

ralist. His writing is honest and moving in its evocation of special places and moments as well as the loss of many of those special places over time: "My long history with turtles has been marked time and again by loss of place, by the physical and spiritual annihilation of the landscape, compelling me to move on in search of wilder places."

This is also the kind of book you can give to non-naturalist friends to try to make them understand why

you love wading through swamps. Its combination of graceful writing, compelling anecdotes and Carroll's own beautiful black and white illustrations are enough to enchant almost any intelligent reader.

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Wild Mammals of North America: Biology, Management, and Conservation (Second edition)

Edited by George A. Feldhamer, Bruce C. Thompson, and Joseph A. Chapman. 2003. The Johns Hopkins University Press, 2715 North Charles Street, Baltimore, Maryland 21218-4363 USA. xiii + 1216 pages. U.S. \$175. Cloth.

After a 21 year interlude, the update of this monumental volume on the biology and management of North American mammals has added a third editor and given a more prominent role to conservation as opposed to economic importance. Even with a larger page format and a reduction of two chapters, the second edition is longer than the first, which reflects the accumulated increase in research over the past two decades. All of the accounts are updated to various degrees with some references as recent as the same year of publication (2003) of this book. A completely new set of authors has been recruited to write half (28) of the 55 chapters. Only six chapters have retained the original contributors and these are all single authored accounts. However, three of these accounts (black bear, badger, and manatee) are negligibly changed from the first edition. Of the 102 authors, there are three who have contributed to two chapters.

The species coverage of this revised volume has been slightly modified. There are new accounts for *Cynomys ludovicianus* (Black-tailed Prairie Dog) and *Neotoma floridana* (Eastern Woodrat) but the invasive *Rattus norvegicus* (Brown Rat) has been removed and the species of foxes, *Martes*, and skunks that were each previously presented in two chapters have each been combined. Furthermore, three chapters have been expanded including the addition of *Macrotus californicus* (California Leaf-nosed Bat) to the bats, *Ammospermophilus* (antelope ground squirrel) to the ground squirrels, and the subsuming of *Cervus nippon* (Sika Deer) into a more inclusive non-native large mammals category covering several species at the end of the book. Recent taxonomy also has been incorporated such as the generic use of *Lontra* for the river otter, *Puma* for the Mountain Lion, and *Tayassu* for the Collared Peccary.

Of the over 400 species of mammals known from North America, approximately half (210) are covered but 155 of these species are not full accounts. The chapters range from 28 detailed single-species accounts to six chapters that focus on two species with multi-taxa reports comprising the remainder. Some of these latter chapters concentrate on higher taxonomic groups including the six species of voles (genus *Microtus*)

found in North America; two genera of ground squirrels (*Spermophilus* and *Ammospermophilus*) covering 25 species; six species of foxes in the genera *Alopex*, *Urocyon* and *Vulpes*; 19 species of pocket gophers in the family Geomyidae; six species of bats from the Vespertilionidae family, one species from Molossidae, and one species from Phyllostomidae; six species representing the toothed whale suborder Odontoceti; and 11 species of the baleen whale suborder Mysticeti. The final chapter treats several exotic or alien species and their associated problems as related to the native fauna.

The general format within each account essentially has remained the same as the first edition. Chapters begin by reviewing the nomenclature, distribution, and description of the species or species-group. Most accounts include life history topics such as physiology, reproduction, age estimation, ecology, feeding habits, behavior, and mortality. A summary is then presented on the economic status, management, conservation, and research needs of the taxa under study. Other subjects covered by some but not all accounts are genetics, anatomy, development and habitat. Except for the last chapter, all have distribution maps, skull figures, and most have photographs of live animals. The book ends with two appendices identifying cranial bones and illustrating standard cranial measurements, a glossary, and an index.

With over 100 contributors to this edited book on wild mammal species deemed to have management significance in North America, it was inevitable that there would be inconsistent treatment across groups. For example, the account of the Black Bear (*Ursus americanus*) is one of the shortest chapters although it is a relatively well-studied and endangered mammal that is in need of a comprehensive management programme. There is almost no mention of its conservation status or of its economic importance, and the chapter is not much changed from the first edition. In contrast, the longest single-species account is for the Bison (*Bison bison*), a highly managed species with very few free-ranging individuals. The text has been substantially revised from the original account and is one of the more thoroughly covered species. Within the multi-taxa chapters, the presentation of information was not standardized, making it difficult to locate specific information for comparative purposes. For example, the seals began with general characteristics for pinnipeds

and then finished with individual accounts for the 16 different species. In contrast, toothed whales included three detailed and sequential species accounts followed by abbreviated discussions on three other species.

