

THE CONDOR

Volume 79

Spring 1977

Number 1



JOURNAL OF THE COOPER ORNITHOLOGICAL SOCIETY

LIBRARY

JUL 19 1977

UNIVERSITY OF IDAHO

COOPER ORNITHOLOGICAL SOCIETY

OFFICERS

- President:* STEPHEN M. RUSSELL, Department of Ecology and Evolutionary Biology, University of Arizona, Tucson, AZ 85721.
Vice-president: RUSSELL P. BALDA, Department of Biological Sciences, Northern Arizona University, Flagstaff, AZ 86001.
Secretary: PAUL H. BALDWIN, Department of Zoology and Entomology, Colorado State University, Fort Collins, CO 80523.
Assistant Secretary: RONALD A. RYDER, Department of Fishery and Wildlife Biology, Colorado State University, Fort Collins, CO 80523.
Treasurer: JANE R. DURHAM, P.O. Box 520, Tempe, AZ 85281.
Assistant Treasurer: JAMES G. MILLER, Department of Biology, 405 Hilgard Avenue, University of California, Los Angeles, CA 90024.
Editor, The Condor: PETER STETTENHEIM, Meriden Road, Lebanon, NH 03766.
Editor, Pacific Coast Avifauna: RALPH J. RAITT, Department of Biology, New Mexico State University, Las Cruces, NM 88001.

BOARD OF DIRECTORS

- | | | |
|-------------------|-------------------|-------------------|
| RUSSELL P. BALDA | JOSEPH R. JEHL | DENNIS M. POWER |
| WILLIAM R. DAWSON | J. DAVID LIGON | PETER STETTENHEIM |
| THOMAS R. HOWELL | OLIVER P. PEARSON | EDGAR STONE |

COUNCIL

- MIKLOS D. F. UDVARDY, *President*
M. DALE ARVEY, *Vice-President*
JENNIFER M. WHITE, *Secretary*

- | | | |
|---------------------|--------------------|--------------------------|
| DAVID G. AINLEY | JOHN WILLIAM HARDY | SIDNEY B. PEYTON |
| M. DALE ARVEY | ED N. HARRISON | FRANK A. PITELKA |
| RUSSELL P. BALDA | THOMAS R. HOWELL | DENNIS M. POWER |
| LUIS F. BAPTISTA | NED K. JOHNSON | RALPH J. RAITT |
| WILLIAM H. BEHLE | DAVID W. JOHNSTON | STEPHEN M. RUSSELL |
| LAURENCE BINFORD | LLOYD F. KIFF | GARY D. SCHNELL |
| DONALD L. BLEITZ | JAMES R. KING | KENNETH E. STAGER |
| CARL E. BOCK | J. DAVID LIGON | PETER STETTENHEIM |
| THOMAS J. CADE | BRUCE L. MANION | EDGAR N. STONE |
| GENE M. CHRISTMAN | BARBARA W. MASSEY | LASZLO J. SZIJJ |
| HOWARD L. COGSWELL | HAROLD F. MAYFIELD | HARRIET P. THOMAS |
| NICHOLAS E. COLLIAS | L. RICHARD MEWALDT | LISE THOMSEN |
| CHARLES T. COLLINS | JAMES R. NORTHERN | MIKLOS D. F. UDVARDY |
| JOHN DAVIS | GORDON H. ORIAN | JACK C. VON BLOEKER, JR. |
| WILLIAM R. DAWSON | ROBERT T. ORR | STUART L. WARTER |
| JANE DURHAM | KENNETH C. PARKES | JENNIFER MEUX WHITE |
| MERCEDES S. FOSTER | ROBERT B. PAYNE | FRANCIS S. L. WILLIAMSON |
| WILSON C. HANNA | OLIVER P. PEARSON | |

MEMBERSHIP

Any person interested in the study and advancement of ornithology may become a member if endorsed by a regular member. Dues are as follows: regular members, \$15.00 per year, of which \$9.00 are for a year's subscription to THE CONDOR; student members, \$8.00 per year; sustaining members, \$25.00 per year. Members of all classes receive THE CONDOR. Life memberships in the Society are no longer available.

Send payment for dues, notices of change of address, and requests for information concerning memberships to Jane R. Durham, Treasurer, P.O. Box 520, Tempe, Arizona 85281.

Known office of publication: Department of Zoology, University of California, Los Angeles, California 90024. Second class postage paid at Los Angeles, California, and additional mailing offices.

