



A Magazine of Field Ornithology

Published by the
WILSON ORNITHOLOGICAL CLUB

SIOUX CITY, IOWA

Entered as Second-class Mail Matter, July 13, 1916, at the Postoffice at Sioux City, Iowa, under Act of March 3, 1879.

CONTENTS

WINTER STARLING ROOSTS OF WASHIN	By E. R. Kalmbach	65-75
CURVATURE OF WING AND FLAPPING FL. By Willia	існт am Brewster Taber, Jr.	75-78
HARLAN'S HAWK	By Norman A. Wood	78-87
Snakes Vs. Birds: Birds Vs. Snakes	By J. E. Guthrie	88-113
Editorial	Section 1	114
General Notes		115-119
ORNITHOLOGICAL LITERATURE		119-128

THE WILSON BULLETIN

Published quarterly, in March, June, September, and December, as the official organ of the Wilson Ornithological Club, at Sioux City, Iowa.

The current issue of the Wilson Bulletin is printed by the Verstegen Printing Company, Sioux City, Iowa.

THE WILSON BULLETIN is sent to all members not in arrears for dues. subscription price is \$1.50 a year, invariably in advance, in the United States. Outside of the United States the subscription rate is \$1.75. New subscriptions, change of address, and applications for membership should be addressed to the Secretary.

All articles and communications for publication, books and publications for notice, and exchanges, should be addressed to the Editor.

Claims for lost and undelivered copies of the magazine may be addressed to the Editor.

THE WILSON ORNITHOLOGICAL CLUB

Founded December 3, 1888. Named after Alexander Wilson, the first American ornithologist, and called the "Father of American Ornithology."

The officers for the current year are:

President-Prof. J. M. Shaver, George Peabody College for Teachers, Nashville, Tenn.

First Vice-President-Prof. E. L. Moseley, State Teachers College, Bowling Green, Ohio.

Second Vice-President-Dr. Josselyn Van Tyne, Museum of Zoology, Ann

Arbor, Mich.
Treasurer—Mr. W. M. Rosene, City State Bank, Ogden, Iowa.
Secretary—Mr. Lawrence E. Hicks, Botany Dept., O. S. U., Columbus, Ohio.
Editor—T. C. Stephens, Morningside College, Sioux City, Iowa.

The membership dues are—Sustaining membership, \$5.00; active membership, \$2.50; associate membership, \$1.50 per year.

The following societies are affiliated organizations:

The Nebraska Ornithologists' Union.

The Iowa Ornithologists' Union. The Kentucky Ornithological Society.

The Tennessee Ornithological Society.