### **JOURNAL**

OF THE

# Tennessee Academy of Science

OFFICIAL PUBLICATION OF THE

Tennessee Academy of Science

Volume XXXIV, 1959

Published Quarterly by TENNESSEE ACADEMY OF SCIENCE

The University of Tennessee Knoxville 16, Tennessee

### **JOURNAL**

OF THE

## Tennessee Academy of Science

#### EDITORIAL STAFF

JESSE M. SHAVER, Editor Emeritus, George Peabody College for Teachers, Nashville

HELEN L. WARD, Editor, University of Tennessee, Knoxville A. C. Cole, Zoology Editor, University of Tennessee, Knoxville

E. D. EAVES, Mathematics Editor, University of Tennessee, Knoxville JAMES C. BROWN, Engineering Editor, Tennessee Polytechnic Institute, Cookeville

CARL M. HILL, Chemistry Editor, Tennessee A and I College, Nashville Douglas Shields, Physics-Astronomy Editor, Middle Tennessee State College, Murfreesboro

W. B. JEWELL, Geology-Geography Editor, Vanderbilt University, Nashville JOHN T. JOHNSON, High School Editor, Young High School, Knoxville FREDERICK T. WOLF, Botany Editor, Vanderbilt University, Nashville

Entered as second class matter at the post office at Knoxville, 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 Knoxville, Tennessee.

The Journal is sent to all members not in arrears for dues. The subscription price is \$3.00 a year, invariably in advance. Single copies 75c.

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 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

Tennessee Science Teachers Association

Tennessee Psychological Association

#### OFFICERS

ROBERT T. LAGEMANN, President, Vanderbilt University, Nashville CHRISTOPHER P. KEIM, President-Elect, Oak Ridge National Laboratory, Oak Ridge

JESSE M. SHAVER, Editor Emeritus, George Peabody College for Teachers. HELEN L. WARD, Editor, University of Tennessee, Knoxville JAMES L. WILSON, Secretary, Belmont College, Nashville G. H. Lundberg, 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 organiza-tion 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 XXXIV, 1959

Number 1, January	
Map of Reelfoot Lake	PAGI
Report of the Director of the Reelfoot Lake Biological Station. C. L. Baker	1
News of Tennessee Science	2
Peronospora parasitica on Leavenworthia. Frederick T. Wolf	
New Cave Beetles (Carabidae, Trechini) from Tennessee and Kentucky. Thomas C. Barr, Jr.	
Trillium Sessile L. in Tennessee. Jesse M. Shaver	
Heterophyllous Leaves in the Palmately Lobed Viola egglestoni Brainerd. Jesse M. Shaver	
An Occurrence of Wapiti (Cervus cf. of C. canadensis), Possibly of Pleistocene Age, in North-Central Dyer County, Tennessee. M. V. Marcher	
Achondroplastic Dwarfs in Cattle. Wm. G. Downs, Jr.	52
Checklist of Vascular Aquatic Plant of Tennessee. Franklin D. Robinson and Royal E. Shanks	
A New Map of the Central Basin of Tennessee. H. R. DeSelm	
Age and Rate of Growth of the Bluegills in Reelfoot Lake, Tennessee, for 1950 and 1958. Robert J. Schoffman, C.S.V.	
Hematological Values from Heart and Tail Vein of the Golden Hamster. William L. Mengebier and Beverly Pleasants	
Number 2, April	
Doctor Robert T. Lagemann, 1959 President of the Tennessee Academy of Science	99
Doctor Gustave H. Lundberg, New Treasurer, Tennessee Academy of Science	
Status of the Opossum in Tennessee. Vincent Schultz	03
Errata	
Status of the Mink and Muskrat in Tennessee. Vincent Schultz	00
An Emended Description of <i>Cambarincola macrodonta</i> Ellis, with Remarks on the Diagnostic Characters of the Genus (Oligochaeta: Branchiobdellidae). Perry C. Holt and Richard L. Hoffman	
Proceedings of the Tennessee Academy of Science for 1958.  Wendell G. Holladay	
Report of the Treasurer of the Tennessee Academy of Science for 1958. Harris J. Dark	
Some Fossils from the Maury Formation, DeKalb County, Tennessee. John M. Kellberg and Stuart W. Maher	
Some Unreported Sulfide Occurrences in East Tennessee. Stuart W. Maher	
News of Tennessee Science	145

### Number 3, July

	PAGE
In Memoriam: Frances Ranney Bottum (1890-1958). Arthur H. Cook	147
HIGH SCHOOL SCIENCE SECTION	
Fourteenth Tennessee Science Talent Search.	
Hanor A. Webb and James L. Major	_ 148
Stress-Basic Origin of Disease. Barbara Conway	154
Experimental Teratology. Barbara Conway	
Announcement. Tenth Annual Fisk University Spectroscopy Institute	157
News of Tennessee Science	158
Pisciamphistoma reynoldsi (Paramphistomidae) A New	
Trematode Parasite of <i>Lebomis</i> spp. in Virginia.	
Burton J. Bogitsh and Thomas C. Cheng	159
Southeastern Agaricales, III. L. R. Hesler	162
Southeastern Agaricales. IV. L. R. Hesler	167
Fish Management on Wood's Reservoir. Norman G. Benson	172
The Changing Agricultural Scene on the Cumberland Plateau. George W. Webb	189
COLLEGIATE DIVISION	
Studies of Genetic Factors in Homeostasis.	
Allen Ashburn and David Fitzpatrick	198
"Crawfish with Rocks in their Heads." H. Bernie Orr	
Operation of Genetic Factors in Growth and Development of Mice. Mel Bowling  The Effect of Cold Stress on Peripheral Leucovite Count in	199
Dwarf-carrier Mice. John B. Werner, Ir	200
Factors in Addition to Experimental "Stress Agents" influencing the Leucocyte-count in Albino Rats. Howard Klausner	201
Research Grants for Undergraduate Students	203
Research States for States	
Number 4, October	
Announcement of Academy Meetings	205
Response of Achondroplastic Dwarts to Insulin.	
William G. Downs, Jr. and Bryant Benson	206
The Larva of Paramyrmica (Hymenoptera:Formicidae).	010
George C. Wheeler and Jeanette Wheeler	219
A New Crayfish of the Genus Cambarus from Alabama (Decapoda:Asticidae). Edward Taylor, Jr.	221
News of Tennessee Science	225
The Drosophila of Sullivan County, Tennessee.	
The Drosophila of Sullivan County, Tennessee.  Richard Stevenson and T. M. Carter	226
Some Cavernicolous Millipeds from the Cumberland Plateau.	
Nell B. Causey	229
Four New Species of Water Mites of the genus Arrenurus from Middle Tennessee (Acarina: Hydracarina). James L. Wilson	238
Natural History Notes on the Goldenrod Ball Gall Fly,	
Eurosta solidaginis (Fitch), and on its Parasites,	
The Color and E migantag Wolch	040
William E. Miller	246
Index to Volume XXXIV	253