

The species accounts contain plates by Brett Jarrett. These are extremely well done. They are as good as the very best of Roger Tory Peterson's work. I did wonder briefly about the accuracy of the South Polar Skua painting, but quickly remembered I have a photograph of several of these skuas that show a range of plumage colours. This level of excellence is carried through the birds, seals and whales.

In addition, there are at least two photographs per page, occupying a quarter to a third of the space. With a few exceptions the quality of these photographs is stupendous. Not only are they good portraits of the individual species, but also they frequently capture an insight above and beyond a mere representation. These photographs were taken by a large number of photographers, although a good proportion is by Shirihai himself. Sadly the only members of the beaked/toothed whale group with photographs are Blainville's and Cuvier's Beaked Whales – a testament to how elusive these creatures are.

I work in a domain where the meaning of each word is important and is often argued over for long periods. So I was taken aback by the book's formal title: *The Complete Guide to Antarctic Wildlife*. It is not complete nor does it deal with all wildlife, for it only covers two classes from one kingdom. Although many members of other kingdoms are mentioned in the text there are only species accounts for birds and marine mammals. The index lists the mammals and birds only. The book is not confined to the Antarctic but includes

New Zealand, Southern Australia, Southern Africa and South America. The books subtitle is "Birds and Marine Mammals of the Antarctic Continent and the Southern Ocean", which is much more accurate. The second title would better justify Shirihai leaving out the region's land mammals (rats and reindeer for example).

There are some other odd errors in this book. The index has six of the plates mixed up and some of the non-bird-marine mammal wildlife is not included. The first figure, a map of the entire region covered, has the island of South Georgia about 3 degrees too far east.

I was a surprised to see the geographic distribution of the Sub-Antarctic Fur Seal included Macquarie Island, off New Zealand. This species' normal range is the Atlantic and Indian Oceans off South Africa. But the text revealed that this mammal has recently become established on Macquarie – a long, but not impossible voyage for a seal.

If you plan to visit the southern oceans then this is the best single, portable book for you to take. Although be warned, this book weighs about twice as much as books of a similar size, as it has very high quality silky paper (that has a wonderful feel). Once you are in your cabin (the only way to visit these islands is by ship), then you can ignore the weight and enjoy the astounding quality.

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Reptiles and Amphibians of Algonquin Provincial Park

By Ronald J. Brooks, Dan Strickland, and Russell J. Rutter. 2003. The Friends of Algonquin Park, P.O. Box 248, Whitney, Ontario. 49 pages. \$2.95.

The first edition of *The Reptiles and Amphibians of Algonquin Park* was published in 1976, authored by Dan Strickland and Russell J. Rutter, long-time naturalists at Algonquin. Its success led to revision and reprinting in 1978, 1986, and further reprintings in 1992 and 2000. The 2003 edition is 48 pages, magazine format (29.7 × 21.0 cm), with tightly-packed text featuring extensive new portions by Ronald J. Brooks, University of Guelph. The latter are for the turtles, all snakes except the Common Gartersnake, and most of the Yellow-spotted Salamander, Green Frog, Mink Frog, and Bullfrog accounts. All of these species, save the snakes, have been focused on in the intensive research of Brooks and his many graduate students in Algonquin Park over three decades. Their enthusiasm for promoting increased awareness of the place of, and threats to, amphibians and reptiles is palatable throughout.

An introductory section defines amphibians and reptiles and the problems of being "cold-blooded" and discusses environmental, behavioural, and physiological adaptations such as "How to Beat the Cold Under-

water" and "How to beat the Cold on Land". Species accounts are grouped and these are prefaced by introductory material. Accounts deal briefly with recognition and distribution within the park but the bulk of the text of each is graphic and vivid word pictures of life history and behaviour.

A typical example of Brooks' distinctive style, from the Snapping Turtle account, concerns the difficulties of saving individuals which have wandered on highways. After advising avoidance of the jaws and claws, it continues with additional caution of supplementary defensive measures. "When upset, Snapping Turtles exude a foul-smelling liquid from the bridge between the carapace (top shell) and plastron (bottom shell). This liquid looks like maple syrup but is rather less delightful and imparts an odour that the researcher comes to associate with Algonquin. The rank smell of reptilian rage on one's hands will last 2 to 3 hours. But the bites, scratches and stench are all worth it when one sees the ungrateful recipient of one's compassion stagger awkwardly into a fetid bog, safe from the speeding giants of Highway 60."