Overall, this revised edition contains some of the most comprehensive descriptions of mammal species found in North America. Notwithstanding the aforementioned criticisms, the editors have continued the fine tradition of thoroughness and scholarship established in their first volume. Not only are the accounts a summary of our biological knowledge of the larger species but the information also is interpreted and presented in the context of management and conservation. This book will be the primary reference source that bridges the gap between applied biology and policy

implementation. A companion volume dealing with the small mammals, and the other half of mammalian diversity, in North America would be a nice complement but perhaps wishful thinking for others to undertake. One noticeable drawback is that the publication is expensive, which will discourage students, researchers, and government workers from purchasing it for their personal library. This book, however, is a required monograph for institutional and departmental libraries that have an interest in not only mammals and their conservation or management but also wildlife ecology, in general.

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Pete Dunne on Bird Watching: The How-to, Where-to and When-to of Birding

By Peter Dunne. 2003. Houghton Mifflin, 222 Berkeley Street, Boston, Massachusetts 02116. USA. 352 pages. U.S. \$12.

Birdwatching is one of the fastest growing outdoor activities in North America. Once the obsession of a few, it is now firmly lodged in the mainstream. Bird books have proliferated, the optical equipment gets better every year, and birding clubs and media are now commonplace: there are even television shows about birding. With all these riches, what is a novice to do? Pete Dunne's latest work is a good place to start. With this cleverly thought out book, Pete Dunne starts at the beginning and provides the tools and tips to make birding a lifelong journey of discovery.

The author is a gifted communicator and teacher, making the material accessible and a fun read, while at the same time packing dozens of tools and tips into three hundred information-filled pages. The place he starts is the backyard – precisely the place where many people first get hooked on birds. He then walks the reader through the tools of the trade, the fundamentals of birding, applied birding (“for fun, purpose... even profit!”), eventually bringing the reader full circle to ethics and a solid conclusion that reminds us of why we birdwatch. Each chapter ends with a useful summary of key learning objectives, which helps to hammer home the important points. He keeps the material alive by interspersing anecdotes from his own rich experience, and others gleaned from a veritable who's who of North American birding. There are plenty of photos (black-and-white, this is no coffee table book) to illustrate points the author wants to make. The author's dry wit frequently surfaces, so be prepared for the occasional good laugh.

Some of the advice is priceless, particularly ten key questions to ask when identifying a bird, and a section entitled “learning to see.” This is complemented by practical advice on things like how to pick binoculars, field guides and spotting scopes. For example, the author provides a helpful hint on how to check to

see if that great pair of binoculars you are thinking of buying is in alignment; if they are not, your eyes will suffer.

There is also plenty of advice – generic and specific – on “where to go” and how to maximize your birding once you get there (my favorite: “the power of the pause”, wait, and birds will show up). He also talks about how to contribute to the store of knowledge while having good fun, for example by participating on Christmas Counts and Breeding Bird Atlases. In the final chapters the author notches the level up several grades, letting novice birders in on some of the inner secrets of successful birders like how to be where and when the birds are. He even divulges the secret of the perfect Eastern Screech Owl imitation (I'm not telling, you will have to read the book to find out.)

Are there things I do not like about this book? Not many, but there are a few. The format, with plenty of inserts, is occasionally disconcerting, particularly some of the “insider's insights” with sometimes abrupt shifts from the author's voice to another, in one case into a lecturing tone thankfully absent in the rest of the book. Sometimes the order of things is confusing, for example the discussion on spotting scopes is widely separated from that on binoculars. While this follows a logical sequence (most birders start with binoculars and only “graduate” to scopes later on in their birding careers) it does seem misplaced. The advice provided is solid and if followed will make for better birders, but there are a few minor missteps. For example, the author perpetuates the oft-repeated myth that European birds are less responsive to squeaking than those in North America – not true in my experience. The book is also unabashedly North American centric; there is very little here about the rest of the world. Occasionally the book drifts towards the advertorial, for example a limited number of bird tour companies are highlighted, but generally the author strikes the right balance. There is one point in the book that I objected