BioOne COMPLETE

Cover

Source: The Auk, 131(1)

Published By: American Ornithological Society

URL: https://doi.org/10.1642/auk.2014.131.1.cover

BioOne Complete (complete.BioOne.org) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at www.bioone.org/terms-of-use.

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to

Downloaded From: https://complete.bioone.org/journals/The-Auk on 24 May 2024
Terms of Use: https://complete.bioone.org/terms-of-use

www.aoucospubs.org

Mission and Scope

The Auk: Ornithological Advances is an international, peer-reviewed journal that publishes original research and scholarship advancing the fundamental scientific knowledge of bird species and broad biological concepts (e.g., ecology, evolution, behavior, physiology, genetics) through studies of bird species. Articles often introduce or employ innovative empirical and theoretical approaches and analyses.

Topics covered in the journal include:

- Evolutionary history and paleontology
- Systematics and nomenclature
- Behavioral ecology
- Foraging strategies and tactics
- Population biology and ecology
- Molecular ecology
- Community and landscape ecology
- Migration and orientation
- Spacing patterns and habitat use
- Genetics and genomics
- Epigenetics, and evolutionary development
- Physiology and biochemistry
- Morphology and anatomy
- Integrative and cross-disciplinary studies
- Theoretical and methodological advances
- Thematic reviews and opinion pieces

Joint Publishing Venture

The American Ornithologists' Union and the Cooper Ornithological Society have redefined and are jointly publishing their peer-reviewed, international journals of ornithology beginning in 2014. *The Auk* has become *The Auk: Ornithological Advances* and focuses on basic ornithological science. *The Condor* has become *The Condor: Ornithological Applications* and focuses on applied ornithological study. The redefined missions create an opportunity for the journals to work together to publish the best science in basic and applied ornithology and to build on their long histories as top journals in the field of avian biology.

The Auk: Ornithological Advances and *The Condor: Ornithological Applications* are managed by the Central Ornithology Publication Office (COPO), the joint publication management office of the American Ornithologists' Union and the Cooper Ornithological Society.

The Auk: Ornithological Advances
Volume 131, Number 1, Pages 1–119
January 2014

www.aou.org

The Auk
Ornithological Advances

Volume 131 Number 1 January 2014



Editor-in-Chief: Mark E. Hauber

INTERNATIONAL JOURNAL OF THE AMERICAN ORNITHOLOGISTS' UNION

Downloaded From: https://complete.bioone.org/journals/The-Auk on 28 Mar 2024
Terms of Use: https://complete.bioone.org/terms-of-use

INTERNATIONAL JOURNAL OF THE AMERICAN ORNITHOLOGISTS' UNION
www.aoucospubs.org

The Auk
Ornithological Advances

EDITOR-IN-CHIEF **Mark E. Hauber**
Hunter College and the Graduate Center, The City University of New York, mark.hauber@hunter.cuny.edu

EDITORS **Kimberly Bostwick,** *Cornell University Museum of Vertebrates,* ksb6@cornell.edu
James S. Sedinger, *University of Nevada Reno,* jsedinger@cabnr.unr.edu

Managing Editor: Kathleen E. Erickson, aoucospubs@gmail.com, (415) 435-1604, Fax: (707) 559-5030
Assistant Managing Editor/Communications Specialist: Rita-Lyn Sanders, aoucospubs@gmail.com, (360) 687-8716
Copyeditors: Richard Earles, Janice Faaborg, Scott W. Gillihan, Mark C. Penrose (Figure editor), Thalia Sachtleben
Abstract Translators: Carlos Daniel Cadena Ordoñez, Jessica Eberhard, Lucio R. Malizia, Karl S. Mokross, César Sánchez, Hélène Senechal
Central Ornithology Publication Office Coordinator: Bonnie S. Bowen, bonnie.bowen@gmail.com

