



Front Matter

Source: The Condor, 114(4)

Published By: American Ornithological Society

URL: <https://doi.org/10.1525/cond.2012.114.4.fm>

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.

Usage of BioOne Complete content is strictly limited to personal, educational, and non - commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

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 critical research.



THE CONDOR

AN INTERNATIONAL JOURNAL
OF AVIAN BIOLOGY

A PUBLICATION OF THE
COOPER ORNITHOLOGICAL SOCIETY
SINCE 1899

VOLUME 114

NUMBER 4

NOVEMBER 2012

MICHAEL A. PATTEN
Editor-in-Chief

PHILIP UNITT
Managing Editor

JOSEPH J. FONTAINE
Book Review Editor

BRENDA D. SMITH-PATTEN
Editorial Assistant

LUCIO R. MALIZIA
CINTIA CORNELIUS
C. DANIEL CADENA
Spanish Abstract Translations

BOARD OF REVIEWING EDITORS

JUAN I. ARETA
*Consejo Nacional de Investigaciones
Científicas y Técnicas*
ELI S. BRIDGE
University of Oklahoma
RICHARD BUCHHOLZ
University of Mississippi
C. DANIEL CADENA
Universidad de los Andes
ROBERT L. CURRY
Villanova University
VERONICA A. J. DOERR
*Australian Commonwealth Scientific
and Research Organization*
RENATA DURÃES
Tulane University
RICHARD A. ERICKSON
LSA Associates
LINNEA S. HALL
Western Foundation of Vertebrate Zoology
KEITH A. HOBSON
Environment Canada
JASON JONES
*Tetrattech Environmental
Consulting, Inc.*
JEFF F. KELLY
University of Oklahoma
STEVEN T. KNICK
Rangeland Ecosystem Science Center
WILLIAM B. KRISTAN III
California State University, San Marcos
RICHARD B. LANCTOT
United States Fish and Wildlife Service
STEVEN C. LATTA
National Aviary

MATTHIAS LEU
College of William and Mary
JAMES R. LOVVORN
Southern Illinois University
KEVIN J. MCGRAW
Arizona State University
MATTHEW MILLER
Smithsonian Tropical Research Institute
FRANK R. MOORE
University of Southern Mississippi
TROY G. MURPHY
Trinity University
JOSEPH J. NOCERA
Ontario Ministry of Natural Resources
ERICA NOL
Trent University
RAÚL ORTIZ-PULIDO
Universidad Autónoma del Estado de Hidalgo
CHRISTIN L. PRUETT
Florida Institute of Technology
GREGORY J. ROBERTSON
Environment Canada
VICTORIA A. SAAB
Rocky Mountain Research Station
FREDERICK H. SHELDON
Louisiana State University
DAVE SHUTLER
Acadia University
JILL A. SOHA
Duke University
DAVID L. SWANSON
University of South Dakota
ERIC L. WALTERS
Old Dominion University
MAIKEN WINTER
Cornell University

LATIN AMERICAN EDITORIAL BOARD

LUCIANO NICOLAS NAKA, Chair
*Louisiana State University &
Universidade Federal do Roraima*
CATHERINE BECHTOLDT
University of Illinois
SANTIAGO CLARAMUNT
*American Museum of
Natural History*
JUAN MAZAR BARNETT
Aves Argentinas
JUAN LUIS PARRA
Stony Brook University

EARLY-CAREER EDITORIAL BOARD

TIMOTHY J. O'CONNELL, Faculty Mentor
Oklahoma State University

BRIAN BIELFELT
CHRISTOPHER W. BRIGGS
ASHLEY CASEY
SCOTT J. CHIAVACCI
ANDREA CONTINA
CLAIRE M. CURRY
ANTHONY C. DALISIO
BLAKE GRISHAM
TYLER M. HARMS
DIANE V. LANDOLL
KATHRYN M. LANGIN
KRISTEN MARTIN
MARIO PESENDORFER
J. RYAN SHIPLEY
DAVE SLAGER
RYAN TERRILL
KATERINA TVARDIKOVA
STEPHANIE WRIGHT

EDITORIAL OFFICE: Oklahoma Biological Survey, University of Oklahoma, 111 E. Chesapeake St., Norman, OK 73019; condor@ou.edu

