

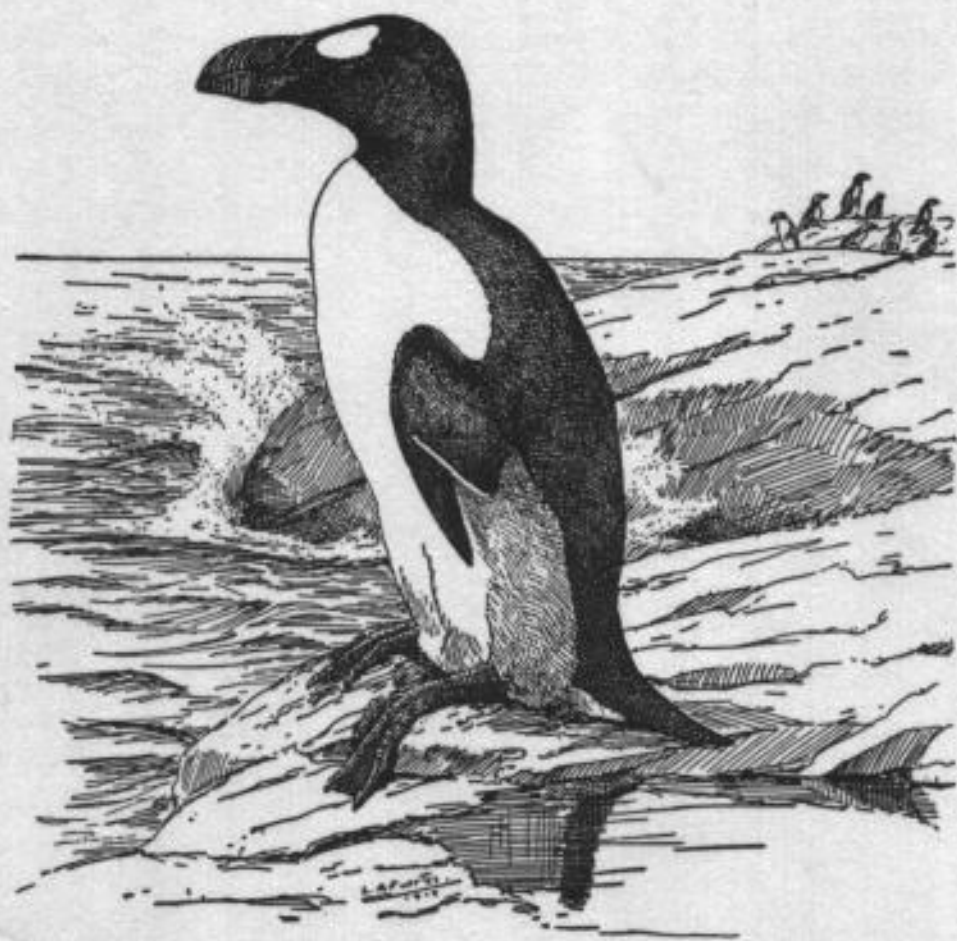
# The Auk

*A Quarterly Journal of Ornithology*

VOL. 84

OCTOBER, 1967

No. 4



PUBLISHED BY  
THE AMERICAN ORNITHOLOGISTS' UNION

WITHDRAWN  
SMITHSONIAN INSTITUTION LIBRARIES

# THE AMERICAN ORNITHOLOGISTS' UNION

(Founded 1883)

## OFFICERS

FOR 1967-68

*President:* HAROLD F. MAYFIELD, River Road, R.F.D., Waterville, Ohio 43566.

*First Vice-President:* JOHN W. ALDRICH, Bureau of Sport Fisheries and Wildlife, Washington, D.C. 20240.

*Second Vice-President:* EUGENE EISENMANN, The American Museum of Natural History, Central Park West at 79th Street, New York, New York 10024.

*Editor of The Auk:* OLIVER L. AUSTIN, JR., Florida State Museum, Gainesville, Florida 32601.

*Secretary:* L. RICHARD MEWALDT, Department of Biological Sciences, San Jose State College, San Jose, California 95114.

