

Animals' Best Friends: Putting Compassion to Work for Animals in Captivity and in the Wild. By Barbara J. King. Chicago (Illinois): University of Chicago Press. \$25.00. ix + 274 p.; index. ISBN: 978-0-226-60148-9 (hc); 978-0-226-60151-9 (eb). 2021.

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Details Figures References Cited by

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shift is ongoing; although the standard in wildlife genomics continues to be reduced representation sequencing, it is apparent that we will soon be sequencing whole genomes for most applications, given the increasing affordability of low coverage, high-throughput sequencing. In what seems, then, a pivotal period of change in the field comes *Population Genomics: Wildlife*, arriving late enough that the term "next-generation sequencing" is starting to become embarrassing, but early enough that we can anticipate that genomics research will look quite different in the near future. How, then, to provide a comprehensive and remotely useful overview of such a broad array of past, current, and emerging knowledge?

This impressive volume seeks to overcome this challenge by centering its theme on application over methodologies. Although this can lead to some deficiencies in coverage (the authors of the introductory chapter take an impressive stab at summarizing a basic bioinformatics pipeline for genomics research, but fail to highlight the computational power needed for such research), on the whole, the editors provide an excellent overview of contemporary and, ideally, future applications of population genomic research for the conservation of wildlife.

The book is comprised of 17 chapters organized into five parts that admirably cover the breadth of current focal areas in wildlife genetics. Chapter topics include advances in genomics for noninvasive, archival, and environmental DNA; the challenges of extrapolating methods across taxa given the variation in vertebrate genome sizes (with one species of salamander coming in at a whopping 120 Gb); and the application of genomic research toward mitigating infectious diseases in wildlife. Multiple chapters address the specific utility of genomic approaches for investigating evolutionary relationships of closely related populations and species complexes, which is becoming increasingly feasible given the higher resolution and greater statistical power of genomic markers. Unsurprisingly, a common area of focus throughout the volume is the genomics of adaptation, particularly in reference to using genomic techniques to better understand the role of adaptation for climate change management, a major emerging application of genomics research.

Perhaps most impressively, and most usefully, many chapters address a common issue for geneticists: how to effectively bridge the gap between research and application. The lengthy introductory chapter provides detailed guidance on designing research to address conservation needs, with specific reference to the need to move beyond peer-reviewed publications toward better communication with managers and conservationists. This chapter, combined with an entire part devoted to conservation and management, cements this volume as a valuable tool for students, researchers, and

managers working across the broad spectrum of wildlife genomics research.

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BEHAVIOR

ANIMALS' BEST FRIENDS: PUTTING COMPASSION TO WORK FOR ANIMALS IN CAPTIVITY AND IN THE WILD. By Barbara J. King. Chicago (Illinois): University of Chicago Press. \$25.00. ix + 274 p.; index. ISBN: 978-0-226-60148-9 (hc); 978-0-226-60151-9 (eb). 2021.

In this engaging and well-organized book, science writer Barbara J. King explores the complex and multifaceted relationship between human and non-human animals. She narrates many compelling stories derived from her personal experiences in the company of a diversity of creatures, from cows to spiders. I am a firm believer in storytelling as a means to create a direct connection with the readers to convey critical messages, so I genuinely enjoy when authors (especially science writers) get up close and personal in their writing.

Each chapter covers a different area of animal-human relationships and there are many practical suggestions on how readers can help animals in zoos, aquaria, farms, laboratories, and our homes. It is evident that the author has done extensive research for this book. She offers excellent insights of interest to specialists as well as animal lovers. As such, the volume will appeal to a broad audience and readers from diverse backgrounds and belief systems.

Throughout the book, I did not enjoy the ever-present use of citations of other authors and scientists. There are instances where King might have better used her own all-encompassing intimate knowledge and life experiences in the company of animals instead of citing others. However, this is only a minor criticism. I believe this is a great read and an important call for compassionate action.

A particularly refreshing aspect of the volume is that the author keeps an open mind and looks at issues from different perspectives. She does not attack those who do not think like her. King always remains respectful of others' opinions even when they are contrary to her beliefs and in conflict with her own emotions.

Explaining how each of us can nurture compassion and empathy toward the other animals we share the planet with, the author has crafted a valuable and

