

Venomous Reptiles of the United States, Canada, and Northern Mexico. Volume 2. *Crotalus*

By Carl H. Ernst and Evelyn M. Ernst. 2012. Johns Hopkins University Press. xiv + 391 pages. 75.00 USD.

This is the second of two volumes on venomous reptiles of North America. Volume 1, published in 2011, covered 13 species: 2 lizards, 5 elapid snakes (4 coral snakes and 1 sea snake), and 6 viperid snakes. This new volume covers 21 (of the 30+) species of rattlesnakes in the genus *Crotalus*. Together these books are an up-

date to Carl Ernst's 1992 book *The Venomous Reptiles of North America*.

The geographic focus of both volumes is the area north of 25° Latitude, which corresponds to the tip of the Baja peninsula of Mexico. This means that rattlesnakes found in northern Mexico are included in

the book, but the many species found farther south are excluded.

The book begins with a brief introduction to the viperids and a key to the species of *Crotalus* covered in this book. Chapters on reptile venom, statistics on envenomation, treatment of envenomation, and the conservation of venomous reptiles are in volume 1. The bulk of the book provides detailed species accounts of the 21 rattlesnakes. The accounts follow the same standardized format as in Volume 1: recognition (detailed description of the species including colour patterns, scale counts and body lengths), geographic variation, confusing species, karyotype, fossil record, distribution, habitat, behaviour and ecology, reproduction, growth and longevity, diet and feeding behaviour, venom delivery system, venom and bites, predators and defence, parasites and pathogens, populations (available data on abundance), and remarks (miscellaneous information). Each account also includes black and white photos of the species as well as a distribution map. The species accounts vary in length depending upon how much information is available. The account for the Tortuga Island Rattlesnake (*C. tortugensis*) is less than 5 pages (including photos and a distribution map) but most accounts are at least twice that length. The book also includes colour photos of all the species and most of the subspecies. In general, the photos are fairly good.

Overall, the quality of the text is quite high. The authors have summarized a vast amount of scientific literature. The literature cited for the book is over 90

pages in length. There are curious omissions. For example, the species account for the Santa Catalina Island Rattleless Rattlesnake (*C. catalinensis*) does not mention that it was once at risk from introduced feral cats (now eradicated) and that it is still at risk from illegal collecting. It also does not mention that this species is one of only two species of *Crotalus* considered critically endangered globally by the IUCN. The account for the Southern Pacific Rattlesnake (*C. helleri*) states that a population on Santa Catalina Island is at risk from introduced pigs. Why is this not a threat to the Santa Catalina Island Rattleless Rattlesnake? The book doesn't mention that it is a different Santa Catalina Island (although this can be inferred from the distribution map). The species account for the Timber Rattlesnake (*C. horridus*) correctly mentions that it has been extirpated from Maine and Ontario, but fails to mention that it has also been extirpated from Rhode Island.

The largest omission is any attempt to put the species into some kind of broader context. The authors state that there are 30 to 35 species of *Crotalus* but there is no central discussion of this debate. An introductory chapter on the genus, illustrating the major groups and outlining taxonomic debates would have been valuable. Nonetheless, this book is a great summary of the literature on North American rattlesnakes.

DAVID SEBURN

Seburn Ecological Services, 2710 Clarendon Street, Ottawa, Ontario K2B 7S5