ASSOCIATE EDITORS

Lauryn Benedict, *University of Northern Colorado*
Melissa Bowlin, *University of Michigan-Dearborn*
Luke K. Butler, *The College of New Jersey*
Bruce Byers, *University of Massachusetts Amherst*
C. Daniel Cadena, *Universidad de los Andes*
Phillip Cassey, *The University of Adelaide*
Christopher J. Clark, *University of California Riverside*
Robert L. Curry, *Villanova University*
Donald Dearborn, *Bates College*
Mark E. Deutschlander, *Hobart and William Smith Colleges*
Stephen J. Dinsmore, *Iowa State University*
Jack Dumbacher, *California Academy of Sciences*
Jennifer Gee, *James San Jacinto Mountains Reserve*
Sharon Gill, *Western Michigan University*
Tomáš Grim, *Palacký University*
D. Caldwell Hahn, *USGS Patuxent Wildlife Research Center*
Thomas P. Hahn, *University of California Davis*
Colleen M. Handel, *USGS Alaska Science Center*
Stefanie Ismar, *GEOMAR Helmholtz Center for Ocean Research Kiel*
Douglas H. Johnson, *USGS Northern Prairie Wildlife Research Center*
Jason Jones, *Tetra Tech EBA*
Jeff Kelly, *University of Oklahoma*
David Koons, *Utah State University*
David Lahti, *Queens College, City University of New York*
Adam Z. Lendvai, *Virginia Tech*
Catherine Lindell, *Michigan State University*
Bernard Lohr, *University of Maryland, Baltimore County*
Gerald Mayr, *Senckenberg Research Institute Frankfurt*
Bill Monahan, *National Park Service Inventory & Monitoring Program*
Troy G. Murphy, *Trinity University*
Paul M. Nolan, *The Citadel (Military College of South Carolina)*
Raul Ortiz-Pulido, *Universidad Autónoma del Estado de Hidalgo*
Sara Oyler-McCance, *USGS Fort Collins Science Center*
Juan L. Parra, *Universidad de Antioquia*
Rebecca J. Safran, *University of Colorado Boulder*
Terry Shaffer, *USGS Northern Prairie Wildlife Research Center*
Frederick H. Sheldon, *Louisiana State University*
Dave Shutler, *Acadia University*
Jill Soha, *Duke University*
Benjamin N. Taft, *University of Wisconsin-Parkside*
Andrea K. Townsend, *University of California Davis*
Elaina Tuttle, *Indiana State University*
Rachel Vallender, *Canadian Wildlife Service*
Eric Walters, *Old Dominion University*

Book Review Editor: R. Todd Engstrom, *Florida State University,* engstrom@bio.fsu.edu, 13093 Henry Beadel Dr., Tallahassee, FL, 32312
In Memoriam Editor: Edward Burtt, *Ohio Wesleyan University,* ehburtt@owu.edu

On the Cover: Brood parasitic Brown-headed Cowbirds (*Molothrus ater*) lay distinct eggs into nests of acceptor Eastern Phoebes (*Sayornis phoebe*). Photo credit: Marie Read (www.marieread.com)

Journal Information: *The Auk: Ornithological Advances* publishes original research and scholarship advancing the fundamental scientific knowledge of bird species and broad biological concepts (e.g., ecology, evolution, behavior, physiology, genetics) through studies of bird species. Appropriate topics include documentation, analysis, and interpretation of laboratory and field studies; theoretical or methodological developments; and reviews of information or ideas. Authors are encouraged to write papers from the perspective of general concepts and theories and to consider the relevance of their findings to taxa in addition to birds. Authors are encouraged to submit high-resolution photographs to accompany their articles. Contributions are welcomed from around the world but must be written in English. *The articles in this journal reflect the research and opinions of the individual authors. As such, the articles do not necessarily reflect the opinions of the editors or any official policy of the American Ornithologists' Union.*

Submit manuscripts online at http://www.editorialmanager.com/auk. **Author instructions** are at www.aoucospubs.org/page/instructions.

Copying and permissions notice: To obtain rights and permission to reprint papers, figures, tables, etc., or parts thereof, previously published in *The Auk* and *The Auk: Ornithological Advances,* contact the Central Ornithology Publication Office (COPO) at aoucospubs@gmail.com.

Abstracting and Indexing: Articles appearing in *The Auk: Ornithological Advances* are abstracted and indexed in many select databases, including: Animal Behavior Abstracts, BIOSIS Previews, CAB Abstracts, Current Contents: Agriculture, Biology & Environmental Sciences, Ecology Abstracts, GEOBASE, PsycINFO, Science Citation Index Expanded, Wildlife and Ecological Studies Worldwide, Zoological Record.

The Auk: Ornithological Advances (ISSN 0004-8038, e-ISSN 1938-4254) is published online weekly by the American Ornithologists' Union at www.aoucospubs.org and is printed quarterly. Periodicals postage paid at Lawrence, KS. POSTMASTER: Send address changes to *The Auk: Ornithological Advances*, OSNA Business Office, 5400 Bosque Blvd., Suite 680, Waco, TX, 76710; business@osnabirds.org. Printed quarterly by Allen Press on Forest Stewardship Council certified paper.

