



Front Matter

Source: The Condor, 112(1)

Published By: American Ornithological Society

URL: <https://doi.org/10.1525/cond.2010.112.1.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 COOPER ORNITHOLOGICAL SOCIETY

OFFICERS

MERCEDES S. FOSTER
PRESIDENT

KIMBERLY A. SULLIVAN
PRESIDENT-ELECT

KATIE M. DUGGER
TREASURER

ABBY POWELL
SECRETARY

BETH A. HAHN
ASSISTANT SECRETARY

MARGARET PETERSEN
ASSISTANT TREASURER

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

CARL D. MARTI
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 Scholar One Manuscripts, <http://mc.manuscriptcentral.com/ucpress-cond>.

Books for review: to David L. Swanson, Biology Department, University of South Dakota, Vermillion, SD 57069, e-mail: dlswanso@usd.edu

Studies in Avian Biology, a series of works too long for the journal, is published at irregular intervals. Manuscripts: to Carl D. Marti, Editor, *Studies in Avian Biology*, 1310 East Jefferson Street, Boise, ID 83712, e-mail: sab@spro.net

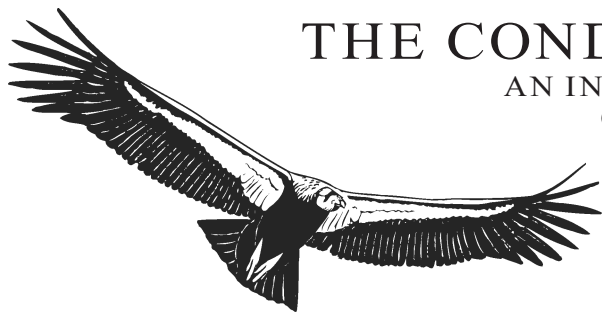
See www.ucpressjournals.com for single issue and subscription orders, and claims information. Domestic claims for nonreceipt of issues should be made within 90 days of the mail date; overseas claims within 180 days. Mail dates can be checked at: <http://www.ucpressjournals.com/ucpress.asp?page=ReleaseSchedule>. 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: Authorization 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, and to purchase article offprints, use the CCC's Rightslink service, available on Caliber at <http://caliber.ucpress.net>. 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.

© 2010 Cooper Ornithological Society. All rights reserved.



THE CONDOR

AN INTERNATIONAL JOURNAL
OF AVIAN BIOLOGY

A PUBLICATION OF THE
COOPER ORNITHOLOGICAL SOCIETY

VOLUME 112

NUMBER 1

FEBRUARY 2010

MICHAEL A. PATTEN
Editor-in-Chief

PHILIP UNITT
Managing Editor

DAVID L. SWANSON
Book Review Editor

BRENDA D. SMITH-PATTEN
Editorial Assistant

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

EDITORIAL BOARD

JUAN I. ARETA
*Consejo Nacional de Investigaciones
Científicas y Técnicas*
CARLOS BOSQUE
Universidad Simón Bolívar
JEFFREY D. BRAWN
*University of Illinois,
Urbana-Champaign*
ELI S. BRIDGE
University of Oklahoma
RICHARD BUCHHOLZ
University of Mississippi
C. DANIEL CADENA
Universidad de los Andes
C. RAY CHANDLER
Georgia Southern University
ROBERT L. CURRY
Villanova University
VERONICA A. J. DOERR
*Australian Commonwealth Scientific
and Research Organization*
RENÉE A. DUCKWORTH
University of Arizona
ALFRED M. DUFTY, JR.
Boise State University

MICHAEL W. EICHHOLZ
Southern Illinois University
RICHARD A. ERICKSON
LSA Associates
KEITH A. HOBSON
Environment Canada
JASON JONES
*Tetra Tech Environmental
Consulting, Inc.*
W. DANIEL KISSLING
University of California, San Diego
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
JAMES R. LOVORN
Southern Illinois University
KEVIN J. MCGRAW
Arizona State University
DOUGLAS A. NELSON
The Ohio State University

ERICA NOL
Trent University
CHRISTIN L. PRUETT
Florida Institute of Technology
JUDITH L. RHYMER
University of Maine
GREGORY J. ROBERTSON
Environment Canada
VICTORIA A. SAAB
Rocky Mountain Research Station
TERRY L. SHAFFER
Northern Prairie Wildlife Research Center
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
University of California, Berkeley
MAIKEN WINTER
Cornell University

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

Publishing new research from the full spectrum of ornithology since 1899.

