The Linnaean Society of New York

Announces the publication of Volume VII of its Transactions

- This volume (128 pp.) lists all species recorded from Mexico to Panama inclusive (over 1,400) under their currently accepted technical names.
- It supplies an English name for each species unit.
- It outlines the range of each species, indicating not only the countries of Middle America in which such species has or has not been noted, but also in a general way the extra-limital range.
- It provides a distributional bibliography (over 200 items) divided by countries, and, in the case of Mexico, subdivided by regions.
- It should become a basic volume in the working library of those interested in the distribution of American birds.

The Species of Middle American Birds by Eugene Eisenmann

PRICE \$2.00

Supply is limited.
Orders should be sent to
the Secretary, Linnaean Society
American Museum of Natural History
New York 24, N. Y.

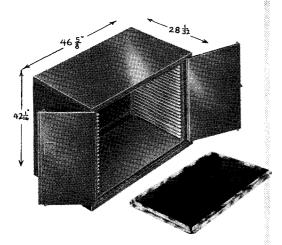
To the A.O.U. Membership:

Dues notices for 1956 have recently been sent out. If you have not yet mailed your payment please consider this a reminder—BUT, better yet, save yourself this annual problem and take out a

LIFE MEMBERSHIP

which may be paid in a single payment of \$100.00 or in four consecutive annual installments of \$25.00 each.

CHARLES G. SIBLEY, Treasurer Fernow Hall, Cornell University Ithaca, N. Y.



Skin Case #201 for Large Trays

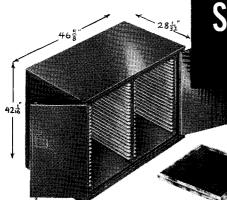
SKIN CASES FOR MAXIMUM PROTECTION CONVENIENCE ECONOMY!

s Jane

ZOOLOGICAL AND ORNITHOLOGICAL

SPECIMEN STORAGE CASE

For Protective Storage of Mammal & Bird Skins



Skin Case #202 for Small Trays

FOR ILLUSTRATED BROCHURE WRITE

- Locked "Live Rubber" Seal
- Sturdy double panel doors
- Locking mechanism secures both doors
- Tray guides permit maximum position of tray positions
- · Fumigant Compartment
- Specimen Trays of aluminum and masonite — light weight easy to handle.

Institutional Division

CHAS J CORP.
105 CHAMBERS STREET, NEW YORK 7, N. Y.

The Auk

A Quarterly Journal of Ornithology

EDITOR ROBERT W. STORER

Assistant Editor
WILLIAM R. DAWSON



VOLUME 72

PUBLISHED BY

The American Ornithologists' Union

LANCASTER, PENNSYLVANIA 1955

DATES OF ISSUE OF 'THE AUK'

Vol. 72, No. 1—February 28, 1955 Vol. 72, No. 2—May 16, 1955 Vol. 72, No. 3—August 9, 1955 Vol. 72, No. 4—November 2, 1955

CONTENTS OF VOLUME 72

NUMBER 1

THE FLIGHT OF THE BLACK-CAPPED CHICKADEE AND THE WHITE-BREASTED NUTHATCH. By Crawford H. Greenewalt	1
THE GEOGRAPHIC DISTRIBUTION OF THE BLUE-EYED SHAGS, Phalacrocorax albiventer and Phalacrocorax atriceps. By F. Behn, J. D. Goodall, A. W. Johnson, and R. A. Philippi B	6
North American Migrants in the State of Veracruz, Mexico: a Summary. By Frederick W. Loetscher, Jr	14
Invertebrate Nest Associates of the Prairie Warbler. By $Val\ Nolan,\ Jr.$	55
IN MEMORIAM: WINSOR MARRETT TYLER. By Wendell Taber	62
THE SEVENTY-SECOND STATED MEETING OF THE AMERICAN ORNITHOLOGISTS' Union. By Harold Mayfield	66
Officers, Trustees, and Committees of the American Ornithologists' Union	77
General Notes	
Birds in the Upper Arctic. By Raymond A. Paynter, Jr	79
Russak	80 80
A Western North Atlantic Record for the Frigate Petrel (Pelagodroma marina hypoleuca). By Malcolm S. Gordon	81
Sandhill Cranes in Yellowstone Park. By James W. Caslick	82
A Case of Cannibalism by a Captive Tufted Titmouse (Parus bicolor). By Paul A. Stewart. Bronzed Grackle (Quiscalus quiscula versicolor) nesting on Beaver Lodge. By Harold H.	83
Axtell	84
The Prothonotary Warbler in Surinam. By F. Haverschmidt	84
Ruptured Heart in the Cardinal (Richmondena cardinalis). By William C. Dilger	85
The Generic Name of the Spectacled Eider. By Kenneth C. Parkes	85
Some Comments on Vaurie's Revision of the Muscicapini. By S. Dillon Ripley	86
Notes on Cowbird Parasitism on Four Species. By Walter P. Nickell	88
A New Name for Garrulax moniliger bakeri. By R. M. deSchauensee	92
Colima Warbler (Vermivora crissalis) in Colima. By J. Van Tyne	92
RECENT LITERATURE	93
Report of the Bird Protection Committee	110
Notes and News	112