*Treasurer:* BURT L. MONROE, SR., P.O. Box 23447, Anchorage, Kentucky 40223.

The present issue of *The Auk* was prepared by the retiring 1967 Editorial Staff.

---

All persons interested in ornithology are invited to apply to the Treasurer for Membership in The American Ornithologists' Union. Dues for Members are \$5.00 per year. *The Auk* is sent without charge to all classes of members not in arrears for dues.

---

Send changes of address, claims for undelivered or defective copies of *The Auk*, and requests for information relative to advertising, subscriptions, back numbers of *The Auk*, as well as for other publications of the Union, to the Treasurer.

---

Published quarterly (January, April, July, and October) by The American Ornithologists' Union. Business office: Burt L. Monroe, Sr., Treasurer, P.O. Box 23447, Anchorage, Kentucky 40223. Subscription: \$6.00 per year. Printed by Allen Press Inc., Lawrence, Kansas, U.S.A. Second-class postage paid at Lawrence, Kansas, U.S.A.

# The Auk

*A Quarterly Journal of Ornithology*

EDITOR

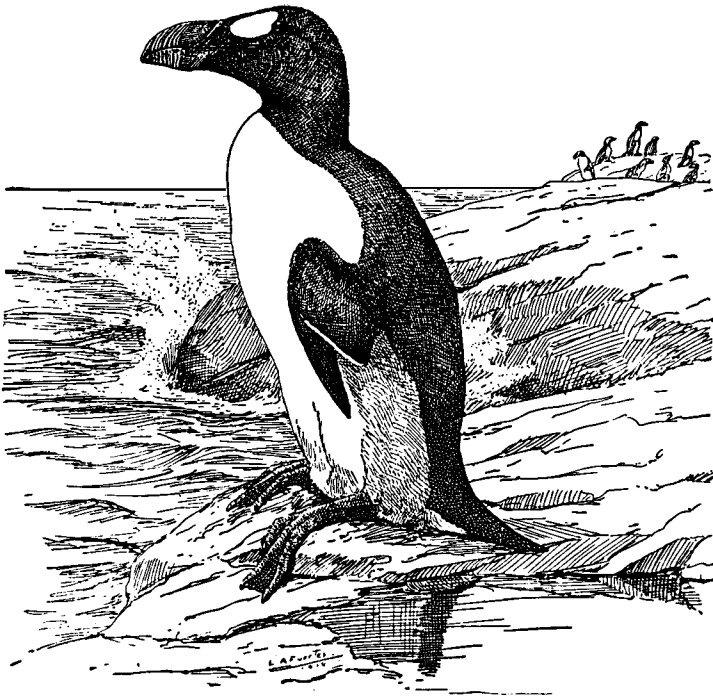
ROBERT M. MENGEL

ASSOCIATE EDITOR

MARION ANNE JENKINSON

EDITORIAL ASSISTANTS

JEROME A. JACKSON, GARY D. SCHNELL, JOHN L. TATSCHL



**VOLUME 84**

PUBLISHED BY

The American Ornithologists' Union

1967

DATES OF ISSUE OF "THE AUK"

