

with any project of this scope, and as the editors themselves commented on in the introduction, this volume really helps lay the groundwork for future revisions and research.

At 790 pages, this book may have benefited from having been published as a two-volume set. This would have allowed inclusion of a brief synonymy with some of the more notable species name changes and would have helped clarify some of the taxonomic changes that were made.

Overall, this was a tremendous effort and the editors and illustrator should be commended. This is a *must have* book for anyone with an interest in chondrichthyans, and should find a place in the libraries of any serious ichthyologist. However, its cost may be prohibitive for many, especially students, underemployed researchers, and researchers from developing countries.

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TEXAS TURTLES & CROCODILIANS: A FIELD GUIDE.
Texas Natural History Guides.

By Troy D. Hibbitts and Terry L. Hibbitts. *Austin (Texas): University of Texas Press.* \$24.95 (paper). xvii + 257 p.; ill.; indexes to common names and to scientific names. ISBN: 978-1-4773-0777-9. 2016.

WITH DOGS AT THE EDGE OF LIFE.

By Colin Dayan. *New York: Columbia University Press.* \$30.00. xvii + 188 p.; ill.; index. ISBN: 978-0-231-16712-3 (hc); 978-0-231-54074-2 (eb). 2016.

This volume is organized into three parts, and each could be a separate book. Part One, *Like a Dog*, is a very intimate account of the author's childhood and her relationship with her dogs. Dayan lived in fear due to the prejudices of the south, as well as fear of her parents. It is sad that the author could not find any happiness during this part of her life. What comes through is Dayan's love for her dogs and how they gave her comfort.

Part Two, *When Law Comes to Visit*, is a detailed account of several incidents where local humane organizations as well as the Humane Society of the United States and PETA get involved because the dogs were pit bulls. In each case, the dogs were seized for dog fighting even though they were not used for fighting. Even puppies and pregnant mothers were destroyed. All of the dogs were destroyed before the cases against the owners were finished and in all cases the owners were not found guilty. No dog fighting was involved and the dogs were not a danger to anyone.

Another case involved a man, Robert Stevens, who loved pit bulls and had made and sold three

documentaries, one of old dog fights, one of pit bulls hunting boars, and one of Japanese dog fights (dog fighting is legal in Japan). Stevens himself did not use dogs for fighting, but made the films to educate pit bull owners. The basis for his arrest was because he sold videos that showed cruelty to animals. Stevens was cleared of all charges.

Part Three, *Pariah Dogs*, is an account of Constantinople's (Istanbul) extermination of street dogs in the early 1900s. Their solution was to catch, crate, and then toss the crated dogs from a boat onto Sharp Island, a barren piece of rock in the Sea of Marmara. There the dogs died of starvation. Dayan quotes an article from that time that reported more than 30,000 dogs were killed by 1910. The author takes us to modern times and the continued effort by the Turkish government to eliminate the street dogs. They are caught, neutered, and dumped into the forest. We are next taken to the capital of Mongolia where a film shows a hunter employed by the government to hunt and shoot the stray dogs.

Dayan has thoroughly researched the events in the book. Her love of pit bulls and dogs in general shines through. She shows us what the true nature of the pit bull is and what some have become in the hands of the wrong type of people. To a dog lover, this is a very heartbreaking volume to read but it illustrates prejudice and the justification people use for their actions.

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HANDBOOK OF THE MAMMALS OF THE WORLD. *Volume 6: Lagomorphs and Rodents I.*

Chief Editors: Don E. Wilson, Thomas E. Lacher, Jr., and Russell A. Mittermeier; Associate Editors: Albert Martínez-Vilalta and David Leslie, Jr.; Authors: Erika Barthelmess et al.; artwork and illustrations by Toni Llobet; photography by Josep del Hoyo et al. Published by Lynx Edicions, Barcelona (Spain), in association with Conservation International and IUCN. \$176.91. 987 p.; ill.; index. ISBN: 978-84-941892-3-4. 2016.

I am a rodent enthusiast with a special place in my heart for pika so, with great excitement, I opened the large box to reveal this wonderful volume. The first thing that struck me after the size (pages are roughly 9.5 × 12") was the attention to detail and the sheer joy this book conveys celebrating lagomorph and rodent diversity. The volume is filled with stunning photographs of mammals in action—a pika calling, a marmot alarm calling, a Santa Catarina's guinea pig singing, squirrels copulating, capybara leaping into the water, squirrels moving their pups, a cape hare chased by a cheetah, a South African ground squirrel mobbing a snake, and a cane rat succumbing to predation by a leopard. But there is much more.