NUMBER 2

NATURAL HISTORY AND BREEDING BEHAVIOR OF THE TINAMOU, Nothoprocta ornata. By Anita K. and Oliver P. Pearson	113
MEASUREMENT OF TERRITORY AND HOME RANGE SIZE IN BIRDS. By Eugene P. Odum and Edward J. Kuenzler	128
Summer Ecology of Oceanic Birds off Southern New England. By Malcolm S. Gordon	138
Notes on the Life History of Traill's Flycatcher (<i>Empidonax traillii</i>) in Southeastern Washington. By James R. King	148
Further Notes on Birds of the Lake Patzcuaro Region, Mexico. By Ernest P. Edwards and Paul S. Martin	174
IN MEMORIAM: FRANCIS HENRY ALLEN. By Wendell Taber	179
Variation of Shape in the Eggs of the Common Tern in the Clutch- sequence. By Mary E. Gemperle and F. W. Preston	184
REMARKS ON THE PIGEON, Otidiphaps nobilis Gould. By Fred H. Glenny and Dean Amadon	199
Notes and News	203
General Notes	
Feeding Habits of the Everglade Kite (Rostrhamus sociabilis). By Robert Cushman Murphy Possible Function of the Flicker's Black Breast Crescent. By Hervey Brackbill Status of the Black-polled, Bay-breasted, and Connecticut Warblers in Middle America.	
By Eugene Eisenmann	206
The Type Locality of the Florida Sandhill Crane. By Pierce Brodkorb	207 208
Eastern Willet in Ohio. By Worth Randle and Emerson Kemsies	208
A New Race of Least Bittern from Peru. By James Bond	208
Philippine Bird Names of Blasius. By A. L. Rand	210 212
Is the Starling Moving into Southern Florida? By Alexander Sprunt, Jr	
Treasurer's Report	213
STUDENT MEMBERSHIP AWARDS	215
Reviews	216
RECENT LITERATURE. Edited by Frank McKinney	219
NUMBER 3	
Land Birds over the Western North Atlantic. By Susan Irving Scholander	225
REMARKS ON THE ORIGINAL SOURCES OF DISPLAYS. By Martin Moynihan	240
Types of Hostile Display. By M. Moynihan	247
THE Expression of Innate Reproductive Rhythm under Conditions of Winter Lighting. By Alden H. Miller	260

