

**JOURNAL**  
OF THE  
**Tennessee Academy of Science**

OFFICIAL PUBLICATION OF THE  
Tennessee Academy of Science

---

Volume XXXIII, 1958

---

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  
CARL TABB BAHNER, *News Editor*, Carson-Newman College, Jefferson City  
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 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  
Tennessee Science Teachers Association  
Tennessee Psychological Association

### OFFICERS

- ARLO I. SMITH, *President*, Southwestern College, Memphis  
ROBERT T. LAGEMANN, *President-Elect*, Vanderbilt University, Nashville  
JESSE M. SHAVER, *Editor Emeritus*, George Peabody College for Teachers, Nashville  
HELEN L. WARD, *Editor*, University of Tennessee, Knoxville  
WENDELL G. HOLLADAY, *Secretary*, Vanderbilt University, Nashville  
HARRIS J. DARK, *Treasurer*, Middle Tennessee State College, Murfreesboro
- 

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 XXXIII, 1958

## NUMBER 1, JANUARY

	PAGE
Report of the Director of the Reelfoot Lake Biological Station -----	1
News of Tennessee Science. Carl Tabb Bahner -----	2
Additional Records of Heleidae Collected in the Tennessee Valley During 1956. W. E. Snow and Eugene Pickard -----	3
Observations on Blackflies (Simuliidae) in the Tennessee River Basin. W. E. Snow, Eugene Pickard, and J. B. Moore -----	5
The Cherokee Bluff Cavern — Legend and Fact H. K. Brooks and H. A. Tiedemann -----	24
The Fecundity, Sex Ratio, and Maturity of the Sauger in Norris Reservoir, Tennessee. William W. Hassler -----	32
New or Little Known Species of Pselaphid Beetles Chiefly from South- eastern United States. Orlando Park -----	39
A Remarkable New Species of <i>Lasius</i> ( <i>Chthonolasius</i> ) from California (Hymenoptera:Formicidae). A. C. Cole -----	75
Errata -----	77
Harvesting of Largemouth Bass on Wheeler Reservoir, Alabama, 1952- 56. David C. Hulse and Lawrence F. Miller -----	78
<i>Ophioaenia gracilis</i> n. sp., a Proteocephalid Cestode from a Frog. Arthur W. Jones, Thomas C. Cheng and R. F. Gillespie -----	84
The Sandstone Industry of the Crossville-Crab Orchard District, Tennessee. George W. Webb -----	89
Age and Rate of Growth of the Yellow Bass in Reelfoot Lake, Ten- nessee, for 1955 and 1957. Robert J. Schoffman, C. S. V. -----	101

## NUMBER 2, APRIL

Doctor Arlo Irving Smith, 1958 President of the Tennessee Academy of Science -----	107
Report of the Representative to the American Association for the Advancement of Science and the Academy Conference. C. L. Baker -----	109
News of Tennessee Science. Carl Tabb Bahner -----	119
The Occurrence of a <i>Cordyceps</i> on the Ant <i>Camponotus pennsylvanicus</i> (Degeer) in the Highlands, N. C., Region. Arnold Van Pelt -----	120
Studies on Rhoad's Cotton Mouse, <i>Peromyscus gossypinus</i> <i>megacephalus</i> , in Alabama. Jackie Batson -----	123
Proceedings of the Tennessee Academy of Science for 1957. Wendell G. Holladay -----	133
Report of the Treasurer of the Tennessee Academy of Science for the Calendar Year, 1957. Harris J. Dark -----	161
Ecological Studies of Some Doline Ponds in East Tennessee. C. Leland Rodgers and Edwin D. Schreiber -----	163
A New Cave Beetle of the Genus <i>Ptomaphagus</i> (Catopidae) from DeKalb County, Tennessee. Thomas C. Barr, Jr. -----	170
Some Observed Textural and Petrographic Variations of the Basal Knox Sandstone in East Tennessee. Stephen E. Collins -----	172

## NUMBER 3, JULY

Wendell G. Holladay, New Secretary of the Tennessee Academy of Science .....	185
Southeastern Agaricales, II: L. R. Hesler .....	186
~A Spectrophotometric Procedure for Iron. William K. Easley, J. M. Kelly, and M. X. Sullivan .....	192
Floristic Regions of Tennessee. Royal E. Shanks .....	195
News of Tennessee Science. Carl Tabb Bahner .....	210
<b>FOR THE HIGH SCHOOL SCIENCE TEACHER. John T. Johnson</b> .....211	
The Twelfth Tennessee Science Talent Search—1958. James L. Major and Hanor A. Webb .....	211
Science Talent at Work. Hanor A. Webb .....	213
Color's Effect on Teenager's Preferences of Fruit Juices. Carolyn Shafer .....	214
Derivation of Modern Number System. Carolyn Huffstetler .....	217
Additional Robberflies from Campbell County, Tennessee. Robert M. Goslin .....	219
Non-Genetic Congenital Luxate. Walter Morgan .....	220
~Earthquakes in Tennessee and Nearby Sections of Neighboring States — 1926-1950. Berlen C. Moneymaker .....	224
The Ecology of The Odonata at a Small Creek in Southern Oklahoma. George H. Bick and Juanda C. Bick .....	240
Prodromus Fungi Ludoviciana. Arthur L. Welden .....	252
Nitrogen Excretion by Chicks Infected with <i>Salmonella pullorum</i> . Elmo S. Dooley, D. Frank Holtman, and Robert E. Pooley .....	258
~Beginning of the Sandstone Industry, Cumberland County, Tennessee. W. B. Jewell .....	260

## NUMBER 4, OCTOBER

Biological Studies on the Armyworm, <i>Pseudaletia unipuncta</i> (Haworth) in Tennessee (Lepidoptera:Noctuidae). Samuel G. Breeland .....	263
Some Climatic Relations of Armyworm Outbreaks. S. Marcovitch .....	348
Index to Volume XXXIII, 1958 .....	351