the central portion of the continent; it was a companion to the 1966 guide to western species, filling a geographic gap in coverage between the two earlier guides.

Roger Conant wrote the first two editions and his wife, Isabelle Hunt Conant, illustrated them with photographs she took of living specimens posed in similar positions for ease and accuracy of comparison and coloured by hand from the same living specimens. A third edition in 1991 added Joseph T. Collins to update the text and artist Tom R. Johnson to illustrate the added species. Featured was Collins's attempt to unilaterally accomplish what he regarded as a modernization of the scientific nomenclature, but this did not meet with universal support from herpetologists (see Cook 1991). An expansion of this edition in 1998 did not include any text revision (see Cook 2001).

The Conants and Collins have since died but finally a new group led by Dr. Robert Powell, a professor of biology at Avila University in Kansas City, Missouri, has taken up the daunting challenge of updating the text. A decision to build on past editions assures that the fourth is still a great field guide, with its scrapbook of previous illustrations interspaced with the new photographs. Its nomenclature follows the 2012 committeegenerated list published by The Society for the Study of Amphibians and Reptiles which is now used by all major herpetological societies for North America.

The number of species included in the new edition of the field guide has increased since 1991 from 379 to 501, adding those uncovered since the earlier editions, particularly through widespread molecular analysis, and the continued or new establishment of 60 intentionally or accidentally introduced exotic species.

The maps have been updated by Travis W. Taggert with consultation of an impressive list of United States

herpetologists but very few Canadians. Throughout, Taggert's novel innovation is his careful attempt to more accurately depict in these maps the distributions, particularly of aquatic and semi-aquatic species, as following a dendroidal pattern within watersheds, and by attention to the fragmented edges of most ranges. A few Canadian ranges appear exaggerated in northern regions due to the map projection chosen. On others, records are difficult to detect because of the small map size and because those judged to be disjuncts are indicated by a miniscule "x". Inclusion of provincial atlas reports may have included occasional unverified localities.

In contrast to the early editions, sections on capture and keeping amphibians and reptiles in captivity have been reduced or eliminated, as well as the treatment of poisonous snakebites, as these topics are now treated in greater depth and modern relevance in other publications. Throughout, the emphasis in a changing world is on conservation of populations and habitats and knowledge of provincial, state, and federal regulations.

## References

Cook, F. R. 1991. [Book Review] Field Guide to Amphibians and Reptiles of Eastern and Central North America. Third Edition. Canadian Field-Naturalist 105: 608–610.

Cook, F. R. 2001. [Book Review] Field Guide to Reptiles and Amphibians of Eastern and Central North America. Expanded third edition. The Canadian Field-Naturalist 115: 194.

Cook, F. R. 2012. [Book review] Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in Our Understanding. Seventh Edition. Brian I. Crother, Committee Chair. 2012 Society for the Study of Amphibians and Reptiles. Herpetological Circular 39. 92 + 5 pages. Canadian Field-Naturalist 126: 340–341.

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