In Memoriam: Elsie Margaret Binger Naumburg. By John T. Zimmer	265
OBSERVATIONS ON THE AVIFAUNA OF AN OZARK PLATEAU. By Philip S. Callahan and Howard Young	267
SEXING MATURE COLUMBIFORMES BY CLOACAL CHARACTERS. By Wilmer J. Miller and Frederic H. Wagner	279
THE MOLT OF HUMMINGBIRDS. By Helmuth O. Wagner	286
Thirtieth Supplement to the American Ornithologists' Union Checklist of North American Birds	292
General Notes	
Mockingbird Attacking Blacksnake. By Thomas W. Hicks. Apparent Copulation of Baldpate in Central Massachusetts. By L. M. Barilett and Gerry Atwell.	296 297
Barn Owls with Two Broods of Young. By F. Victor Morejohn	298
Ross's Goose in Texas. By Raymond J. Buller	298
A Record of the Mexican Crossbill (Loxia curvirostra stricklandi) from Fort Worth, Texas. By Warren M. Pulich	299
The Identity of Pyrrota valeryi J. and E. Verreaux. By Robert W. Storer	
Suggestions Regarding Alcoholic Specimens and Skeletons of Birds. By $Andrew\ J.\ Berger$.	300
Chipping Sparrow with song of Clay-colored Sparrow at Toronto. By Ronald R. Tasker	303
Reviews	304
RECENT LITERATURE, Edited by Frank McKinney	316
Obituaries	
Anastasio Alfaro (Gonzalez); Herbert William Brandt; John Milton Edson; Harry Harris; Ludwig Schuster; Alice Hall Walter	321
NUMBER 4	
Notes on the Life History of $Todirostrum\ maculatum\ $ in Surinam. By $F.\ Haverschmidt\ .\ .\ .\ .\ .\ .$	325
IN MEMORIAM: ARTHUR CLEVELAND BENT. By Wendell Taber	332
On the Hearing of Birds. By Johann Schwartzkopff	340
Notes on a Fall Migration at Matinicus Rock, Maine. By Rosario	
Mazzeo	348
Homing Flights and Orientation of Pigeons. By Harold B. Hitchcock	355
Censusing Southern Michigan Sandhill, Cranes. By Lawrence H. Walkinshaw and Harold F. Wing	374
SEASONAL CHANGES IN THE ENERGY BALANCE OF THE ENGLISH SPARROW. By Earle A. Davis, Jr	385
General Notes	
Reappearance of Newell's Shearwater in Hawaii. By Frank Richardson	412
Ramée Is	412

The Behavior of Birds Under Stress. By Alexander W. Blain, M.D	413
Evidence for Iron Staining as the Cause of Rusty Discoloration of Normally White Feathers	
• • • • • • • • • • • • • • • • • • • •	414 415
Flight Behavior of the Procellariiformes. By John G. Erickson	
A Hybrid Longspur from Saskatchewan. By Charles G. Sibley and Olin Sewall Pettingill, Jr.	
Cattle Egret, Marbled Godwit, Surfbird and Brown-chested Martin in Panama. By Eugene	426
	428
	431
Reviews	432
RECENT LITERATURE. Edited by Frank McKinney	434
Obituary	448
INDEX TO VOLUME 72. Prepared by Col. L. R. Wolfe	449
Title-page	i
Dates of Publication	ii
Contents of Volume 72	iii
Corrigenda	vii
List of Plates Plate Opposite p	na ore
1. Greenewalt: White-breasted Nuthatches Landing and Taking off	1
2. Greenewalt: Black-capped Chickadees in Flight	1
**	4
3. Greenewalt: White-breasted Nuthatches in Flight	_
4. Greenewalt: Tufted Titmouse and Black-capped Chickadees in Flight	5
5. Behn et al. Blue-eyed Shags at Colony in Tierra del Fuego	12
6. Behn et al. Blue-eyed Shags at Colony in Tierra del Fuego	13
7. TABER: Winsor Marrett Tyler	64
8. Hermes: Saw-whet Owl in Action	
9. Hermes: Saw-what Owl in Action	113
9. Hermes: Saw-what Owl in Action	113 120
9. HERMES: Saw-what Owl in Action	113 120 180
9. Hermes: Saw-what Owl in Action	113 120 180 265
9. Hermes: Saw-what Owl in Action	113 120 180 265 280
9. Hermes: Saw-what Owl in Action	113 120 180 265 280
9. HERMES: Saw-what Owl in Action	113 120 180 265 280 281 325
9. HERMES: Saw-what Owl in Action	113 120 180 265 280 281 325
9. HERMES: Saw-what Owl in Action	113 120 180 265 280 281 325 332 380

CORRIGENDA

Pages 2 and 3, Tables 1 and 2; for 'Acceleration in meters per second,' read 'Acceleration in meters per second²,' and for 'Acceleration in miles per hour,' read 'Acceleration in miles per hour².'

Page 21, lines 19 and 20 should read:

'55 (B-2) Rivera, near sea-level; location on sketch-map open to doubt. Romatlan. Not definitely determined, but said to be near Córdoba.'

