As with many species, owl populations are often in trouble around the world for the usual reasons: habitat destruction, direct (vehicles, shooting, trapping) and indirect (hitting barbed wire fences) mortality, and invasive alien species such as West Nile virus. But Duncan argues that an awareness and understanding of how people have perceived owls in the past may help support efforts to conserve them today.

The one small section of the book that many people will struggle to read describes the DNA sequencing and classification of owls. It would have been more understandable if Duncan had linked this highly technical description, especially the Maximum Likelihood Tree showing owl relationships, to some of the species accounts, where it is obvious from a glance at range maps for many of the Scops Owls in the Malaysian accounts, where it is obvious from a glance at range maps for many of the Scops Owls in the Malaysian

Ecology, Conservation, and Status of Reptiles in Canada


This book is an edited compilation of peer-reviewed contributions on several aspects of conservation and more specifically, on the ecology of the reptiles that occur in Canada. It contains chapters by many (figurative) heavyweights of Canadian herpetology, who bring combined centuries of experience to the project. The book is a very good application of accumulated biological knowledge to the question of conservation. It is also a good example of how a professional community can collaborate in a common cause.

It begins with a short introduction, then a historical review of work done on reptiles in Canada. Next are four chapters summarizing the life history of lizards, snakes, freshwater turtles, and marine turtles. Contributions on the applications of genetics to conservation, health and disease in reptile populations, and traffic mortality follow. The future of Canadian reptiles and a strategy for conservation are discussed. The book ends with an illustrated checklist of species, with the official conservation status of each. There is also a comprehensive summary of literature, both historic and recent, with few omissions.

The book succeeds in its aim of providing a summary of the biology and conservation status of Canadian reptiles. The chapters are of a consistently high calibre – a testimony to the knowledge of the authors and the thoroughness of the editors. The book is useful on more than one level – as a summary of reptile ecology in Canada and as a conservation guide; the extensive literature is also a valuable resource.

Several themes are common to the contributions. Reptiles living in Canada face two problems – the climate and humans. Because climate affects life history, reptiles are concentrated in southern Canada, where it’s warmer. Unfortunately for the reptiles, humans are concentrated in the same areas. Human activities that result in habitat modification are usually in direct conflict with the best interests of reptiles.

The book makes the point that although the Canadian climate may not be ideal for reptiles, they have adapted to life here. A reader soon realizes that many, if not all, declines in reptile numbers are due to human action. For example, road mortality is a common theme in several chapters. Human alterations to the landscape can have direct effects such as habitat destruction, and also secondary effects such as increases in reptile predators like cats and raccoons. Several authors make the point that declines in reptile, especially turtle, populations can occur slowly, drawing little public attention.

Although I was familiar with much of the information presented, there were some surprises, one being the high number of marine turtles off the Atlantic and Pacific coasts. This is but one example of how much is still not known about our reptile fauna.

Quibbles are few and minor. Colour variations and aberrant scutellation in turtles should not be included among diseases and parasites; the authors themselves admit that these “...are not detrimental...” (page 149).

What is the prognosis for reptile conservation? Although knowledge of the need for conservation is high among the public, and although the number of conservation programs is high, the future still looks bleak, because of the juxtaposition of human and reptile populations. The point is made repeatedly that while atlases and monitoring programs are good, they are ultimately ineffective without concrete action; “...ecological knowledge alone will not save species when the real problems facing them are social and political.” (page 47).

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