



THE LIBRARY CONDOR

MAR 21 1988

A JOURNAL OF AVIAR BIOLOGY

Volume 90

February 1988

Number 1

CONTENTS

- Species Concepts in Ornithology
MARY C. MCKITRICK and ROBERT M. ZINK 1
- Carcass Composition and Energy Reserves of Sage Grouse During Winter
T. E. REMINGTON and C. E. BRAUN 15
- Diets of the White-Chinned Petrel and Sooty Shearwater in the Southern
Benguela Region, South Africa
S. JACKSON 20
- Female and Male Specialization in Parental Care and Its Consequences in
Black-Billed Magpies
DEBORAH BUTTRON 29
- Shiny Cowbird Parasitism in Central Brazil
ROBERTO B. CAVALCANTI and THAÍS MARTINS PIMENTEL 40
- The Form and Function of Song in Female Song Sparrows
PETER ARCESE, PHILIP KRAFT STODDARD, and SARA M.
HIEBERT 44
- Nest Predation and Nest-Site Selection of a Western Population of the
Hermit Thrush
THOMAS E. MARTIN and JAMES J. ROPER 51
- House Finch Nest-Site Selection at Guelph, Ontario
DONALD S. GRAHAM 58
- Population Biology of Cavity Nesters in Northern Arizona: Do Nest Sites
Limit Breeding Densities?
JEFFREY D. BRAWN and RUSSELL P. BALDA 61
- Evolution of Brown Towhees: Allozymes, Morphometrics and Species
Limits
ROBERT M. ZINK 72
- Components of Clutch Size Variation in Arctic-Nesting Canada Geese
CHARLES D. MACINNES and ERICA H. DUNN 83

(Continued on outside back cover)

Published Quarterly by the Cooper Ornithological Society

COOPER ORNITHOLOGICAL SOCIETY

OFFICERS

President: RUSSELL B. 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, Forest, Range and Watershed Laboratory, U.S. Forest Service, 22nd Street, Laramie, WY 82070.

Treasurer: CHARLES T. COLLINS, Department of Biology, California State University, Long Beach, CA 90840.

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

1985-1988

DANIEL W. ANDERSON
ROBERT D. OHMART
CHARLES VAN RIPER III

1986-1989

LLOYD F. KIFF
J. DAVID LIGON
GLEN E. WOOLFENDEN

1987-1990

CARL E. BOCK
THERESA L. BUCHER
MICHAEL D. KERN

COMMITTEES. BY-LAWS: D. M. Power*; FINANCE: C. John Ralph,* T. L. Bucher, C. T. Collins, B. Maxwell, W. B. Quay; INVESTING TRUSTEES: C. John Ralph,* B. Maxwell, E. N. Stone; HISTORY: Howard L. Cogswell,* L. C. Stone, J. C. Von Blocker; MEMBERSHIP: Martin G. Raphael, D. M. Finch, T. A. Scott, S. H. Anderson; HONORARY MEMBERS: Ralph W. Schreiber,* H. L. Cogswell, K. Garrett; PUBLICATIONS: Charles van Riper III,* J. R. Jehl, Jr., M. D. Kern, M. L. Morrison, M. L. Morton, R. D. Ohmart; ANNUAL MEETING: C. John Ralph,* D. F. Balph, M. H. Balph, W. D. Koenig, C. van Riper III; CONSERVATION AND RESOLUTION: Carl D. Marti,* J. D. Brawn, B. R. Noon; 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. (*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 Charles T. Collins, 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 \$18.00 per year for regular members, \$12.00 for student and emeritus members, \$20.00 for families, and \$25.00 for sustaining members 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. POSTMASTER: Send address change 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 1988.