VOL. 84, No. 1—22 MARCH 1967

VOL. 84, No. 2—8 JUNE 1967

VOL. 84, No. 3—31 JULY 1967

VOL. 84, No. 4—15 NOVEMBER 1967

SUPPLEMENT—15 NOVEMBER 1967

# CONTENTS OF VOLUME 84

## NUMBER 1

BOBWHITE .....	frontispiece, facing p. 1
BEHAVIOR OF THE BOBWHITE, <i>COLINUS VIRGINIANUS</i> . <i>Allen W. Stokes</i>	1
PHYSIOLOGICAL RESPONSES OF THE BLUE-THROATED AND RIVOLI'S HUMMINGBIRDS. <i>Robert C. Lasiewski and Richard J. Lasiewski</i> .....	34
ON THE SIERRA MADRE SPARROW, <i>XENOSPIZA BAILEYI</i> , OF MEXICO. <i>Robert W. Dickerman, Allan R. Phillips, and Dwain W. Warner</i> .....	49
MOLT IN THE ADELIE PENGUIN. <i>R. L. Penney</i> .....	61
RESPONSES OF BROODING NIGHTHAWKS TO A DISTURBANCE STIMULUS. <i>Anthony F. Gramza</i> .....	72
SELECTION AND USE OF DRUMMING SITES BY MALE RUFFED GROUSE. <i>Gordon W. Gullion</i> .....	87
 GENERAL NOTES	
Wild Turkeys ( <i>Meleagris gallopavo</i> ) with supernumerary leg spurs. <i>Lovett E. Williams, Jr.</i> .....	113
Cock pheasants rout Marsh Hawk. <i>John P. Weigand</i> .....	114
A specimen of the Golden-cheeked Warbler from Florida. <i>Glen E. Woolfenden</i> .....	115
Fossil owls from the Hagerman local fauna (Upper Pliocene) of Idaho. <i>Norman L. Ford and Bertram G. Murray, Jr.</i> .....	115
Notes on the interspecific behavioral relationships of marsh-nesting passerines. <i>Mary F. Willson</i> .....	118
Aggressive behavior by a migrating Cape May Warbler. <i>Herbert W. Kale, II</i>	120
Notes on hatching and growth of the Southern Lapwing in Chile. <i>J. K. Greer and Marjorie Greer</i> .....	121
Diving schedules of a Common Loon and a group of Oldsquaws. <i>Paul A. Stewart</i> .....	122
A 36-year-old wild Herring Gull. <i>Olin Sewall Pettingill, Jr.</i> .....	123
Observations on embryos of Common Loons. <i>Robert Lister</i> .....	124
A flight-time integrator for birds. <i>Eugene A. LeFebvre, Richard C. Birkebak, and Frank D. Dorman</i> .....	124
Another record of active molt in passerine birds. <i>Larry L. Wolf</i> .....	128
Organisms consumed by various migrating shorebirds. <i>William S. Brooks</i> ..	128

The incubation period of the Hawaiian stilt. <i>Andrew J. Berger</i> .....	130
The eggs and nesting ground of the Puna Plover. <i>Gunnar Hoy</i> .....	130
"Resting" heart and respiratory rates of small birds. <i>R. Alan Lewis</i> .....	131
Migrant races of Western Wood Pewee in Utah. <i>William H. Behle</i> .....	133
REVIEWS. <i>Edited by Kenneth C. Parkes</i> .....	135
SPECIAL REVIEW: THE NEW DICTIONARY OF BIRDS AND THE PROPOSED WORLD LIST. <i>Oliver L. Austin, Jr.</i> .....	142
RECENT LITERATURE. <i>Edited by Glen E. Woolfenden</i> .....	147
NOTES AND NEWS .....	165

---

NUMBER 2

BLACK CHACHALACA .....	frontispiece, facing p. 169
NOTES ON THE BLACK CHACHALACA ( <i>PENELOPINA NIGRA</i> ). <i>Robert F. Andrlé</i> .....	169
ENVIRONMENTAL INFLUENCE ON THE INCIDENCE OF FLIGHT IN THE ROUGH-LEGGED HAWK. <i>Gary D. Schnell</i> .....	173
SOME OBSERVATIONS AND COMMENTS ON THE PERIODIC INVASIONS OF GOSHAWKS. <i>Helmut C. Mueller and Daniel D. Berger</i> .....	183
IN MEMORIAM: ALDEN HOLMES MILLER. <i>John Davis</i> .....	192
AN ELECTROPHORETIC STUDY OF AVIAN EYE-LENS PROTEINS. <i>Charles G. Sibley and Alan H. Brush</i> .....	203
OBSERVATIONS ON THE BREEDING BIOLOGY OF WILSON'S PHALAROPE ( <i>STEGANOPUS TRICOLOR</i> ) IN CENTRAL ALBERTA. <i>E. Otto Höhn</i> .....	220
PROCEEDINGS OF THE EIGHTY-FOURTH STATED MEETING OF THE AMERICAN ORNITHOLOGISTS' UNION. <i>L. Richard Mewaldt, Secretary</i> .....	245
GENERAL NOTES	
Age of fossil birds from the greensands of New Jersey. <i>Donald Baird</i> .....	260
Evening Grosbeak attacks House Sparrow. <i>Charles D. Babcock</i> .....	263
The Wattled Crane in Ethiopia. <i>Emil K. Urban and Lawrence H. Walkinshaw</i> .....	263
Photoperiod and size of testes of Eastern Meadowlarks. <i>Philip H. Darst and Dale Hein</i> .....	265

