Wildlife in Airport Environments: Preventing Animal–Aircraft Collisions through Science-Based Management

by Travis L. DeVault, Bradley F. Blackwell, and Jerrold L. Belant, editors
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Review by Joe N. Caudell

Managing wildlife on airports is a growing field that was brought to widespread public attention with the emergency water landing of US Airways flight 1549. Captain Chesley Burnett “Sully” Sullenberger III made the spectacular landing on the Hudson River in New York City after the plane’s engines failed due to their ingesting large birds in flight. The event drew worldwide attention and became known as the “Miracle on the Hudson.” Since that time, wildlife managers and biologists, much of the media, and many of the general public have been made more aware of the need for wildlife management on airports. Wildlife in Airport Environments is the first comprehensive book, outside of training materials, that addresses this issue. Editors Travis L. DeVault, Bradley F. Blackwell, and Jerrold L. Belant, all experienced researchers in this field, pulled together a collection of papers that describe current methodology used in the control and management of wildlife at airports, as well as current avenues of research to reduce damage in this area.

Published in association with The Wildlife Society, the book is part of the relatively new wildlife management series from Johns Hopkins University Press. Divided into 15 chapters, it is comprised of a collection of papers written by a diverse group of researchers and the editors. The book’s 3 sections reflect 3 different aspects of working with wildlife at airports: managing wildlife populations; managing the resources wildlife use on airports; and monitoring wildlife populations. The section on wildlife management techniques reviews the current methods used by biologists and other wildlife managers at airports and is broken down into chapters on visual deterrents, chemical repellents, exclusion of mammals, translocation, and population management techniques. The section on managing resources focuses on managing the food, water, and vegetation on airports to effectively reduce wildlife use of airport properties. The last section focuses on wildlife monitoring and includes a section on using radar to monitor wildlife populations. This section provides information on survey techniques and understanding animal movement on and around airports.

The editors and authors did an excellent job pulling together technical material in a format that is relatively easy to read. The text is organized into thematic chapters that focuses on wildlife management principles, rather than on techniques. Unlike the Federal Aviation Administration’s (Cleary and Dolbeer 2005) and Canada’s (MacKinnon 2004) guidelines for minimizing airstrikes, it is not an instruction or “how to” manual. Instead, it can be used as a supplement to update both of those manuals, serving as a valuable reference for wildlife biologists and airport operations managers looking for a review of the current advances in wildlife management techniques at airports. It is least valuable to practitioners who are simply looking for a description on how to use the new
techniques and apply them on airports, as it will require locating and interpreting the research sources described in the text and applying them in field setting. However, university instructors who desire to have more of an emphasis on this growing area of wildlife damage management will find this book valuable as a supplemental text for their courses.

Literature cited

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