J. Field Ornithol. 87(2):222–225, 2016 DOI: 10.1111/jofo.12153

RECENT LITERATURE

Edited by Sabrina S. Taylor
staylor@lsu.edu

BOOK REVIEW

Parrots of the Wild: A Natural History of the World's Most Captivating Birds Catherine A. Toft and Timothy F. Wright. 2015. University of California Press, Oakland, CA. 346 pages. ISBN 9780520239258. $39.95 (Hardcover). Also available as an e-book.

I will be the first to admit that I have been intrigued by parrots ever since I was a child, and allowed that interest to influence my decision to study parrots in graduate school and beyond. So I was predisposed to enjoy Catherine Toft and Timothy Wright's recently published *Parrots of the Wild*, written primarily by Toft before her death in 2011, and then finished by her longtime colleague and collaborator, Tim Wright.

I suspect that my fascination with parrots —the avian group that includes macaws, cockatoos, and parakeets—is not all that unusual. As a group, parrots are unique among birds for their long relationship with humans, who, across hundreds of years and many cultures, have kept them as pets. Due to their sociability and vocal abilities, parrots are birds with which many people feel a strong affinity and, as a result, I expect that many will enjoy reading this book.

In spite of humans' longstanding familiarity with parrots as pets, until fairly recently these birds remained largely unstudied in the wild. The last couple of decades, however, have seen a tremendous increase in our knowledge of their behavior, population biology, and evolutionary history. *Parrots of the Wild* summarizes and synthesizes this growing body of scientific literature on parrots in a way that is appealing and accessible to scientists and nonscientists alike. The range of topics covered in the book is broad, including the evolutionary history of this ancient avian group, their morphology and physiology, communication and cognition, mating behavior and population biology, and a discussion of parrot conservation and invasion biology. The depth and breadth of research reviewed is reflected in the number of references at the end of the book—the bibliography occupies a full 60 pages. Although the authors include information from laboratory-based studies of captive parrots (e.g., studies of mating behavior, vocal communication, and cognition), the book does not cover the avicultural or veterinary literature, and the emphasis is on understanding the behavior of wild parrots.

For the lay reader, whose interest in parrots may stem from knowing them as pets or watching them fly overhead while birding, Toft and Wright offer an opportunity to not only get to know these captivating birds, but to also gain some insight into how scientific research is done. For example, in the chapter on the evolutionary history of parrots, the reader gets a guided tour of the process by which scientists have gathered and interpreted information—fossils, morphological features, and molecular data—to infer the phylogenetic relationships among parrots. There is also a careful discussion of the study of vocal communication and cognition in parrots, highlighting some of the difficulties of studying vocal learning. Throughout the book, there is no attempt to shy away from technical aspects of biological research, and key terms and ideas are succinctly explained. The authors' use of scientific jargon is minimized and there are text boxes interspersed throughout to provide additional information on particular topics or case studies. For the biologist, even one who studies parrots, the book's breadth is sure to yield new information and insights, and is an invitation to dig further into the primary literature. The authors made the explicit decision not to insert citations and footnotes into the text to keep the book's length manageable and make the book more readable; fortunately, they provide a section with literature notes for each chapter, listing references for the topics covered. This permits

interested readers to delve into the primary literature on topics of particular interest, and makes the book a valuable scholarly resource.

Because I study parrots, I was familiar with much of the work discussed in the book, and so I especially appreciated that it is not simply a recapitulation of published research. Instead, it is an unprecedented synthetic review, with many insights and drawing on available information from a range of species and studies to examine common themes. A similar approach is taken in the discussion of the conservation and invasion biology of parrots, where the authors attempt to understand why some species have declined toward extinction whereas populations of others have spread beyond their native range.

Scientists are often pressed to justify their research in terms of its "broader impacts," to make it accessible, relevant, or useful to the rest of society. This book is a beautiful example of how biologists can use their expertise and a charismatic group of organisms to inform and educate the general public about natural history and scientific research. There is a large audience of people who are familiar with parrots to some degree, or who are interested in birds in general, as well as plenty of parrot fanatics—all would enjoy diving into this book. When they emerge, they will be up to date on our current knowledge of parrot biology, and will recognize even more fully the need to conserve these remarkable birds in the wild.

Jessica R. Eberhard, Department of Biological Sciences and Museum of Natural Science, Louisiana State University, Baton Rouge, LA, USA, eberhard@lsu.edu

doi: 10.1111/jofo.12153

Nests, Eggs, and Incubation: New Ideas about Avian Reproduction

Edited by D. Charles Deeming and S. James Reynolds. 2015. Oxford University Press, Oxford, UK. xiv + 296 pp, 8 page color insert, B&W photos and many figures. ISBN 9780198718666. $110 (Hardcover).

For me, incubation has always been the most fascinating part of the avian breeding cycle. It is quieter and more peaceful than other parts of the cycle. I like to watch females sitting motionless on nests and warming the eggs beneath their bodies. I can even imagine the tiny embryo developing inside the egg and turning into a small bird ready to hatch. The most comprehensive book on bird incubation has undoubtedly been *Avian Incubation* edited by Charles Deeming and published 14 years ago (Deeming 2002). Fourteen years is a long time and so Dr. Deeming considered producing a second edition. However, he decided not to revise the original book (because most of the information is still valid), but rather to write a new one that would focus more on nests and eggs, and in which he would present new information on different aspects of avian incubation. This new book was published last fall thanks to the hard work of two editors (Dr. Deeming was joined by S. James Reynolds) and 27 contributors from around the world.

Nests, Eggs and Incubation: New Ideas about Avian Reproduction focuses on four broad areas: the nest, the egg, incubation, and the study of avian reproduction. Altogether, there are 18 chapters written by leading authorities in their respective areas. The chapters dedicated to nests and eggs are based on both older and more recent studies whereas the chapters on incubation are based primarily on studies published after 2002. Although the main focus is on nests, eggs, and incubation, the book covers most of the avian breeding cycle.

After an introductory chapter written by the editors, we are taken back in time because the next chapter tells us what we have learned from the fossil record about the evolution of avian incubation. It is followed by six chapters focused on nests. In Chapter 3, the authors discuss how individuals and species differ in their nest building behavior (habitat and material choice, and composition of the nests) and the importance of learning in building nests. Functional properties of nests are the main topic of Chapter 4. Part of this chapter is also devoted to the techniques used to measure the thermal properties of nests and how thermal properties vary among different types of nests. For me, it was interesting to learn about the results of Dr.