JOURNAL OF THE

TENNESSEE ACADEMY OF SCIENCE

OFFICIAL PUBLICATION OF THE Tennessee Academy of Science

Volume XXVI, 1951

Published Quarterly by
Tennessee Academy of Science
George Peabody College for Teachers
Nashville 4, Tennessee

JOURNAL

of the

Tennessee Academy of Science

FDITORIAL STAFF

JESSE M. SHAVER, Editor, George Peabody College for Teachers, Nashville. HARRY MONK, Ornithology Editor, Ovoca Apartments, Nashville.

W. Roger Rusk, Physics-Astronomy, University of Tennessee, Knoxville,

CHARLES S. SHOUP, News Editor, Biology Division, U. S. Atomic Energy Commission, Oak Ridge.

M. L. MACQUEEN, Mathematics Editor, Southwestern, Memphis.

ELSIE QUARTERMAN, Botany Editor, Vanderbilt University, Nashville. A. C. Cole, Zoology Editor, University of Tennessee, Knoxville.

Entered as second class matter February 12, 1926, at the post office at Nashville, Tennessee, under Act of August 24, 1912, acceptance of mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, and authorized September 16, 1931.

Published quarterly, in January, April, July, and October, by the Tennessee Academy of Science at Nashville, Tennessee.

The Journal is sent to all members not in arrears for dues. The subscription price is \$2.00 a year, invariably in advance. Single copies 50c.

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

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

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.

OFFICERS

CARL T. BAHNER, President, Carson-Newman College, Jefferson City. CARL K. SEYFERT, Vice-President, Vanderbilt University, Nashville. JESSE M. SHAVER, Editor, George Peabody College for Teachers, Nashville. ARLO I. SMITH, Secretary, Southwestern College, Memphis. MOFFAT G. BOYCE, Treasurer, Vanderbilt University, Nashville.

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 our activities. The annual dues are: \$3.00 for members and \$10.00 for sustaining members. They may be sent direct with your application for membership to the secretary.

TABLE OF CONTENTS

VOLUME XXVI, 1951

Number 1, January

P	age
Report of the Director of the Reelfoot Lake Biological Station. C. L. Baker	1
Financial Statement of the Reelfoot Lake Biological Station for the Biennium, January 1, 1949-December 31, 1950. C. L. Baker	2
News of Tennessee Science. C. S. Shoup	3
Percentage of Breeder Squirrels Killed During the 1949 Season and its Effect upon Setting the 1950-51 Season. Al Marsh	15
Studies on Trematode Cercariae at Reelfoot Lake, Tennessee, I. J. D. Goodman	22
Age and Growth of White Crappie in Reelfoot Lake for 1938 and 1948. Robert Schoffman	26
The Influence of Thyroxine, Epinephrine, and X-Rays on Metamorphosis of Some Neotenous Urodeles. C. I., Baker and Mabel B. Stoudemayer.	32
Age and Growth Differentiation Between the Sexes of the Largemouth Black Bass, Micropterus salmoides (Lacepede). James H. Padfield, Jr.	42
Studies on Trematode Cercariae at Reelfoot Lake, Tennessee, II. J. D. Goodman	5'5
Notes on the Sexology of Philomycid Slugs of the Genus Eumelus Rafinesque. G. R. Webb	73
Additional Mosquito Distribution Records for South Carolina. A. A. Weathersbee, F. T. Arnold, Jr., and M. M. Askey, Jr	79
The Occurrence of the Flathead Chub, <i>Platygobio gracilis</i> , in Tennessee. H. H. Shoemaker, Q. H. Pickering, and Leonard Durham	84
Observations on the Histology of the Alimentary Tract of Littorina irrorata (Say). H. J. Werner	85
A Note on the Correlation Between Non-Language Mental Ages and Reading Test Scores. J.C. Stanley, Jr.	88
The Investigation of Anti-Reticular Cytotoxic Serum (ACS). W. M. Malisoff and Thomas S. Gardner	89
Number 2, April	
Doctor Carl Tabb Bahner, New President of the Tennessee Academy of	
Science News of Tennessee Science. C. S. Shoup. Dr. Moffatt G. Boyce, New Treasurer, Tennessee Academy of Science	93 94 95
Dr. Marion Leigh MacQueen, Vice-President, Tennessee Academy of Science, 1950	95
The Sticks Remained Unbroken. S. L. Meyer	97
ogy, and Behavior. Clyde E. Keeler	105
Year 1950. J. J. Friauf	112 113
The Hayscentedfern in Tennessee. Jesse M. Shaver	114
The Sensitivefern in Tennessee. Jesse M. Shaver	118
What Science Means to Me. Phyllis Alexander	128
Proceedings of the Tennessee Academy of Science for 1950. A. I. Smith New Members of the Tennessee Academy of Science Elected at the John-	135
son City Meeting	154
Anna O Musiller Harmon P Schmitt and George P Musiller	157

Pa	ige
The Tennessee Junior Academy of Science. Frances R. Bottum	162 164 167
Number 3, July	
News of Tennessee Science. C. S. Shoup. Rayon Manufacture by the Viscose Process. Lee R. Herndon. Notes on Oklahoma Dragonflies. G. H. Bick. Proceedings of the Twelfth Annual Meeting of the Association of South-	169 172 173 178
eastern Biologists. A. V. Beatty. A New Species of Smithistruma from Tennessee (Hymenoptera:	181
Formicidae). Donald W. Pfitzer	198
Bradshaw	201
Notes on the Bird-Voiced Tree Frog, Hyla phaeocrypta. Malcolm V. Parker The Significance of Managed Water Levels in Developing the Fisheries	208
of Large Impoundments. Roy Wood	214 236
Problems of Science Teaching in Small High Schools. Mrs. Anna W. Pearsall	
Number 4, October	
A Tribute to Doctor Harcourt A. Morgan. Jesse M. Shaver News of Tennessee Science. C. S. Shoup	443
	249
A New Turtle Toxochelys weeksi, from the Upper Cretaceous of West	262
A Taxonomic Survey of Myxomycetes of the Great Smoky Mountains	
N. C. 1 D. I. Author I. Wolden	271
The Teaching of Astronomy at the University of Tennessee. Mary W. Peters The Species of Acanthocephala Described since 1933. Helen Ward Index to Volume XXVI, 1951	

Laboratory Supplies Microscopes and Accessories Dissecting Instruments & Chemicals & Reagents and Solutions

Distributors for Clay-Adams, Bausch & Lomb and other Importers and Manufacturers

NASHVILLE SURGICAL SUPPLY COMPANY

1911 CHURCH STREET NASHVILLE 3, TENN.

ILLUSTRATORS DESIGNERS COLOR PROCESS ENGRAVERS

Makers of fine printing plates to suit every publication and advertising medium since 1913

Quality Work-Prompt Delivery

CAPITOL ENGRAVING COMPANY

807 CLARK PLACE NASHVILLE, TENNESSEE

"Your story in picture leaves nothing untold"



"One Source of Supply"

MERCK AND BAKER C. P. CHEMICALS LABORATORY GLASSWARE AND APPARATUS

Your Inquiries Solicited

MASSEY SURGICAL SUPPLY. INC.

NASHVILLE 3, TENNESSEE

Photographic Supplies

Projection Equipment

Lantern Slides Made to Order

Expert Developing-Printing-Enlarging

GEO. C. DURY CO.

420 UNION STREET

NASHVILLE 3, TENN.

Good Printers to Good People

PRINTING LITHOGRAPHING

Cullom & Ghertner Co.

600 TWENTY-FIRST AVENUE, NORTH NASHVILLE 4, TENNESSEE