Or the description of post egg-laying behaviour: "Slowly, the mother begins to pull earth back into the nest, carefully pressing it around the eggs. Each hind

foot reaches out to the side and the foot flexes and drags sand and pebbles into the hole. When the hole is partly full, the female braces on her front feet and tail to form a tripod, makes a 'fist' of her hind feet and swings side to side punching the earth tightly in the nest. This whole process can only be described as beautiful beyond words."

Interspersed among the species accounts are "side-bars" of general interest: "Are Turtles Immortal?", "More Park Roads Would Mean Less Protection for the Park's Threatened Wildlife", "Hidden Talents", "Getting launched in life", "Salamanders and the danger of acid rain", and "Are frogs and other amphibians declining in Algonquin Park".

An attractive visual feature of the publication is the 138 colour photographs. These illustrate adults of all 31 species (5 turtles, 9 snakes, 7 salamanders and 10 frogs, treefrogs and toad) covered by the text. As well, they include juveniles and eggs of most, some key features, and habitat and field workers in Algonquin Park. There are four maps of approximate northern range limits for various groups of reptiles and the number of days above 18°C (from 250 and more for the most southern group to 100 and less for the Common Garter Snake). Two line drawings illustrate snakes'

belly scales, spilt (divided) and unsplit "cloacal" (anal) scales, and smooth and keeled scales. Ten mini-drawings depict representative species of the 10 families listed in the table of contents.

In contrast to the "cutting edge" information throughout most of the book, the account of the Blue-spotted Salamander complex has not been well updated; particularly noticeable is the omission of Canadian work of the last decade from University of Guelph (James Bogart) or the Royal Ontario Museum (Bob Murphy and Les Lowcock). Missed in the "Further Reading" section is *The Royal Ontario Museum Field Guide to Amphibians and Reptiles* by Ross MacCulloch (reviewed in *The Canadian Field-Naturalist* 116(4): 653-654), published in 2003 but perhaps not until after the Algonquin text had been prepared.

For any naturalist visiting Algonquin Park, this book is a must, but others, even if they will never go there but want to increase their appreciation and general knowledge of amphibian and reptile behaviour and adaptation, will find the text a joy to read cover to cover.

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Herpetology in Montana: A History, Status Summary, Checklists, Dichotomous Keys, Accounts of Native, Potentially Native, and Exotic Species, and Indexed Bibliography

By Bryce A. Maxwell, J. Kirwin Werner, Paul Hendricks, and Dennis L. Faith. 2003. Society for Northwestern Vertebrate Zoology, Olympia, Washington, Northwest Fauna Number 5. viii + 138 pages.

This meticulously prepared analysis of state distribution and literature justifiably bills itself as "the most through compilation of information on Montana's herpetofauna to date". It covers 12 amphibian and 17 reptile species regarded as native in the state in individual species accounts as well as a review of 7 additional species or subspecies which are possibly native and 13 species or subspecies that have been reported as exotic.

An initial 10-page history of Montana herpetology is followed by a summary of information on, and status of, the herpetofauna. Seven figures present chronological summaries of voucher and observation records, of major contributions, of articles and percentage contribution by types of literature, the number of articles by species, and maps of number of amphibian and reptile species by county. Checklists for the native amphibia and reptilia are followed by keys to amphibian eggs, larvæ, and adults juveniles and to adult and juvenile reptiles.

A five-page introduction to the species accounts discusses the spot distribution maps (39 institutions provided information on 3396 amphibian and 1240 reptile voucher specimens and contained 3286 and 1163 mappable locality data, respectively; 4654 amphibian

and 2349 reptile observations from a variety of sources were also mappable). After the first mapping of this data base extralimital or otherwise questionable records were verified by contacting the museum or observer and a number of errors of identification were found, as well as some where verification was not possible because the museum specimens were now missing. The authors stress that anyone conducting primary research should confirm the interpretations of localities presented for museum voucher specimens by contacting the institutions directly.

The bulk of the text (pages 30 to 105) presents the species accounts which include a distribution map for each species with the total records on which the map is based, general comments, earliest records (literature and voucher specimen), maximum elevation voucher record, a voucher record summary by county, and a bibliographic index by topic. There is no field data, no descriptions (other than the keys) and no ecology or behaviour. The only illustrations are on the front (Western Rattlesnake) and back (neotenic Tiger Salamander and head views of Western Rattlesnakes) covers reproduced from the literature of the 19th century.

A notable exclusion from the verified species list (but included in the "potentially native" list) is *Bufo hemiophrys*, widespread over much of Alberta and Saskatchewan to the north. It was recorded only in the northeastern corner of the state by the late Jeffery Black in his surveys in the late 1960s and early 1970s and no