Mobbing of a Chuck-will's-widow by small passerines. <i>Robert W. Ficken, Millicent S. Ficken, and Elizabeth S. Hadaway</i> .....	266
Bilateral gynandris in an Evening Grosbeak. <i>Roxie C. Laybourne</i> .....	267
The distribution of the Cerulean Warbler in the Province of Quebec, Canada. <i>Henri Ouellet</i> .....	272
A case of polygamy in the Black-capped Chickadee. <i>Susan M. Smith</i> .....	274
Occurrence of <i>Vireo bellii medius</i> in southern Mississippi. <i>Thomas D. Burleigh</i> .....	274
Sexual dimorphism in juvenile House Sparrows. <i>Richard F. Johnston</i> .....	275
Sandhill Cranes and other birds from Bering Strait, Alaska. <i>W. J. Breckenridge and David Cline</i> .....	277
Cory's Shearwaters ( <i>Puffinus diomedea borealis</i> ) off eastern Florida. <i>Fredrick H. Lesser and Lovett E. Williams, Jr.</i> .....	278
An addition to the avifauna of the United States: <i>Myiarchus stolidus sagrae</i> . <i>Merriam L. Miles</i> .....	279
REVIEWS. <i>Edited by Kenneth C. Parkes</i> .....	280
RECENT LITERATURE. <i>Edited by Glen E. Woolfenden</i> .....	288
NOTES AND NEWS .....	305
OBITUARIES .....	305
CORRESPONDENCE .....	307

---

### NUMBER 3

MIGRATORY ORIENTATION IN THE INDIGO BUNTING, <i>PASSERINA CYANEA</i> . PART I: EVIDENCE FOR USE OF CELESTIAL CUES. <i>Stephen T. Emlen</i> .....	309
SOME ALLOPATRIC SPECIES PAIRS OF BIRDS IN NORTHWESTERN COLOMBIA. <i>Jürgen Hajfer</i> .....	343
NOTES ON THE WINTER DISTRIBUTION OF BIRDS IN THE WESTERN ANTARCTIC AND ADJACENT PACIFIC WATERS. <i>Laszlo J. Szijj</i> .....	366
COMPARATIVE SURVEY OF THE ANAL GLANDS OF BIRDS. <i>W. B. Quay</i> .....	379
DAY AND NIGHT CHANGES IN BODY WEIGHT OF THE WHITE-THROATED SPARROW, <i>ZONOTRICHIA ALBICOLLIS</i> . <i>John E. Kontogiannis</i> .....	390
A QUANTITATIVE ANALYSIS OF BREEDING BEHAVIOR IN THE AFRICAN VILLAGE WEAVERBIRD. <i>Nicholas E. Collias and Elsie C. Collias</i> .....	396
REPORT OF THE COMMITTEE ON BIRD PROTECTION, 1966 .....	412

## GENERAL NOTES

Autumnal breeding of the Paraguay Snipe in Uruguay. <i>Jon C. Barlow</i> .....	421
Cowbird removes warbler nestling from nest. <i>James Tate, Jr.</i> .....	422
A predator-decoy method for capturing insectivorous birds. <i>Richard B. Root and Ruth M. Yarrow</i> .....	423
Fulvous Tree Duck observed in the southern Sargasso Sea. <i>George E. Watson</i> .....	424
Occurrence of the Saw-whet Owl in Florida. <i>Frederick H. Lesser and Allen R. Stickley, Jr.</i> .....	425
Recent wintering records of the Kirtland's Warbler. <i>Margaret H. Hundley</i> .....	425
Polynesian rat predation on nesting Laysan Albatrosses and other Pacific seabirds. <i>Cameron B. Kepler</i> .....	426
Turkey Vultures attack living prey. <i>Helmut C. Mueller and Daniel D. Berger</i> .....	430
Main arteries in the neck and thorax of three sun grebes (Heliornithidae). <i>Fred H. Glenny</i> .....	431
Ferruginous Hawk attacks Great Horned Owl. <i>John P. Weigand</i> .....	433
REVIEWS. <i>Edited by Kenneth C. Parkes</i> .....	434
RECENT LITERATURE. <i>Edited by Glen E. Woolfenden</i> .....	444
NOTES AND NEWS .....	462

