



Front Matter

Source: The Condor, 111(3)

Published By: American Ornithological Society

URL: <https://doi.org/10.1525/cond.2009.111.3.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

THOMAS E. MARTIN
PRESIDENT

MERCEDES S. FOSTER
PRESIDENT-ELECT

KATIE M. DUGGER
TREASURER

ABBY POWELL
SECRETARY

BETH A. HAHN
ASSISTANT SECRETARY

KIMBERLY A. SULLIVAN
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 Manuscript Central, <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.

© 2009 Cooper Ornithological Society. All rights reserved.



THE CONDOR

AN INTERNATIONAL JOURNAL
OF AVIAN BIOLOGY

A PUBLICATION OF THE
COOPER ORNITHOLOGICAL SOCIETY

VOLUME 111

NUMBER 3

AUGUST 2009

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

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

ETHAN D. CLOTFELTER
Amherst College

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

JASON JONES
*Tetratich 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. LATTI
National Aviary

JAMES R. LOVORN
University of Wyoming

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.

In spite of sexual differences in size and wing shape, and in spite of nesting in areas of widely different oceanic productivity, Cory's Shearwaters (*Calonectris diomedea*) nesting on the island of Berlengas along the coast of mainland Portugal and those nesting on Selvagem Grande, a subtropical oceanic island between Madeira and the Canary Islands, do not differ by sex in length of incubation shift, length of foraging trips, or mass gain at sea (Ramos et al., pp. 424–432). Photograph of a Cory's Shearwater at the colony at Selvagem Grande by Paulo Catry, paulo.catry@gmail.com.

THE COOPER ORNITHOLOGICAL SOCIETY

President: Thomas E. Martin, USGS Montana Cooperative Wildlife Research Unit, University of Montana, Missoula, MT 59812, phone: 406-243-5372, fax: 406-243-6064, e-mail: tom.martin@umontana.edu
President-Elect: Mercedes S. Foster, USGS Patuxent Wildlife Research Unit, National Museum of Natural History, P.O. Box 37012, Washington, DC 20013-7012, phone: 202-633-0778, fax: 202-357-1932, e-mail: fosterm@si.edu
Treasurer: Katie M. 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: Kimberly A. Sullivan, Department of Biology, Utah State University, Logan, UT 84322-5305, phone: 435-797-3713, fax: 435-797-1575, e-mail: yejunco@cc.usu.edu
Secretary: Abby Powell, Alaska Cooperative Fish and Wildlife Research Unit, University of Alaska, Fairbanks, Fairbanks, AK 99775-7020, phone: 907-474-5505, fax: 907-474-7872, e-mail: ffanp@uaf.edu
Assistant Secretary: Beth Hahn, USDA Forest Service, 619 Howell St., Missoula, MT 59802, phone: 405-546-3139, e-mail: bhahn@fs.fed.us
Editor-in-Chief of the *Condor*: Michael A. Patten, Oklahoma Biological Survey, University of Oklahoma, 111 E. Chesapeake Street, Norman, OK 73019, 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 Street, Boise, ID 83712, phone: 208-426-8996, fax: 208-426-3117, e-mail: sab@spro.net

BOARD OF DIRECTORS

2006–2009

ALEXANDER BADYAEV
MARILYN RAMENOFSKY
KATIE M. DUGGER

2007–2010

JANIS DICKINSON
MATTHIAS LEU
MARK REYNOLDS

2008–2011

STEPHEN BEISSINGER
PATRICIA KENNEDY
FRANK MOORE

COMMITTEE CHAIRS

PUBLICATIONS: LINDA A. WHITTINGHAM	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	PAPER AWARDS: BARBARA E. KUS AND MATTHIAS LEU
CONSERVATION-RESOLUTIONS: T. LUKE GEORGE	WEBSITE COMMITTEE: CARL MARTI AND
STUDENT PARTICIPATION: MATTHIAS LEU AND	TY C. M. HOFFMAN
DANIEL BARTON	STUDENT MEMBERSHIP: SHELDON J. COOPER
NOMINATING FOR DIRECTORS: KATIE M. DUGGER	STUDENT TRAVEL: ROLF KOFORD

2009 ANNUAL MEETING LOCAL COMMITTEE: JOSEPH J. FONTAINE

REPRESENTATIVES

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