# JUN 05 1989 THE IRSITY OF IDAMC CONDOR

## A JOURNAL OF AVIAN BIOLOGY

Volume 91

May 1989

LIDING

Number 2

## CONTENTS

Within-Season Breeding Dispersal in Prairie Warblers and Other Passerines WENDY M. JACKSON, SIEVERT ROHWER, and VAL NOLAN, JR.	233
The Use of Banding Recovery Data to Estimate Dispersal Rates and Gene Flow in Avian Species: Case Studies in the Red-Winged Blackbird and Common Grackle WILLIAM S. MOORE and RICHARD A. DOLBEER	242
Natal Dispersal of Eastern Screech-Owls JAMES R. BELTHOFF and GARY RITCHISON	254
Endogenous Reserves of Adult Male Sage Grouse During Courtship JERRY W. HUPP and CLAIT E. BRAUN	266
Display Behavior of Male Calliope Hummingbirds During the Breeding Season STAFFAN TAMM, DOUG P. ARMSTRONG, and ZENA J. TOOZE	272
Foods and Dietary Strategies of Prairie-Nesting Ruddy Ducks and Redheads MARC C. WOODIN and GEORGE A. SWANSON	280
Seasonal Changes in Bird Communities of the Chaparral and Blue-Oak Woodlands in Central California MICHAEL L. AVERY and CHARLES VAN RIPER III	288
Response of Nesting Red-Tailed Hawks to Helicopter Overflights DAVID E. ANDERSEN, ORRIN J. RONGSTAD, and WILLIAM R. MYTTON	296
Reproduction and Demography of the Florida Everglade (Snail) Kite NOEL F. R. SNYDER, STEVEN R. BEISSINGER, and RODERICK E. CHANDLER	300
Site-Related Dominance and Spacing Among Winter Flocks of Black-Capped Chickadees	
ANDRÉ DESROCHERS and SUSAN J. HANNON	317

(Continued on outside back cover)

Published Quarterly by the Cooper Ornithological Society

### COOPER ORNITHOLOGICAL SOCIETY

#### **OFFICERS**

President: RUSSELL P. BALDA, Department of Biological Sciences, Northern Arizona University, Flagstaff, AZ 86011.

President-elect: JARED VERNER, Forestry Sciences Laboratory, U.S. Forest Service, 2081 E. Sierra Avenue, Fresno, CA 93710.

Secretary: MICHAEL L. MORRISON, Department of Forestry and Resource Management, University of California, Berkeley, CA 94720.

Assistant Secretary: MARTIN G. RAPHAEL, Forestry Sciences Laboratory, U.S. Forest Service, 22nd Street, Laramie, WY 82070.

Treasurer: ROBERT C. SZARO, P.O. Box 117, Brandywine, MD 20613.

Assistant Treasurer: JAMES R. NORTHERN, Department of Biology, 405 Hilgard Avenue, University of California, Los Angeles, CA 90024.

Editor, The Condor: MARTIN L. MORTON, Department of Biology, Occidental College, Los Angeles, CA 90041.

*Editor*, Studies in Avian Biology: JOSEPH R. JEHL, JR., Sea World Research Institute, Hubbs Marine Research Center, 1700 South Shores Road, San Diego, CA 92109.

#### **BOARD OF DIRECTORS**

1986-1989

LLOYD F. KIFF J. DAVID LIGON GLEN E. WOOLFENDEN 1987-1990 CARL E. BOCK THERESA L. BUCHER MICHAEL D. KERN 1988–1991 RICHARD L. HUTTO L. RICHARD MEWALDT FRANK A. PITELKA

COMMITTEES. BY-LAWS: Dennis M. Power,\* M. L. Morrison; FINANCE: C. John Ralph,\* T. L. Bucher, B. Maxwell, W. B. Quay, E. N. Stone, R. C. Szaro; INVESTING TRUSTEES: Bruce Maxwell,\* C. J. Ralph, E. N. Stone; HISTORY: Lois C. Stone,\* H. L. Cogswell, R. Bowman; MEMBERSHIP: Martin G. Raphael,\* D. M. Finch, P. Hall, T. A. Scott; HONORARY MEMBERS: Ned K. Johnson\*; PUBLICATIONS: Michael D. Kern,\* C. van Riper III, F. A. Pitelka, J. R. Jehl, Jr., M. L. Morton, J. R. Northern, M. L. Morrison; ANNUAL MEETING: C. John Ralph,\* W. D. Koenig, J. M. Scott, L. F. Kiff; CONSERVATION AND RESOLUTION: Carl D. Marti,\* J. D. Brawn, S. J. Hejl; CENTENNIAL MEETING: Russell P. Balda,\* Thomas R. Howell,\* K. L. Dixon, L. F. Kiff, R. J. Raitt; STUDENT AWARDS: Lloyd F. Kiff,\* T. G. Balgooyen, J. Verner; STUDENT PARTICIPATION: J. David Ligon,\* K. G. Smith, K. A. With. (\*Chair or co-chair.)

#### MEMBERSHIP

Any person interested in ornithology may become a member of the Cooper Ornithological Society upon payment of dues. Additional information about membership and the Society is given in the Bylaws (Condor 83:390). Members of all classes receive THE CONDOR.

**Requests for information concerning membership:** to Robert C. Szaro, Treasurer, address above. **Payment for dues, changes of address, queries about existing membership and subscription rates:** to Ornithological Societies of North America (O.S.N.A.), P.O. Box 21618, Columbus, OH 43221.

#### PUBLICATIONS

THE CONDOR (ISSN 0010-5422) is a quarterly journal devoted to the biology of wild species of birds. It publishes research reports and short articles containing new information, as well as occasional review articles. Known office of publication: O.S.N.A., Department of Zoology, 1735 Neil Avenue, Ohio State University, Columbus, OH 43210. Second class postage paid at Columbus. OH 43221, U.S.A. and additional mailing offices.

Manuscripts and announcements: to Martin L. Morton, Dept. of Biology, Occidental College, Los Angeles, CA 90041.

Books for review: to Marcy F. Lawton, Dept. of Biological Sciences, University of Alabama in Huntsville, Huntsville, AL 35899.

Queries about advertising: to Advertising Manager, The Condor, Department of Biology, Occidental College, Los Angeles, CA 90041.

Subscription orders and queries about missing issues for subscriptions: to O.S.N.A., address above. Purchase of back issues: to James R. Northern, Assistant Treasurer, address above.

STUDIES IN AVIAN BIOLOGY, as successor to PACIFIC COAST AVIFAUNA, is a series of works too long for the journal, published at irregular intervals.

Manuscripts: to Joseph R. Jehl, Jr., Editor, address above.

Purchase of issues: to James R. Northern, Assistant Treasurer, address above.

THE CONDOR (ISSN 0010-5422) is published quarterly for \$23 per year for regular members, \$15 for student and emeritus members, and \$25 for families by the Cooper Ornithological Society, O.S.N.A., Department of Zoology, 1735 Neil Avenue, Ohio State University, Columbus, OH 43210. Second class postage paid at Columbus, OH and additional mailing offices. Institutional rates are \$45 for U.S., Canada and Mexico; \$50 for all other countries. POSTMASTER: Send address changes to The Condor, O.S.N.A., P.O. Box 21618, Columbus, OH 43221.

Printed quarterly at Lawrence, Kansas, U.S.A. by Allen Press, Inc. © The Cooper Ornithological Society 1989.