Each taxonomic group—beavers, pocket mice, kangaroo mice and kangaroo rats, pocket gophers, anomalures, springhares, gundis, kha-nyou, Old World porcupines, cane rats, noki, naked mole-rats, African mole-rats, New World porcupines, pacas, cavies, capybaras and maras, agoutis and acouchys, viscachas and chinchillas, pacarana chinchilla rats and Inca rats, tuco-tucos, viscacha rats, degus, rock rats and coruro, hutias, coypu and South American spiny rats, mountain beaver, and tree, flying, and ground squirrels, chipmunks, marmots and prairie dogs, and dormice—begins with a lengthy overview that summarizes knowledge of systematics, morphology, habitat, general habits and other behaviors (depending upon what is known), food and feeding, breeding, movements and social organization, relationships with humans, and status and conservation. Following these summary sections are plates with full-color drawings of each species followed by species accounts—each with a range map.

I learned a lot because the book has the most up-to-date taxonomy and species names. For instance, there are more species of Eurasian pika than the last time I looked and a new species is aptly named after a former colleague (Hoffmann's pika). I also learned that someone changed the name of the marmot I study (*Marmota flaviventris* to *M. flaviventris*) to correct a grammatical error. When I dug down into species accounts for species that I was more familiar with, I both learned new things and was impressed with how up-to-date the literature cited was.

I have several quibbles. First, range maps focus on native ranges, many of which are depressingly small. Yet, lagomorphs and rodents have been introduced beyond their native range and, in some cases, have had a major impact on the ecologies of these new environments. Although discussed in the text, maps would have been nice. Second, there are 94 pages of tightly packed citations, but the references are not attributed to facts and although this makes the text very readable, it is a little less useful as a scholarly work. Thus, when I was uncertain of some statements, I was unable to track down the source. Third, and unlike various avian and primate handbooks, I do not believe there was sufficient life-history and behavioral data consistently summarized for this to be a primary reference for comparative studies. Although not fatal, this was a missed opportunity and may partially reflect the paucity of data on many of these striking, but poorly known, species.

Quibbles aside, this volume must be acquired by every library and anyone with a keen interest in these fascinating mammals. It is an outstanding, essential, and enjoyable resource.

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ELEPHANT SENSE AND SENSIBILITY: BEHAVIOR AND COGNITION.

By Michael Garstang; photographs by Wynand du Plessis and Claudia du Plessis. Academic Press. Amsterdam (The Netherlands) and Boston (Massachusetts): Elsevier. \$49.95 (paper). xiii + 133 p.; ill.; index. ISBN: 978-0-12-802217-7. 2015.

Admittedly, I was surprised to see a book titled *Elephant Sense and Sensibility: Behavior and Cognition* by Michael Garstang, a scientist and professor in meteorology and known for his pioneer work on elephant long-distance communication in relation to atmospheric conditions, but not specifically for elephant behavior and cognition. Yet, the author's network with elephant scientists and specialists, his experience, and his scientific knowledge provide a solid foundation for this holistic volume on elephant behavior. In 14 chapters, Garstang addresses complex topics such as the neuroanatomy and the function of the brain, memory, morality, emotions, empathy and altruism, communication (focusing on vocal signals), learning, and teaching as well as, finally, addressing the human-elephant relationship. With the exception of the second chapter, where the evolution of the Elephantidae is outlined, the author strongly focuses on the African savannah elephant (*Loxodonta africana*). This is self-explanatory since research on elephant behavior has focused mainly on *L. africana*. Although not explicitly stated in the book, findings on *L. africana* should not be automatically transferred to the other elephant species, in particular, not to the Asian elephant (*Elephas maximus*).

Readers should not expect a complete synopsis of the most relevant literature. Some scientific findings and papers that I would have considered explicitly as important are not incorporated, most obvious to me in the chapters An Elephant's Brain and Communication (this would, for example, concern the work by Suzana Herculano-Houzel and colleagues in 2014, who found that the elephant brain contains 257 billion (10^9) neurons, three times more than the average human brain; however, 97.5% of the neurons are concentrated in the cerebellum, making the elephant an absolute mammalian outlier in regard to the number of cerebellar neurons, which might be related to sensorimotor specializations). Although Garstang most likely did not intend to provide a complete literature overview, students and researchers should be aware that not all significant papers have been incorporated.

I really appreciated the numerous appealing anecdotes that appear in each chapter. Importantly, these anecdotes stem from scientists and/or noted elephant specialists, reporting case observations that have not been published in prevalent scientific journals. These observations, and the way they are presented, offer a special perspective into elephant