THE COOPER ORNITHOLOGICAL SOCIETY

President: Kimberly A. Sullivan, Department of Biology, Utah State University, Logan, UT 84322-5305, phone: 435-797-3713, fax: 435-797-1575, e-mail: vejunco@biology.usu.edu

President-Elect: Frank R. Moore, Department of Biological Sciences, University of Southern Mississippi, Hattiesburg, MS 39406-0001, phone: 601-266-4748, fax: 601-266-5797, e-mail: Frank.Moore@usm.edu

Treasurer: Katie Dugger, Department of Fisheries and Wildlife, Oregon State University, 104 Nash Hall, Corvallis, OR 97331, phone: 541-737-2473, fax: 541-737-3590, e-mail: katie.dugger@oregonstate.edu

Assistant Treasurer: Margaret Petersen, Anchorage, AK 99508, phone: 907-786-7180, fax: 907-786-7070

Secretary: Abby Powell, Department of Biology and Wildlife, University of Alaska, Fairbanks, AK 99775-7020, phone: 907-474-5505, fax: 907-474-7872, e-mail: abby.powell@alaska.edu

Assistant Secretary: Joseph J. Fontaine, School of Natural Resources, University of Nebraska, Lincoln, NE 68583, phone: 402-472-0339, fax: 402-472-2722, e-mail: jfontaine2@unl.edu

Editor-in-Chief of the *Condor*: Michael Patten, Oklahoma Biological Survey, University of Oklahoma, 111 E. Chesapeake Street, Norman, OK 73109, phone: 405-325-5061, fax: 405-325-7702, e-mail: condor@ou.edu

Managing Editor of the *Condor*: Philip Unitt, San Diego Natural History Museum, P. O. Box 121390, San Diego, CA 92112, phone: 619-255-0235, fax: 619-232-0248, e-mail: birds@sdnhm.org

Editor of *Studies in Avian Biology*: Brett K. Sandercock, Division of Biology, Kansas State University, Manhattan, KS 66506, e-mail: bsanderc@ksu.edu

BOARD OF DIRECTORS

2009–2012
BONNIE BOWEN
SIEVERT ROWHER
SUSAN SKAGEN

2010–2013
CRAIG W. BENKMAN
EILEEN KIRSCH
CAROL VLECK

2011–2014
ANNA CHALFOUN
VICTORIA DREITZ
SCOTT SILLETT

COMMITTEE CHAIRS

PUBLICATIONS: FRANK MOORE	PAINTON AWARD: LEONARD FREED
BYLAWS: MERCEDES FOSTER	MILLER AWARD: TOM MARTIN
FINANCE: KIMBERLY A. SULLIVAN	KATMA AWARD: STEVEN BEISSINGER
HISTORY: LLOYD F. KIFF	MEWALDT–KING AWARD: VACANT
MEMBERSHIP: MARTIN RAPHAEL	GRINNELL AWARD: WALTER WEHTJE
HONORARY MEMBERSHIP: MARTIN RAPHAEL	STUDENT TRAVEL AND PAPER AWARDS:
CONSERVATION–RESOLUTIONS: VACANT	SUSAN SKAGEN
STUDENT PARTICIPATION: MATTHIAS LEU AND DANIEL BARTON	WEBSITE COMMITTEE: TY C.M. HOFFMAN
NOMINATING FOR DIRECTORS: PATRICIA KENNEDY	ARCHIVES: BRENDA D. SMITH-PATTEN
	STUDENT MEMBERSHIP: SHELDON J. COOPER

2012 ANNUAL MEETING LOCAL COMMITTEE: BOB ELNER AND KATHY MARTIN

REPRESENTATIVES

AAAS: ELLEN PAUL JOURNAL EXCHANGE: MERCEDES FOSTER
NORTH AMERICAN BANDING COUNCIL: STEPHEN RUSSELL AND PATRICIA HEGLUND
ORNITHOLOGICAL COUNCIL: JILL DEPPE AND TOM BANCROFT

