

ECOLOGY, CONSERVATION, AND STATUS OF REPTILES IN CANADA

CAROLYN N. L. SEBURN AND CHRISTINE A. BISHOP (eds.). 2007. Number Two in the Herpetological Conservation series, Society for the Study of Amphibians and Reptiles published in association with the Canadian Amphibian and Reptile Conservation Network, Salt Lake City, UT. 26 cm by 19 cm. Hard Cover. 246 pages. Black and white photographs throughout. 1ISBN 978-0-916984-70-0. \$40.00 US.

Disappearing amphibians have received worldwide attention since the early 1990s. *Ecology, Conservation, and Status of Reptiles in Canada*, which flowed from a 1998 conference in Saskatoon, makes a strong case for many Canadian reptiles being in equal or greater difficulty. In this comprehensive volume, Canada's leading herpetologists unite to provide a science-based assessment of the survival needs of native turtles, lizards and snakes.

Ecology, Conservation, and Status of Reptiles in Canada notes that, in 2006, 30 of 46 Canadian species were listed by COSEWIC (Committee on the Status of Endangered Wildlife in Canada) as at risk nationally, a substantially higher proportion than either birds or mammals. (Although no additional species have been added since the book's publication, five species, subspecies or populations have been up listed to a less secure status, including Saskatchewan and Alberta's Greater Short-horned Lizard, up listed to endangered.)

Our cold climate does not favour reptiles, causing delayed maturity, frequent reproductive failure and hibernation stress. Compared to more southerly populations, Canadian

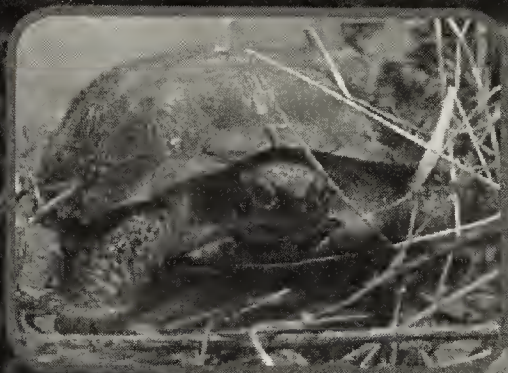
species have a lower capacity to compensate for losses, and their scattered numbers hinder re-colonization. Anthropogenic pressures such as roads and urbanization further increase the pressure to survive, enhanced by the fact most reptiles and most Canadians cohabit in the same narrow strip along the American border. Seburn and Bishop's book describes and evaluates how these factors impact reptiles. Eleven chapters, supplemented by a checklist and status summary, provide an extremely detailed overview of all species.

Five of the chapters are of particular note. Chapter 2 by Francis Cook on early Canadian reptile studies traces herpetology studies from the 1600's to the present. In Chapter 3, G. Lawrence Powell and Anthony Russell give an excellent assessment of Canadian lizards' life histories and problems, examining both in the context of their North American range. Patrick Gregory in Chapter 4 provides a particularly good analysis of adjustments in behaviour and physiology required of snakes in cold climates, with a focus on prairie snake dens. In Chapter 5, Ronald Brooks, dean of Canadian turtle researchers, provides a compelling, and depressing, thesis showing why freshwater turtles cannot be managed

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like traditional density dependent species which are the norm in North American wildlife management agencies. Chapter 6, by four authors, provides extensive detail on marine turtles in Canadian waters, showing them to be much more common than previously believed, yet still under threat.

The remaining chapters deal with genetics in conservation, disease, and traffic mortality, ending with a bleak assessment of reptiles' future in Canada, and a suggested conservation strategy. A checklist summarizing common and scientific names, distribution, threats and

conservation status with a good quality black and white photograph of all but one species (an extirpated Eastern rattlesnake) concludes the volume.

The book's great value is in providing a Canada-wide overview of reptiles by the country's most knowledgeable researchers. Abstracts preface all chapters but one, giving a quick overview of contents. The literature cited sections at the end of each chapter are immense; a random spot check did not reveal any significant omissions. Typographical errors are few.

However, a few changes could have greatly enhanced the book's stated purpose of raising awareness of reptile survival problems for people outside the herpetological community. For instance, for casual naturalists, an indication of the authors' qualifications would strengthen the message. Ease of reading could be better. Pages are dense with prose and the writing quality is uneven. Species are often, but not always, referenced by scientific name only and that is frequently abbreviated. Despite the editors' stated reliance on the Society for the Study of Amphibians and Reptiles checklist as the authority, species names frequently vary from that

standard and are not consistent, further confusing the casual reader. For example, Western Rattlesnake on page 193 becomes Prairie Rattlesnake in the checklist. Eastern Foxsnake is *Elaphe gloydii* on the same page, but *Elaphe gloydi* in the checklist, which then identifies the adjacent photograph as *Elaphe vulpina*.

The checklist is the weakest part of the book. Although it packs a lot of information into a small space, the layout is poor and the information does not always match material earlier in the book e.g. Snapping Turtle and Stinkpot distribution.

Despite these shortcomings, *Ecology, Conservation, and Status of Reptiles in Canada* is an impressive volume and will be an important addition to the bookshelf of any professional, or serious amateur, herpetologist. It is to be hoped too that herpetologists and non-herpetologists alike will respond to the suggested conservation strategy in the final chapter and thwart the gloomy predictions outlined earlier in the book.

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Bullsnake near Kyle, SK on 1 July 2007

Dan Zazelenchuk