PUBLICATIONS

THE CONDOR is a journal published quarterly. Subscription price to institutions and non-members, \$20.00 per volume, payable in advance. Single copies, \$5.50 each. Subscription orders should be sent to the Treasurer (address above). Send orders for single copies to the Assistant Treasurer (see above).

PACIFIC COAST AVIFAUNA is a series of longer contributions, published at irregular intervals. Inquiries concerning manuscripts should be addressed to the Editor, Ralph J. Raitt, Department of Biology, New Mexico State University, Las Cruces, New Mexico 88001. Issues may be purchased from the Assistant Treasurer of the Society (see back cover of this journal).

Printed Quarterly at Lawrence, Kansas, U.S.A. by Allen Press, Inc.

Second-class postage paid at Lawrence, Kansas, U.S.A. 66044.

© The Cooper Ornithological Society 1977.

THE CONDOR

JOURNAL OF THE COOPER ORNITHOLOGICAL SOCIETY

Volume 79, Number 1

Issued 8 July 1977

Editor: PETER STETTENHEIM

Associate Editors:

MERCEDES S. FOSTER

GARY D. SCHNELL

Editorial Assistants:

ELIZABETH PRYOR MacEACHRAN

HELEN CURCIO

CONTENTS

Dominance in the Florida Scrub Jay GLEN E. WOOLFENDEN and JOHN H. FITZPATRICK	1
The Preening Invitation or Head-down Display of Parasitic Cowbirds: I. Evidence for Intraspecific Occurrence STEPHEN I. ROTHSTEIN	13
The Effect of Dietary Lysine Level on the Energy and Nitrogen Balance of the Dark-eyed Junco JOHN W. PARRISH JR. and ELDEN W. MARTIN	24
Growth Energetics of the White Ibis JAMES KUSHLAN	31
Growth and Development of the Rufous-winged Sparrow (<i>Aimophila carpalis</i>) GEORGE T. AUSTIN and ROBERT E. RICKLEFS	37
Maintenance and Anti-insect Behavior of Six Species of Ciconiiform Birds in South Florida GEORGE R. MAXWELL II and HERBERT W. KALE II	51
Shorebird Food Habits in the Eastern Canadian Arctic MYRON CHARLES BAKER	56
Food Caching among American Kestrels Wintering in Northwestern California MICHAEL W. COLLOPY	63
Foraging Efficiency and Parental Care in <i>Colibri coruscans</i> F. REED HAINSWORTH	69
Seasonal Variation in the Genus <i>Leucosticte</i> in North America RICHARD E. JOHNSON	76

Winter Distribution of Juvenile and Older Red-footed Boobies from the Hawaiian Islands BRIAN A. HARRINGTON	87
New Information on Costa Rican Waterbirds F. GARY STILES and SUSAN M. SMITH	91
Breeding Behavior and Food Habits of the Wattled Jacana DAVID R. OSBORNE and GODFREY R. BOURNE	98
Individual Variation in Songs of Dark-eyed Juncos LAIDLAW WILLIAMS and MICHAEL H. MACROBERTS	106
Song Dialects in the Bobolink (<i>Dolichonyx oryzivorus</i>) MICHAEL AVERY and LEWIS W. ORING	113
SHORT COMMUNICATIONS	
The Shiny Cowbird in the West Indies WILLIAM POST and JAMES W. WILEY	119
Continued Eastern Expansion of Breeding Range of Ross' Goose J. P. PREVETT and F. C. JOHNSON	121
Age Differences in the Digging Frequency of Herring Gulls on a Dump NICOLAAS A. M. VERBEEK	123
Mate Attraction Function of Song in the White-throated Sparrow FREDERICK E. WASSERMAN	125
Food Caching in the Screech Owl FRANK J. S. PHELAN	127
Head-scratching by a One-legged Chaffinch JOAN HALL-CRAGGS	127
A Hybrid American Avocet \times Black-necked Stilt WILLIAM L. PRINCIPE JR.	128
Area-volume Relationship for a Bird's Egg J. B. TATUM	129
The Nest and Egg of the Black Solitary Eagle ED N. HARRISON and LLOYD F. KIFF	132
The Egg of the Crowned Solitary Eagle, <i>Harpyhaliaetus coronatus</i> HELMUT SICK and DANTE MARTINS TEIXEIRA	133
Temporal Patterns in Laying, Hatching, and Incubation of Sooty Terns WILLIAM Y. BROWN	133
RECENT PUBLICATIONS	137
NEWS AND NOTES	140
THE BULLETIN BOARD	141
STATEMENT OF OWNERSHIP	141