

The Auk

*A Quarterly Journal
of Ornithology*

VOL. 108 No. 4 OCTOBER 1991

(ISSN 0004-8038)



CONTENTS

MORPHOLOGIC AND GENETIC VARIATION AMONG BREEDING COLONIES OF THE ATLANTIC PUFFIN (<i>FRATERCULA ARCTICA</i>). Sharon M. Moen	755
SPATIAL RELATIONSHIPS BETWEEN NESTING COLONIES AND FORAGING AREAS OF GREAT BLUE HERONS. James P. Gibbs	764
MITOCHONDRIAL DNA VARIATION AMONG PHALAROPES AND ALLIES. Donna L. Dittmann and Robert M. Zink	771
THE INFLUENCE OF FOOD ON REPRODUCTIVE STRATEGIES IN A MONOGAMOUS KINGFISHER (<i>CHLOROCERYLE AMAZONA</i>). William James Davis and Douglas J. Graham	780
BROADSCALE DENSITY AND AGGREGATION OF PELAGIC BIRDS FROM A CIRCUMNAVIGATIONAL SURVEY OF THE ANTARCTIC OCEAN. Richard R. Veit and George L. Hunt Jr.	790
OBSERVATIONS OF MULTISPECIES SEABIRD FLOCKS AROUND SOUTH GEORGIA. Nancy M. Harrison, Michael J. Whitehouse, Dennis Heinemann, Peter A. Prince, George L. Hunt Jr., and Richard R. Veit	801
SOCIAL RECOGNITION AND RESPONSE TO SONG IN COOPERATIVE RED-WINGED FAIRY-WRENS. R. B. Payne, L. L. Payne, I. Rowley, and E. M. Russell	811
PATTERNS AND SIGNIFICANCE OF GEOGRAPHICAL VARIATION IN THE BLUE TIT (<i>PARUS CAERULEUS</i>). Jean-Louis Martin	820
RELATION OF WITHIN-POPULATION PHENOTYPIC VARIATION WITH SEX, SEASON, AND GEOGRAPHY IN THE BLUE TIT. Jean-Louis Martin and Jay Pitocchelli	833
PATTERNS IN THE PROVISIONING AND GROWTH OF NESTLING RHINOCEROS AUKLETS. D. F. Bertram, G. W. Kaiser, and R. C. Ydenberg	842
ESTIMATING WINTER SPECIES RICHNESS WITH UNLIMITED-DISTANCE POINT COUNTS. Kevin J. Gutzwiller	853
EXTRAORDINARY CLUTCH SIZE AND HATCHING ASYNCHRONY OF A NEOTROPICAL PARROT. Steven R. Beissinger and James R. Waltman	863
FEMALE-LIKE PLUMAGE OF SUBADULT MALE AMERICAN REDSTARTS DOES NOT REDUCE AGGRESSION FROM OTHER MALES. Elizabeth Procter-Gray	872
ECOMORPHOLOGY OF THE NORTH AMERICAN RUBY-CROWNED (<i>REGULUS CALENDULA</i>) AND GOLDEN-CROWNED (<i>R. SATRAPA</i>) KINGLETS. Allen Keast and Sari Saunders	880
FEATHER REGROWTH IN FEMALE EUROPEAN STARLINGS REARING BROODS OF DIFFERENT SIZES. Douglas W. White, E. Dale Kennedy, and Philip C. Stouffer	889
MOVEMENT AND LEK VISITATION BY FEMALE GREATER PRAIRIE-CHICKENS IN RELATION TO PREDICTIONS OF BRADBURY'S FEMALE PREFERENCE HYPOTHESIS OF LEK EVOLUTION. Michael A. Schroeder	896
NESTING NEAR A COMMON TERN COLONY INCREASES AND DECREASES SPOTTED SANDPIPER NEST PREDATION. Julie A. R. Alberico, J. Michael Reed, and Lewis W. Oring	904

(Continued on inside front cover)

PUBLISHED BY

THE AMERICAN ORNITHOLOGISTS' UNION

Washington, D.C.

