

Published by the  
Cooper  
Ornithological Society

Volume 101  
No. 2  
May 1999



# THE CONDOR

An International Journal of Avian Biology



# COOPER ORNITHOLOGICAL SOCIETY

*President:* J. MICHAEL SCOTT, IDCFWRU, Department of Fish and Wildlife, University of Idaho, Moscow, ID 83844-1141, 208-885-6960, 208-885-9080 fax, mscott@uidaho.edu  
*President-elect:* GLENN E. WALSBERG, Department of Biology, Arizona State University, Tempe, AZ 85287-1501, 602-965-3543, 602-965-2519 fax, walsberg@asu.edu  
*Secretary:* EILEEN M. KIRSCH, Biological Resources Division of the U.S. Geological Survey, PO Box 818, La Crosse, WI 54602, 608-783-6451, 608-783-6066 fax, kirsche@mail.fws.gov  
*Assistant Secretary:* PETER STETTENHEIM, 168 Croydon Turnpike, Plainfield, NH 03781-5403, 603-448-4655, peter.stettenheim@valley.net.  
*Treasurer:* ERICK G. CAMPBELL, Bureau of Land Management, 2114 NE 90th Ave., Vancouver, WA 98664, 503-952-6382, 503-952-6021 fax, ecampbel@or.blm.gov  
*Assistant Treasurer:* LARRY MANGAN, Bureau of Land Management, 1300 Airport Lane, North Bend, OR 97459, 541-756-0100, 541-756-9303 fax, lmangan@or.blm.gov  
*Editor of THE CONDOR:* WALTER D. KOENIG, Hastings Natural History Reservation, 38601 E. Carmel Valley Road, Carmel Valley, CA 93924, 831-659-5981, 831-659-3649 fax, wicker@uclink.berkeley.edu  
*Managing Editor of THE CONDOR:* DAVID J. GUBERNICK, Condor Editorial Office, Hastings Natural History Reservation, 38601 E. Carmel Valley Road, Carmel Valley, CA 93924, 831-659-1369, condor@socrates.berkeley.edu  
*Editor of STUDIES IN AVIAN BIOLOGY:* JOHN ROTENBERRY, Department of Biology, University of California, Riverside, CA 92521, 909-787-3953, 909-787-4286 fax, rote@ucr.ac1.ucr.edu

## BOARD OF DIRECTORS

1996-1999	1997-2000	1998-2001
BONNIE S. BOWEN	BETTE A. LOISELLE	WILLIAM R. DAWSON
CHARLES T. COLLINS	ROBERT E. RICKLEFS	NADAV NUR
DAVID S. DOBKIN	DIANA F. TOMBACK	DONALD POWERS

**STANDING COMMITTEES.** BYLAWS: B. S. Bowen,\* Nadav Nur, S. Russell. CONSERVATION-RESOLUTIONS: M. G. Raphael,\* C. Beardmore, M. Bechard, E. Kirsch, T. Root, M. Sogge. FINANCE: E. A. Schreiber,\* T. Bucher, E. Campbell, J. W. Fitzpatrick. HISTORY: L. F. Kiff,\* H. Cogswell, R. J. Quigley. HARRY R. PAINTON AWARD: Carol Vleck,\* John Bates, Millicent Ficken. HONORARY MEMBERS: M. L. Morton,\* G. E. Walsberg. MEMBERSHIP: T. E. Martin,\* T. Balgooyen, L. Hall, C. R. Preston, R. O. Russell. MEWALDT-KING AWARD: J. R. Faaborg,\* T. C. Grubb Jr., B. L. Woodworth. MILLER AWARD: Robert Ricklefs,\* W. R. Dawson, V. Nohan Jr., D. F. Tomback, J. Verner. PUBLICATIONS: F. Knopf,\* F. Chavez-Ramirez, K. J. Gutzwiller, W. D. Koenig, B. A. Loiselle, J. Rotenberry.

**AD HOC COMMITTEES.** NOMINATING FOR DIRECTORS: David Dobkin,\* Sallie Hejl, Barbara Kus. STUDENT PARTICIPATION: T. L. George,\* R. Dixon, S. Hejl, S. Jones, R. R. Koford, K. Sullivan, B. Wolf. MEMBERSHIP IN DEVELOPING COUNTRIES: Tom Martin.\* 1999 ANNUAL MEETING: Erick Campbell.\* SCIENTIFIC PROGRAM: Larry Mangan,\* J. R. Herkert, D. K. Niven, S. K. Robinson. HOME PAGE: K. G. Smith.\* (\*Chair or Co-chair.)

**REPRESENTATIVES.** ORNITHOLOGICAL COUNCIL: S. L. L. Gaunt.

## MEMBERSHIP AND SUBSCRIPTIONS

Any person interested in avian biology may become a member of the Cooper Ornithological Society. All members receive *THE CONDOR*. North American members also receive the bimonthly *ORNITHOLOGICAL NEWSLETTER*. Membership rates are \$35 per year for regular members in the United States, Canada, Australia, Belgium, Denmark, Finland, France, Germany, Iceland, Israel, Japan, Luxembourg, The Netherlands, New Zealand, Norway, Sweden, and the United Kingdom. Regular membership rates are \$20 per year for members in all other countries. Rates are \$20 for student and emeritus members, and \$40 for families. Institutional subscriptions are \$90. Send check or money order in U.S. funds with complete name and address to: Ornithological Societies of North America (O.S.N.A.), P.O. Box 1897, Lawrence, KS 66044-8897. If applying for student rates, include a brief, signed statement from an academic advisor certifying student status.

## PUBLICATIONS

*THE CONDOR* (ISSN 0010-5422) is a quarterly journal devoted to the biology of wild species of birds. It publishes research reports and occasional review articles. *Contributors should follow instructions on the preparation and submission of articles given in the February issue.*

**Manuscripts, announcements, and advertising:** to Walter D. Koenig, address above.

**Books for review:** to Kimberly G. Smith, Department of Biological Sciences, University of Arkansas, Fayetteville, AR 72701.

**Changes of address and queries about missing issues for subscriptions:** to O.S.N.A., address above.

**Purchases of back issues:** to Erick G. Campbell, Treasurer, address above.

*STUDIES IN AVIAN BIOLOGY*, a series of works too long for the journal, is published at irregular intervals.

**Manuscripts:** to John Rotenberry, Editor, address above.

**Purchase of issues:** Erick G. Campbell, Treasurer, address above.

POSTMASTER: Send address changes to *THE CONDOR*, O.S.N.A., P.O. Box 1897, Lawrence, KS 66044-8897. Periodicals postage paid at Lawrence, KS 66044, U.S.A., and additional mailing offices. Printed quarterly at Lawrence, Kansas, U.S.A. by Allen Press, Inc. and is published by the Cooper Ornithological Society, 810 East 10th Street, Lawrence, Kansas 66044-8897. © The Cooper Ornithological Society 1999.