Foreword

Harry W. Greene

American Bison: A Natural History is the sixth volume in the University of California Press series on organisms and environments. Our unifying themes are the diversity of plants and animals, the ways in which they interact with each other and with their surroundings, and the broader implications of those relationships for science and society. We seek books that promote unusual, even unexpected connections among seemingly disparate topics, and we want to encourage projects that are distinguished by the unique perspectives and talents of their authors. Other volumes thus far have concerned the ecology of Arizona grasslands, the behavior of Bornean treeshrews, Seri ethnoherpetology, the amphibians and reptiles of Baja California, and global lizard biology.

Among all living mammals, bison are perhaps most emblematic of North America and of the fate of wildlife on a continent so long and dramatically transformed, especially under the weight of our impact. During their most recent twenty thousand years or so, bison have witnessed glaciers advancing and receding with widespread climate changes, invasions of the New World by humans from Asia and Europe, and the extinction of several dozen species of other large mammals. Over those same millennia we have slaughtered bison in numbers beyond comprehension, as men first with spears chased them over cliffs, then later with bow and arrows dispatched them from horseback, and finally with rifles shot them from railway cars. Today bison still roam North American prairies, most of them in a few small herds from Canada to Oklahoma, and their biology still mirrors the seasonal rhythms of weather and local ecology. And as did their Pleistocene ancestors, these massive, shaggy creatures stir up the insects that cowbirds eat, crop vast expanses of grassland, and create vernal pools with their dust wallows. Meanwhile, bison are threatened

by ever-shrinking habitat, political controversies, and, perhaps surprisingly, the possibility of extinction through domestication.

Ask professional animal behaviorists what motivates their field studies and the commonest answer is likely “curiosity,” especially a desire to know what it is like to be a particular animal. Although some biologists and philosophers regard that question as fundamentally unanswerable, many of us just as stubbornly find it irresistible, and there’s no denying that accurate observations provide windows into the lives of other organisms. Thoroughly documented field biology also supplies the facts that underlie conservation, management, and public concern for nature. *American Bison* serves all of these goals as it follows one man’s lifetime obsession with the details of bison natural history. Dale Lott is a respected scholar as well as a keen and sympathetic observer of animals and people, and I think he must love bison. Lott grew up among these creatures he often as not calls buffalo, and his engaging prose crackles, almost rumbles at times with a deep appreciation for them and their surroundings. Beyond the basic findings of science, he offers pithy comments on rural lifestyles and just enough personal background to give the reader a welcome familiarity and confidence in his views. Perhaps most intriguingly, Lott asks us to distinguish between real and mythical bison, between the animals as they were and still might be and the animals as we wish they were. With honest knowledge, he seems to imply, we might better ask what kind of bison we will tolerate and what kind of world we can share.

American Bison comprehensively summarizes the biology of these large mammals. Thanks to Lott’s interest in seemingly everything having to do with the Great Plains, along the way we learn about mountains, rain shadows, wind, soil, wolves, prairie dogs, horses, symbiotic gut bacteria, and diseases of cattle. He also tutors us in the basics of ecological theory and behavioral endocrinology, as well as in what to do when a bison cow charges. This wonderful book is packed with facts, some familiar, others new and even surprising. For example, there are likely no more than 30 million bison at peak abundance in North America, rather than 60 or 70 million as is often stated. Ironically, all the founder animals of today’s public herds—except for those in Yellowstone and the wood bison in Canada—came from the stock of famed Texas rancher Charles Goodnight

and other private owners. Badgers and coyotes sometimes do hunt collaboratively, as long claimed by Indians; and however awkward a grown bison might look to us, one bull did a standing high jump that landed him six feet above his launch site, and another “hopped” an eight-foot-wide cattle guard!

We are so fortunate that today there are places in North America to experience such magnificent creatures and that Dale Lott’s life’s work inspires us to learn what it’s like to be one of them. In the parks and refuges where bison still live freely, a visitor can stand near a herd during mating season and feel the tremble of their movements and vocalizations, or watch a ton of woolly brown herbivore casually drop to the ground and roll in a cloud of dust. *American Bison: A Natural History* closes with carefully reasoned arguments for a Great Plains Park, a place where we can preserve these animals and thereby save some wilderness for all of us.

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