Page 35, line 20: for 'then' read 'than.'

Page 39, sixth line from bottom: for 'April 16,' read 'April 13.'

Page 88, sixth line from bottom: for 'Icterus,' read 'Icteria.'

Page 191, third line from bottom: for ' $R = D^2/8$,' read ' $R = D^2/8\delta$.'

Page 310, line 31: for 'earier,' read 'earlier.'

THE AUK

A Quarterly Journal of Ornithology

ORGAN OF THE AMERICAN ORNITHOLOGISTS' UNION

For publication in 'The Auk,' articles or notes must present material that is of significance to ornithologists and that has not been published elsewhere. All manuscripts should be typewritten, double spaced, with wide margins. Titles should be brief. Terminal bibliographies are used as a rule for long articles. Only works actually cited in the text are to be included in these bibliographies; works not so cited will be deleted by the editors. Where fewer than five references to literature are made, they may be inserted in parentheses in the text. References in manuscript for 'General Notes' should be in the text. Consult issues of 'The Auk' since January, 1949, for style of citation. Long articles should be summarized briefly. Footnotes, Roman numerals, and ruled tables are to be avoided. Acknowledgments belong in the text. Line drawings must be in India ink on white paper or drawing board; usually these should be planned for at least one-half reduction when printed. Thus, details and lettering must be correspondingly large. Legends must be brief. Photographs must be hard, glossy prints of good contrast. Common and scientific names of North American birds should follow the A.O.U. Check-List and supplements except in taxonomic papers giving critical discussions.

Proofs of all articles and notes will be sent to authors. Reprints from articles, 'General Notes,' and 'Correspondence' are to be paid for by the author. These must be ordered from the Editor on the blanks sent with the proof and must be returned with the proof. Printed covers can be furnished at additional cost.

All articles and notes submitted for publication and all books and publications intended for review should be sent to the Editor.

ROBERT W. STORER, Museum of Zoology, University of Michigan, Ann Arbor Michigan.

All persons interested in ornithology are invited to join the American Ornithologists' Union. Application may be made to the Treasurer; dues for Members are \$4.00 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.

CHARLES G. SIBLEY, Fernow Hall, Cornell University, Ithaca, New York.

OFFICERS OF THE AMERICAN ORNITHOLOGISTS' UNION

President: ALDEN H. MILLER, University of California, Museum of Vertebrate Zoology, Berkeley 4, California.

First Vice-President: LUDLOW GRISCOM, Harvard University, Museum of Comparative Zoology, Cambridge 38, Massachusetts.

Second Vice-President: Ernst Mayr, Harvard University, Museum of Comparative Zoology, Cambridge 38, Massachusetts.

Editor: Robert W. Storer, University of Michigan, Museum of Zoology, Ann Arbor, Michigan.

Secretary: HAROLD F. MAYFIELD, 2557 Portsmouth Avenue, Toledo 13, Ohio.

Treasurer: Charles G. Sibley, Cornell University, Fernow Hall, Ithaca, New York

OAKLEIGH THORNE, II Says:

The winter and breeding bird studies in Audubon Field Notes are most interesting to the student of natural bird populations. Many new areas are covered each year, as well as new reports on old areas. Bird ranges and populations are constantly changing, and for one to keep up with these, Audubon Field Notes is a key publication.

AUDUBON FIELD NOTES

SUBSCRIBE TODAY!

Subscription for one year \$3.00 Subscription for two years \$5.50 Subscription for three years. \$7.50

(Separate copies of April issue—Christmas Bird Count \$2.00)

1130 Fifth Avenue, New York 28, N. Y.

"Recent Studies in Avian Biology"

This volume, prepared by the Research Committee of the American Ornithologists' Union, is to be ready for distribution on or about December 1, 1955.

It contains chapters, written by well-known ornithologists, on many aspects of the biology of birds. Behavior, anatomy, migration, speciation and other phases of avian biology are covered.

Order your copy from the

AMERICAN ORNITHOLOGISTS' UNION CHARLES G. SIBLEY, Treasurer

Fernow Hall, Cornell University
Ithaca, New York

Price \$7.50, postpaid.