THE COOPER ORNITHOLOGICAL SOCIETY

OFFICERS

KIMBERLY A. SULLIVAN
PRESIDENT

FRANK MOORE
PRESIDENT-ELECT

KATIE M. DUGGER
TREASURER

ABBY POWELL
SECRETARY

JOSEPH J. FONTAINE
ASSISTANT SECRETARY

MARGARET PETERSEN
ASSISTANT TREASURER

MICHAEL A. PATTEN
EDITOR-IN-CHIEF OF THE *CONDOR*

BRETT K. SANDERCOCK
EDITOR OF *STUDIES IN AVIAN BIOLOGY*

Membership: Any person interested in avian biology may become a member of the Cooper Ornithological Society. Regular membership rates (which include both online and print versions of *The Condor*) are US\$80 per year in select countries (United States, Canada, western Europe, Iceland, Australia, New Zealand, Israel, Japan, Republic of Korea, and Taiwan), \$25 per year in all other countries, \$55 for student members, \$30 for emeritus members, \$100 for families. Individuals may opt to receive *only* the online version for a reduced membership rate of \$40 per year, \$25 for student members. If applying for student rates, include a brief, signed statement from an academic advisor certifying student status. North American members also receive the bimonthly *Ornithological Newsletter*. All correspondence regarding membership, including dues payments and changes of address, should go to Ornithological Societies of North America (OSNA), 5400 Bosque Blvd., Suite 680, Waco, TX 76710, or business@osnabirds.org

Publications: *The Condor* is a quarterly journal devoted to the biology of wild birds. It publishes research reports, review articles, and commentary. Contributors should refer to the Instructions for Authors published in the February issue and on the Cooper Ornithological Society website, www.cooper.org. *The Condor* (ISSN 0010-5422, e-ISSN 1938-5129) is published quarterly (February, May, August, November) by the University of California Press, Journals and Digital Publishing Division, 2000 Center Street, Suite 303, Berkeley, CA 94704-1223, for the Cooper Ornithological Society. Periodicals postage paid at Berkeley, CA, and additional mailing offices. POSTMASTER: Send address changes to *The Condor*, University of California Press, Journals and Digital Publishing, 2000 Center Street, Suite 303, Berkeley, CA 94704-1223.

Manuscripts: via ScholarOne Manuscripts, <http://mc.manuscriptcentral.com/ucpress-cond>.

Books for review: to the *Condor* editorial office, Oklahoma Biological Survey, University of Oklahoma, 111 E. Chesapeake St., Norman, OK 73019.

Studies in Avian Biology, a series of works too long for the journal, is published at irregular intervals. Manuscripts: to Brett K. Sandercock, Division of Biology, Kansas State University, Manhattan, KS 66506, e-mail: bsanderc@ksu.edu

See www.ucpressjournals.com for single issue and subscription orders, and claims information. Domestic claims for nonreceipt of issues should be made within 90 days of the mail date; overseas claims within 180 days. Mail dates can be checked at: <http://www.ucpressjournals.com/ucpress.asp?page=ReleaseSchedule>. UC Press does not begin accepting claims for an issue until thirty (30) days after the mail date. Inquiries about advertising can be sent to adsales@ucpressjournals.com. For complete abstracting and indexing coverage for the journal, please visit <http://www.ucpressjournals.com>. All other inquiries can be directed to customerservice@ucpressjournals.com.

Copying and permissions notice: Luthorization to copy article content beyond fair use (as specified in Sections 107 and 108 of the U.S. Copyright Law) for internal or personal use, or the internal or personal use of specific clients, is granted by the Regents of the University of California on behalf of the Cooper Ornithological Society for libraries and other users, provided that they are registered with and pay the specified fee through the Copyright Clearance Center (CCC), www.copyright.com. To reach the CCC's Customer Service Department, phone 978-750-8400 or write to info@copyright.com. For permission to distribute electronically, republish, resell, or repurpose material from 2008 forward, use the CCC's Rightslink service, available on JSTOR at <http://www.jstor.org/r/ucal/cond>. Submit all other permissions and licensing inquiries through the University of California Press's Rights and Permissions website, www.ucpressjournals.com/reprintInfo.asp, or via e-mail: journalspermissions@ucpress.edu.



Printed by Allen Press on Forest Stewardship Council™—certified paper.

© 2012 Cooper Ornithological Society. All rights reserved.