THE CONDOR ONLINE: Access the Cooper Ornithological Society's website, www.cooper.org, to find tables of contents and abstracts for issues from February 2001 through the forthcoming issue, in English and Spanish. The COS website also provides prospective authors with current instructions for authors.

The Kirtland's Warbler (*Dendroica kirtlandii*) winters in The Bahamas, including Eleuthera, in early-successional habitats where the fruits on which it feeds are common. These fruits include those of *Lantana involucrata*, on which this bird is feeding (Wunderle et al., pp. 123–137). Photograph by Dave Currie, davecurrie666@hotmail.com.

THE COOPER ORNITHOLOGICAL SOCIETY

President: Mercedes Foster, USGS Patuxent Wildlife Research Center, National Museum of Natural History-MRC, 0111, P. O. Box 37012, Washington, DC 20013-7012, phone: 202-633-0788, fax: 202-357-1932, e-mail: fosterm@si.edu
President-Elect: Kimberly A. Sullivan, Department of Biology, Utah State University, Logan, UT 84322-5305, phone: 435-797-3713, fax: 435-797-1575, e-mail: yejunco@biology.usu.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, USGS Alaska Science Center, 4210 University Dr., Anchorage, AK 99508, phone: 907-786-7180, fax: 907-786-7070, email: mpetersen@usgs.gov
Secretary: Abby Powell, USGS Alaska Cooperative Fish and Wildlife Research Unit, University of Alaska, Fairbanks, AK 99775-7020, phone: 907-474-5505, fax: 907-474-7872, e-mail: ffanp@uaf.edu
Assistant Secretary: Beth Hahn, USDA Forest Service, Northern Region, 200 E. Broadway, Missoula, MT 59802, phone: 405-329-3677, e-mail: bhahn@fs.fed.us
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*: Carl D. Marti, 1310 East Jefferson St., Boise, ID 83712, phone: 208-426-8996, fax: 208-426-3117, e-mail: sab@spro.net

BOARD OF DIRECTORS

2007–2010

JANIS DICKINSON
MATTHIAS LEU
MARK REYNOLDS
MELANIE COLON
(STUDENT MEMBER)

2008–2011

STEVEN BEISSINGER
PATRICIA KENNEDY
FRANK MOORE
KRISTINA PAXTON
(STUDENT MEMBER)

2009–2012

BONNIE BOWEN
SIEVERT ROHWER
SUSAN SKAGEN

COMMITTEE CHAIRS

| | |
|--|---|
| PUBLICATIONS: FRANK MOORE | PAINTON AWARD: MATTHIAS LEU |
| BYLAWS: JANIS DICKINSON | MILLER AWARD: BONNIE BOWEN |
| FINANCE: PETER STACEY | KATMA AWARD: ALEX BADYAEV |
| HISTORY: LLOYD F. KIFF | MEWALDT–KING AWARD: PAUL NOLAN |
| MEMBERSHIP: MARTIN RAPHAEL | GRINNELL AWARD: WALTER WEHTJE |
| HONORARY MEMBERSHIP: MARTIN RAPHAEL | STUDENT TRAVEL AND PAPER AWARDS: ROLF KOFORD, SUSAN SKAGEN, AND MATTHIAS LEU |
| CONSERVATION–RESOLUTIONS: T. LUKE GEORGE | WEBSITE COMMITTEE: CARL MARTI AND TY C.M. HOFFMAN |
| STUDENT PARTICIPATION: MATTHIAS LEU AND DANIEL BARTON | STUDENT MEMBERSHIP: SHELDON J. COOPER |
| NOMINATING FOR DIRECTORS: JANIS DICKINSON | |

2010 ANNUAL MEETING LOCAL COMMITTEE: BARBARA E. KUS

REPRESENTATIVES

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