The Auk: Ornithological Advances, Volume 131, Number 1, January 2014. ©2014 American Ornithologists' Union. All rights reserved.

Downloaded From: https://complete.bioone.org/journals/The-Auk on 28 Mar 2024
Terms of Use: https://complete.bioone.org/terms-of-use

The American Ornithologists' Union

THE COUNCIL FOR 2013–2014

OFFICERS AND EDITORS

President: Susan M. Haig, *USGS Forest and Rangeland Ecosystem Science Center,* 3200 SW Jefferson Way, Corvallis, OR, 97331, susan_haig@usgs.gov

President-Elect: Scott M. Lanyon, *Department of Ecology, Evolution, and Behavior, University of Minnesota,* 1987 Upper Buford Circle, St. Paul, MN, 55108, Layno001@umn.edu

Secretary: Sara R. Morris, *Department of Biology, Canisius College,* 2001 Main Street, Buffalo, NY, 14208, morriss@canisius.edu

Treasurer: James R. Herkert, *Illinois Department of Natural Resources,* One Natural Resources Way, Springfield, IL, 62702, james.herkert@illinois.gov

Editor-in-Chief of *The Auk: Ornithological Advances*: Mark E. Hauber, *Department of Psychology, Hunter College, City University of New York,* 628C Hunter North, 695 Park Avenue, New York, NY, 10021, mark.hauber@hunter.cuny.edu

Editor of *Ornithological Monographs*: Michael L. Morrison, *Wildlife and Fisheries Sciences, Texas A&M University,* 210 Nagle Hall, MS 2258, College Station, TX, 77843, mlmorrison@ag.tamu.edu

Business Manager: Scott W. Gillihan, 5405 Villa View Drive, Farmington, NM, 87402, aoubusinessmanager@gmail.com

ELECTIVE COUNCILORS

2014: Irby J. Lovette, Scott K. Robinson, Kenneth V. Rosenberg, Kevin Winker
2015: Daniel R. Ardia, Maria Del Coro Arizmendi, Rebecca T. Kimball, Jorge L. Perez-Eman
2016: David N. Bonter, Kevin J. Burns, Deborah M. Finch, Patricia J. Heglund

LIVING PAST PRESIDENTS

John Faaborg (2010–2012), Edward H. Burtt, Jr. (2008–2010), Erica H. Dunn (2006–2008), James A. Kushlan (2004–2006), Fred Cooke (2002–2004), John W. Fitzpatrick (2000–2002), Frank B. Gill (1998–2000), Richard C. Banks (1994–1996), Brina Kessel (1992–1994), Frances C. James (1984–1986), Wesley E. Lanyon (1976–1978)

MEMBERSHIP

Persons interested in birds are invited to join the American Ornithologists' Union. Regular membership costs $75 per year; student memberships are $28. Membership is $28 for persons in all countries except the United States, Canada, Israel, Japan, Australia, New Zealand, and the following Western European countries: Iceland, Norway, Sweden, Finland, Denmark, Germany, The Netherlands, Belgium, Luxembourg, France, the United Kingdom, Ireland, Switzerland, Austria, Italy, Spain, and Portugal. All members receive access to the online version of *The Auk: Ornithological Advances* and the bimonthly *Ornithological Newsletter*. Quarterly print versions of *The Auk: Ornithological Advances* can be ordered by members for $30/year. A life membership is $2,600, paid in one sum or four annual installments of $650. Individuals may join, renew memberships, and report changes of address through the Ornithological Societies of North America (OSNA): www.osnabirds.org; business@osnabirds.org; 5400 Bosque Blvd., Suite 680, Waco, TX, 76710. Gifts of any amount for the Endowment Fund are welcome and should be sent to AOU, c/o Schneider Group, 5400 Bosque Blvd., Suite 680, Waco, TX, 76710. Gifts to the AOU are tax-deductible to the extent permitted by law.

INSTITUTIONAL SUBSCRIPTIONS

The Ornithological Societies of North America (OSNA) handles institutional subscriptions: (254) 399-9636, business@osnabirds.org. See www.osnabirds.org for single-issue and subscription orders, claims information, and mail dates. Domestic claims for nonreceipt of issues should be made within 90 days of the mail date; overseas claims within 180 days.

The Auk: Ornithological Advances, Volume 131, Number 1, January 2014. ©2014 American Ornithologists' Union. All rights reserved.