FOREWORD

by Harry W. Greene

WITH THE PUBLICATION of Carl and Jane Bock's *The View from Bald Hill*, the University of California Press inaugurates a new series on organisms and environments. Our central themes are the distribution and abundance of organisms, the ways in which plants and animals interact with their surroundings, and the broader implications of those relationships for science and society. The series goals are to promote unusual, even unexpected connections among seemingly disparate topics, as well as to encourage books that are special by virtue of the unique perspectives and talents of their authors. Other volumes in the series include an ethnoherpetology of the Seri by Gary Paul Nabhan and a natural history of treeshrews by Louise H. Emmons.

The View from Bald Hill is about grassland ecology, written by a couple who have devoted their professional lives to untangling that mystery at a particular place in Arizona. Historically one of the largest biomes in North America, native grasslands are now among the world's most endangered ecosystems, and therein lie the most urgent implications of this fine book. Despite widespread concern for global loss of biodiversity, relatively little public attention has been focused on two of the most fundamental questions in conservation biology: How have we already affected our surroundings over the long-term past?

And just what shall we preserve for the future? If the clock could be pushed back, would we settle for North America as it existed in 1492? Mightn't we choose instead to have things as they were a few thousand years earlier, before the advent of widespread aboriginal agriculture and hunting? Or perhaps even twenty thousand years ago, before people invaded the New World? How can science help inform environmental policy, and why should we even care about the fate of prairie ecosystems?

Tucson is famous for rocky bajadas and saguaro cacti, but only a few dozen miles to the southeast is rolling grassland, punctuated by forested, outlier ranges of the Sierra Madre Occidental. Thus situated, the Bocks' study site is on the very southwestern edge of the vast plains that stretch from northern Mexico to Canada. Until the mid-nineteenth century these immense steppes sustained countless millions of insects, birds, and herbivorous mammals; those animals in turn supported numerous lizards, snakes, raptors, and other predators. Today, although cattle are widespread and large carnivores long gone, even an hour's hike or a leisurely drive in the Arizona grasslands will dispel any notions of flatland monotony. Here the incandescence of sidelit grassy hills during a thunderstorm and the orange-lavender stripes of sunset on a craggy horizon easily rival natural beauty elsewhere. In this wide-open habitat it's not unusual to have a stroll enlivened by the buzz of an agitated rattlesnake, or to spot distant pronghorn through binoculars, then realize they've long since checked you out. And it's not hard to squint at those lovely animals and drop back ten thousand years, to imagine a Pleistocene bestiary of giant ground sloths and saber-toothed cats. Later, though, as you pass through the nearby town of Sonoita, the future looms in the form of ranchettes, boutiques, and barking dogs.

The Bocks bring an unusual mix of talents to their book on this special and troubled landscape. Jane is a plant ecologist and forensic botanist, while Carl is an ornithologist; both of them are award-winning teachers at the University of Colorado. Together the Bocks have spent more than three decades studying grassland ecosystems, from South Dakota and Montana to Arizona, and they have published more than one hundred and thirty scholarly papers on the results of that work. *The View from Bald Hill* synthesizes their efforts to under-

stand the complex effects of fire, rain, climate change, and invading species on a native biota. At the core of the story are careful observations followed by painstakingly controlled experiments, the very essence of good science, and in particular the Bocks are concerned with the effects of cattle grazing. They perceive a pattern or a puzzle in nature, then set out to learn what happens when one or more factors are manipulated; doing that can be surprisingly tedious, and often the results lead to new questions and more studies. Along the way the authors appreciate everything around them, from contrary weather and neighborly ranchers to snakes and coyotes.

Admonished to maintain objectivity and thus their credibility, biologists are also increasingly pressured to cross that line into social action, to get more involved. *The View from Bald Hill* goes well beyond a lucid account of grassland ecology and a primer on experimental field research. With graceful, unpretentious prose, the Bocks offer a first-hand view that is at once scholarly and affectionate, the chronicle of science with a heart. Above all, this book gives us a sense of the grasslands, a feel for the texture of their complexity and for their problems, and it closes with some poignant truths about our future.

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