NEST-SITE SELECTION AND NESTING SUCCESS OF WHITE-TAILED TROPICBIRDS (<i>PHAETHON LEPTURUS</i>) AT CAYO LUÍS PEÑA, PUERTO RICO. Fred Charles Schaffner	911
EFFECTS OF SUBSTRATE ON THE DISTRIBUTION OF MAGELLANIC PENGUIN (<i>SPHENISCUS MAGELLANICUS</i>) BURROWS. David L. Stokes and P. Dee Boersma	923
ACTIVITY PATTERNS OF NEARCTIC DABBING DUCKS WINTERING IN YUCATAN, MEXICO. John D. Thompson and Guy A. Baldassarre	934
MEASURING ANNUAL REPRODUCTIVE SUCCESS, WITH COMMENTS ON THE EVOLUTION OF REPRODUCTIVE BEHAVIOR. Bertram G. Murray Jr.	942
IN MEMORIAM: FRANCES MOREY UHLER. George Jonkel	953
IN MEMORIAM: KAI CURRY-LINDAHL. Gustav A. Swanson	953
IN MEMORIAM: JOSEPH ARCHIBALD HAGAR. Kathleen S. Anderson	954
SHORT COMMUNICATIONS	
Fingerprinting Birds' DNA with a Synthetic Polynucleotide Probe (TG) _n . Hans Ellegren	956
A Single Plucked Feather as a Source of DNA for Bird Genetic Studies. Pierre Taberlet and Jean Bouvet	959
Nitrogen Isotope Ratios Identify Deserted Seabird Colonies. Hiroshi Mizutani, Yuko Kabaya, P. J. Moors, T. W. Speir, and Graeme L. Lyon	960
On the Validity of <i>Bubo virginianus occidentalis</i> Stone. Robert W. Dickerman	964
Egg-laying Times of American Robins. Patrick J. Weatherhead, Robert D. Montgomery, and Susan B. McRae	965
Comments on the Sample Sizes Used to Test the Effect of Experimental Brood Enlargement on Adult Survival. Jeff Graves	967
Courtship of Ducklings by Adult Male Chiloee Wigeon (<i>Anas sibilatrix</i>). Gwen Brewer	969
An Interspecific Relationship Between Egg Size and Clutch Size in Birds. Tim M. Blackburn	973
Use of the Relative Frequency of Notes by Veeries in Song Recognition and Production. Daniel M. Weary, Ronald G. Wiseman, Robert E. Lemon, Tina Chin, and Johanne Mongrain	977
COMMENTARY	
The Conservation Crisis: International Trade in Live Exotic Birds Creates a Vast Movement That Must Be Halted. Bird Trade Subcommittee of the AOU Conservation Committee	982
BOOK REVIEWS. Edited by Bruce M. Beehler	985
100 YEARS AGO IN <i>THE AUK</i>	800
NOTES AND NEWS	810
INDEX TO VOLUME 108. Compiled by K. Elizabeth K. Pacala	1009

THE AMERICAN ORNITHOLOGISTS' UNION (FOUNDED 1883)

OFFICERS FOR 1990-91

President: BURT L. MONROE JR., Department of Biology, University of Louisville, Louisville, Kentucky 40292.

President-Elect: BRINA KESSEL, Box 80211, College, Fairbanks, Alaska 99708.

Vice President: STEPHEN M. RUSSELL, Ecology and Evolutionary Biology, University of Arizona, Tucson, Arizona 85721.

Editor of The Auk: ALAN H. BRUSH, Department of Physiology and Neurobiology, University of Connecticut, Storrs, Connecticut 06269.

Secretary: MARY VICTORIA McDONALD, Department of Biology, University of Central Arkansas, Conway, Arkansas 72032.

Treasurer: MARION A. JENKINSON, Museum of Natural History, University of Kansas, Lawrence, Kansas 66045.

Editor of Ornithological Monographs: NED K. JOHNSON, Museum of Vertebrate Zoology, Life Sciences Building, University of California, Berkeley, California 94720.

Persons interested in birds are invited to join the American Ornithologists' Union. Dues are \$35 per year; student memberships are \$18. Membership is \$18.00 for persons in all countries except the United States, Canada, Israel, Japan, Australia, New Zealand, and the following Western European countries: Iceland, Norway, Sweden, Finland, Denmark, West Germany, Netherlands, Belgium, Luxembourg, France, the United Kingdom, Ireland, Switzerland, Austria, Italy, Spain, and Portugal. All members receive *The Auk* and North American members receive a bimonthly *Ornithological Newsletter*. Subscription price to institutions is \$60. A Life Membership is \$1,050, paid in one sum or four annual installments of \$262.50. Gifts of any amount for the Endowment Fund are welcome and should be sent to the Treasurer. The following major donation categories are recognized: Sponsor (\$1,000), Patron (\$3,000), Benefactor (\$10,000), and Guarantor (\$25,000). The names of Sponsors, Patrons, Benefactors, and Guarantors are inscribed in perpetuity in the AOU records. Gifts to the AOU are tax deductible to the extent permitted by law.

Send requests for information concerning membership, advertising, and back issues to the Treasurer. Information about, or orders for, *Ornithological Monographs* and other special publications should be sent to: Max C. Thompson, Assistant to the AOU Treasurer, Department of Biology, Southwestern College, 100 College Street, Winfield, Kansas 67156. Communications may also be routed through the AOU's permanent address: Division of Ornithology, National Museum of Natural History, Washington, D.C. 20560.

Send change of address, payment of dues, subscription requests, or requests for undelivered issues of *The Auk* to Ornithological Societies of North America (OSNA), P.O. Box 1897, Lawrence, Kansas 66044-8897.

THE AUK (ISSN 0004-8038) is published quarterly (January, April, July, and October) for \$60.00 per year (to institutions) by the American Ornithologists' Union, 810 East 10th Street, Lawrence, KS 66044-8897. Second-class postage paid at Lawrence, KS. POSTMASTER: Send address changes to *The Auk*, P.O. Box 1897, Lawrence, KS 66044-8897. Copyright 1991 by The American Ornithologists' Union. All material in this journal may be copied for the noncommercial purpose of educational or scientific advancement without the need to seek specific permission.

THIS PUBLICATION IS PRINTED ON ACID-FREE PAPER.