

pecially coral snake mimicry), tables of the general distributions of the coral snake mimics (genus level) and, as noted above, over 100 color plates. The book could easily have been written without this chapter, but its inclusion is a treat for the reader.

In summary, Campbell and Lamar have successfully put together a comprehensive treatment of Latin American venomous reptiles that not only allows identification of any of the taxa included but also contains hundreds of distribution maps and spectacular color plates.

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THE NATURAL HISTORY OF WEASELS & STOATS. *The Natural History of Mammals Series.*

By Carolyn King. Comstock Publishing Associates (Cornell University Press), Ithaca, New York. \$26.50. xviii + 253 p. + 4 pl.; ill.; index. ISBN: 0-8014-2428-3. 1989.

There's little truth in the English saying that "You can w(easily) tell a weasel from a stoat because stoats are (s)totally different!" Both species have the long, thin body and short legs characteristic of weasels; they differ mainly in size and color. The weasel, *Mustela nivalis* (known in North America as the least weasel), and the larger stoat, *M. erminea* (known in North America as the short-tailed weasel or ermine), are two of the three weasel species found over much of Eurasia and North America. The third and largest species, the long-tailed weasel (*M. frenata*) is confined to the New World, and its range extends farther south, into Central and South America. This book reviews the natural history of these three weasels.

The author, Carolyn King, is well qualified to write about weasels. She has devoted most of her scientific career to the study of weasels and stoats—both in England, where they are native, and in New Zealand, where they are introduced. She believes that the origin of weasels "as Pleistocene rodent specialists is the key to understanding everything about them." (p. 17). And she covers almost everything about them in her book, including molting, body size, hunting behavior, prey, reproduction, population dynamics, and the "puzzles" of delayed implantation, sexual dimorphism, and co-existence among sympatric species.

For the biologist, this book provides a guide to the literature on weasels and a useful summary of what is known—and not known—about them. The amateur naturalist will appreciate the informal style: for example, the ecology of predation is explained in terms of an analogy with a shopping trip for "Morningmunch" breakfast cereal! Colored plates and excellent drawings of weasels engaged in a variety of activities, such as chewing a bone (in the corner of the mouth because the carnassial teeth are

at the back of the jaw) and extracting a chick from the nest-box of a great tit (based on a photo taken by an automatic camera), add to the book's interest.

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ECOPHYSIOLOGY OF THE CAMELIDAE AND DESERT RUMINANTS. *Adaptations of Desert Organisms.*

By R. T. Wilson; Series Editor: J. L. Cloudsley-Thompson. Springer-Verlag, Berlin and New York. \$59.00. x + 120 p.; ill.; subject index. ISBN: 0-387-50806-6 (from New York). 1989.

The aims of ecophysiology are, as proposed in the introduction of this book, to define the adaptive features that fit an organism to its environment. This book is about the distinctive features of nonfossorial mammals living in the driest zones of the world and, as is enthusiastically revealed in the preface, it was mainly written in those zones.

After a brief though informative section on the characteristics of desert environments, there are two chapters on the cherished subjects of ecophysiologicals, heat and water. The last chapter deals mostly with the general anatomy and physiology of the digestive system in ruminants, and it adds little specific information relevant to the ecophysiological perspective.

The chapter, "Temperature and Heat Relations," is structured around three groups of animals, camelids, domestic ruminants (mostly sheeps and goats), and wild ruminants (mostly antelopes and gazelles) through which the classical strategies of physiological and behavioral thermoregulation are reviewed. Special emphasis is given to the role of temporal heterothermy (erroneously called bradymetabolism by the author) and to the use of panting and sweating, as well as to the importance of fur color and to the obligation of keeping a cool brain. As in most such studies, however, the critical effects of wind on both heat gain and loss are rarely sorted out.

The major chapter of the book, "Water Balance and Kidney Function," is subdivided according to water requirements, turnover (an undefined term), and loss. Current knowledge on the factors that determine the hydric budget is well covered, and some often-neglected principles or facts receive welcome attention. For example, it is commonly known that many large animals living in arid areas can be independent of access to free water. The point is rarely made, however, that this is generally achieved through reinforcement of common physiological and behavioral strategies rather than by development of peculiar mechanisms. This is well illustrated by species such as the eland, the oryx, and Grant's gazelle, which can survive indefinitely without drinking. They maximize their input of water by browsing mainly at night when plants have increased their tis-