BOOK REVIEWS: Video Surveillance of Nesting Birds. Edited by Christine A. Ribic, Frank R. Thompson III, and Pamela J. Pietz.

Marissa A. Ahlering

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Video Surveillance of Nesting Birds. Edited by Christine A. Ribic, Frank R. Thompson III, and Pamela J. Pietz. 2012. Studies in Avian Biology, No. 43. University of California Press, Berkeley, California, USA. 240 pages. $65.00 (hardcover). ISBN: 978-0520273139.

Observations and studies of nests have been a central component of ornithology since its inception. Until recently, studies of nesting ecology were limited to human observation, making some types of information nearly impossible to obtain, such as nocturnal behavior, or difficult to study with adequate sample sizes, such as provisioning behaviors or cause of nest failure. The use of video photography to study the nesting biology of birds has exploded in the past decade, and the most recent volume of Studies in Avian Biology, *Video Surveillance of Nesting Birds*, has done a nice job of summarizing the history of camera use in avian studies, the types of information that can be gained from video technology at nests, and the logistics and pitfalls of deploying these systems in the field.

The stated goal of this book is to highlight the growing body of literature on the use of video surveillance technology to advance our knowledge of avian nesting ecology. A common theme throughout the book is that the knowledge gained from using video cameras at nests is continually challenging or refuting long-held assumptions about breeding and predator behaviors. The majority of the chapters in the book focus on species in grassland or shrubland systems. The book is divided into four sections: an overview and synthesis section, breeding behavior, behavioral responses to predation and predator identification, and technology.

The overview and synthesis section begins with a chapter that reviews the knowledge gained from video cameras about grassland songbirds. This chapter does a good job reviewing this history of how the technology has evolved and was used in grassland systems and summarizing the key findings from video-camera data. The second chapter takes advantage of the growing number of nest-camera datasets to show a shift from snake-dominated nest predation at southern latitudes to mammal-dominated nest predation at northern latitudes, and the authors discuss the conservation and management implications from knowing the composition of the nest-predator community. Finally, this section concludes with a chapter reviewing the use of nest cameras with gamebird species. The authors also provide recommendations for future research, which provides a useful guide for students and researchers beginning camera studies with game birds.

The second section on breeding behavior includes chapters that focus on accurately documenting natural history and demographic parameters. Chapters 4–9 provide good examples of the other types of information that can be gained from using video cameras at nests, including verifying the length of egg and nestling stages, provisioning rates of adult birds, incubation behaviors, and nocturnal activity. Because the focus of most chapters is on grassland birds, these chapters also provide a valuable summary of grassland-songbird natural history outside of the context of video-camera technology.

The third section focuses on the use of video cameras to understand and identify nest predators. As Cox et al. state in Chapter 15, predator identification is one of the primary reasons for using video cameras at nests. This collection of chapters demonstrates how cameras have changed the way we think about nest success by being able to distinguish complete from partial predation events, documenting nest defense against predators, and demonstrating that different guilds of predators display different patterns of predation.

The final section is a chapter devoted to reviewing the literature and technology used in studies deploying video cameras at nests. This chapter presents a nice summary of the literature describing how cameras have been used at nests over the past 50 years. More importantly, the authors provide a useful overview of the types of equipment that have been used in the past and a very detailed description of two systems they field-tested. The authors do a good job highlighting the technological and electrical expertise that is necessary to build these systems and discuss many issues to consider when beginning a nest camera study. This is a must read for anyone thinking about conducting a nest-camera study.

In my view, the primary strength of this book is having a compiled source of information regarding the background of camera studies, good examples of how camera data can be used, and a review of the technology and expertise necessary to make these cameras operational in the field. For new graduate students or researchers considering the use of video cameras in their nest studies, this book provides a valuable resource for understanding what is known, current research needs, and examples and recommendations for how to implement a camera study. The main weakness of this book is the very limited discussion in any of the chapters on data management and video editing. Video cameras create enormous amounts of data that require time to watch and code, a lot of storage space, and potentially editing. Recommendations on how best to deal with these issues could be invaluable to researchers new to the field. Additionally, one caveat that is not clear from the title of the book is that the chapters are biased to grassland systems. Although this is likely because camera data are particularly useful for the cryptic nature of grassland-nesting species, it may catch readers off guard. However, the grassland bias makes this book a good resource for natural history and breeding biology of grassland-nesting species. The bottom line is that video surveillance at nests has propelled our knowledge about breeding and predator behav-

iors forward by leaps and bounds over the past two decades, and *Video Surveillance of Nesting Birds* provides a valuable introduction into the growing literature and enlightening use of video cameras in avian nest studies.—*Marissa A. Ahlering, Prairie Ecologist, The Nature Conservancy, 938 Lincoln Street, Vermillion, South Dakota 57069, USA.*