JOURNAL

OF THE

Tennessee Academy of Science

VOLUME XLII

NUMBER 1

CONTENTS

•	ago
Report of the Director of the Reelfoot Lake Biological Station. C. L. Baker	1
The Urogenital System of the Male Nectums maculosus. Judith W. Rosenquist and C. L. Baker	1
The Curly-leaved Pondweed Problem at Reelfoot Lake. Eugene Cypert	10
Age and Rate of Growth of the Channel Catfish in Reelfoot Lake for 1960 and 1966. Robert J. Schoffman, C.S.V.	12
New Data on the Range of the Troglobitic Trichoniscid Isopod, Caucasonethes henroti. John R. Holsinger	15
Artificialy Metamorphosed Neotenic Cane Salamanders. Harry C. Yeatman	16
Two New Monogenetic Trematodes from South America. C. E. Price and E. A. Schlueter	23
The Activity Coefficient of Potassium Chloride in Aqueous Solution as Measured in a Cation-sensitive Glass Electrode. M. H. Lietzke and R. W. Stoughton	26
A Record of the Mole Salamander, Ambystoma talpoideum from Middle Tennessee. Warren U. Brigham, Arnold Gnilka, and R. W. Dimmick	28
The Morphological Varieties of Southern Red Oak. Stewart Ware	29

JOURNAL

Tennessee Academy of Science

EDITORIAL STAFF

DONALD CAPLENOR, Editor, Tenn. Tech. Univ., Cooke-

JAMES D. CAPONETTI, Botany Editor, University of Ten-

JAMES B. DELANO, Engineering Editor, Arnold Engi-

neering Development Center, Tullahoma EDGAR D. EAVES, Mathematics Editor, University of

ROBERT J. FLOYD, Geology-Geography Editor, Tennessee

Division of Geology, Nashville MARK M. JONES, Chemistry Editor, Vanderbilt Uni-

Mrs. G. H. Lundberg, High School Science-Mathematics Editor, Peabody Demonstration School,

RICHARD STEVENSON, News Editor, East Tennessee

State University, Johnson City

R. P. WARD, Zoology Editor, Peabody College, Nashville John B. Thomison, Medical Sciences Editor, School of Medicine, Vanderbilt University, Nashville

YOUNGHANSE, Physics-Astronomy Editor, Oak J. O.

Ridge National Laboratory, Oak Ridge

All articles and communications for publications, books, and publications for review, should be addressed

New subscriptions, changes of address and applicato the Editor. tions for membership should be addressed to the Secretary. Personal items, news of events in the scientific world, and other notes suitable for the "News of Tennessee Science" department should be addressed to the News Editor.

Published quarterly, in January, April, July and October, by the Tennessee Academy of Science at Box 186A, Tennessee Technological University, Cookeville, Tennessee 38501.

The Journal is sent to all members not in arrears for dues. The subscription price is \$5.00 a year, invariably in advance. Single copies \$1.25.

Second Class Postage Paid at Nashville, Tennessee.

THE TENNESSEE ACADEMY OF SCIENCE

(Founded 1912, at Nashville, Tennessee) Affiliated with the American Association for the Advancement of Science

AFFILIATED SOCIETIES

Tennessee Ornithological Society, Nashville, Tennessee Barnard Astronomical Club, Nashville Tennessee Science Teachers' Association

Tennessee Psychological Association **OFFICERS**

NORMAN CAMPBELL, President, University of Tennessee, Martin Branch, Martin

ROGER RUSK, President-elect, University of Tennessee, Knoxville

DONALD CAPLENOR, Editor, Tenn. Tech. University, Cookeville

JAMES D. CAPONETTI, Secretary, University of Tennessee, Knoxville

ROBERT WILSON, Treasurer, University of Chattanooga, Chattanooga

CLINTON L. BAKER, Director of the Reelfoot Lake Biological Station, Southwestern College, Memphis

EXECUTIVE COMMITTEE

JOHN H. BAILEY, East Tennessee State University, Johnson City

CLINTON L. BAKER, Southwestern College, Memphis Frank H. Barclay, East Tennessee State University, Johnson City

BROTHER GEORGE CARNEY, Christian Brothers College, Memphis

NORMAN CAMPBELL, University of Tennessee, Martin Branch, Martin

DONALD CAPLENOR, Tenn. Tech. Univ., Cookeville JAMES D. CAPONETTI, University of Tennessee, Knox-

WILLIAM H. ELLIS, Austin Peay State College, Clarksville

MELBURN H. MAYFIELD, Austin Peay State College, Clarksville

RICHARD J. RARIDON, Oak Ridge National Laboratories, Oak Ridge

ROGER RUSK, University of Tennessee, Knoxville RICHARD STEVENSON, East Tennessee State University,

Johnson City ROBERT WILSON, University of Chattanooga, Chattanooga

NOTICE TO AUTHORS

Papers submitted for publication in the JOURNAL may be sent to any member of the editorial staff. Manuscripts must be approved by the Editor and the appropriate Section Editor before publication. Manuappropriate scripts should be typewritten, double or triple spaced, with wide margins, and with legends for figures typed on a separate page. Recent issues should be consulted with regard to matters of style. Each table should be placed on a separate sheet. Footnotes should not be used except very rarely. Greek letters and symbols should be avoided as much as possible.

The style for the list of references should conform to the style used in recent issues of the JOURNAL. This list should be headed Literature Cited. The following example illustrates the proper style to be used for references:

Snow, W. E. and Eugene Pickard. 1954. Observations on the seasonal activity of some night-biting Diptera. J. Tenn. Acad. Sci. 29:17-22.

Photographs (black and white glossy prints) may be accepted as illustrations; however, line drawings and diagrams are preferable. Drawings should be made in India ink on white paper or Bristol Board. An article containing more than 2 or 3 illustrations can be published only with the financial cooperation of the author.

A per page charge of \$10.00 will be made to industrial contributors.

A blank form for ordering reprints from the printer is enclosed with the galley proof. The cost of reprints is as follows:

is as follows:	4 pages	8 pages	12 pages	16 pages
2 pages 100 copies \$12.00 Ea. add. 100 2.00	\$20.00	\$38.00 8.50	\$47.00 12.25	\$56.00 16.00

The Tennessee Academy of Science is very anxious to include in its membership all teachers and professors of science, research workers in science both in educational institutions and industrial establishments, and all others who are interested in some phase of science. We invite you to join our organization and take part in

The annual dues are \$5.00 for members except teachers below the college level, whose dues are \$3.00, and \$10.00 for customers. and \$10.00 for sustaining members. Dues may be sent direct with your application for membership to the Secretary.