---

## NUMBER 4

MIGRATORY ORIENTATION IN THE INDIGO BUNTING, <i>PASSERINA CYANEA</i> . PART II: MECHANISM OF CELESTIAL ORIENTATION. <i>Stephen T. Emlen</i> .....	463
COMPETITIVE RELATIONSHIPS BETWEEN PARULA WARBLERS AND OTHER SPECIES DURING THE BREEDING SEASON. <i>Douglass H. Morse</i> ..	490
RELATIONSHIPS BETWEEN BLACK-EARED AND PLAIN-EARED FORMS OF BUSH-TITS ( <i>PSALTRIPARUS</i> ). <i>Ralph J. Raitt</i> .....	503
ON THE SYSTEMATIC POSITION OF THE BOAT-BILLED HERON. <i>Joel Cracraft</i> .....	529
AN INTERGENERIC HYBRID WOOD WARBLER ( <i>SEIURUS</i> × <i>DENDROICA</i> ). <i>Lester L. Short, Jr., and Chandler S. Robbins</i> .....	534
COURTSHIP OF THE REDHEAD ( <i>AYTHYA AMERICANA</i> ). <i>Milton W. Weller</i> .....	544



RELATIVE GROWTH, BODY CONSTITUENTS, AND ENERGY CONTENT OF NESTLING BARN SWALLOWS AND RED-WINGED BLACKBIRDS. <i>Robert E. Ricklefs</i> .....	560
YAWNING AND OTHER MAINTENANCE ACTIVITIES IN THE SOUTH AFRICAN OSTRICH. <i>E. G. Franz Sauer and E. M. Sauer</i> .....	571
GENERAL NOTES	
Canvasback male participating in a Redhead courtship party. <i>Richard L. Timken</i> .....	588
Water sources of the Long-billed Marsh Wren in Georgia salt marshes. <i>Herbert W. Kale, II</i> .....	589
Records of four species of <i>Pterodroma</i> from the central Pacific Ocean. <i>Patrick J. Gould and Warren B. King</i> .....	591
<i>Agapornis fischeri</i> , <i>Lybius guifsobalito</i> , and <i>Stiphronis erythrothorax</i> in Kenya. <i>Dale A. Zimmerman</i> .....	594
Foraging behavior of the Double-toothed Kite in association with white- faced monkeys. <i>Jon S. Greenlaw</i> .....	596
Breeding behavior of the Roadrunner, <i>Geococcyx californianus</i> . <i>William A. Calder</i> .....	597
Occurrence and nesting of the Hook-billed Kite ( <i>Chondrohierax uncinatus</i> ) in Texas. <i>Raymond J. Fleetwood and John L. Hamilton</i> .....	598
Interactions of a crow and a fledgling cowbird. <i>Millicent S. Ficken</i> .....	601
Rock Wren in Ontario. <i>Joanna Burger and Richard Brownstein</i> .....	602
Comparison of nesting sites of Bald Eagles in central Florida from 1930 to 1965. <i>Joseph C. Howell and George M. Heinzman</i> .....	602
An interesting case of mortality in the Gouldian Finch. <i>Harrison B. Tordoff</i>	604
REVIEWS. <i>Edited by Kenneth C. Parkes</i> .....	606
RECENT LITERATURE. <i>Edited by Glen E. Woolfenden</i> .....	616
CORRESPONDENCE .....	634
NOTES AND NEWS .....	635
INDEX TO VOLUME 84. <i>Compiled by Marion Anne Jenkinson</i> .....	637

## SUPPLEMENT

AMERICAN ORNITHOLOGISTS' UNION 1967 MEMBERSHIP DIRECTORY