JOURNAL

OF THE Tennessee Academy of Science

VOLUME 71 NUMBER 3

CONTENTS

Twenty Years of Forest Change at Radnor Lake Natural Area, Davidson County, Middle Tennessee. Joe Schibig	57
Use of a Chemically Defined Medium for the Isolation and Identification of Motor-oil-degrading Microorganisms. Walter C. Black and John M. Zamora	73
Fellows of the Tennessee Academy of Science, 1956-1995	

Tennessee Academy of Science

EXECUTIVE COMMITTEE

President
David H. Kesler
Dept. of Biology
Rhodes College
Memphis, TN 38112

Treasurer
John W. Harris
Dept. of Biology
Tennessee Tech. Univ.
Cookeville, TN 38505

Tennessee Dept. of Education Linda Jordan, Science Consultant 8th Floor, Gateway Plaza 710 James Robertson Parkway Nashville, TN 37243-0379 Past-president
Diane R. Nelson
Dept. of Biology
East Tennessee State Univ.
Johnson City, TN 37614-0703

Director, Visiting Sci. Program Wayne Stevenson SEED-ORAU, P.O. Box 117 Oak Ridge Associated Univ. Oak Ridge, TN 37830

1994-1996 Member-at-large
Martha Weller
Dept. of Physics and Astronomy
Middle Tennessee State Univ.
Murfreesboro, TN 37132

Managing Editor
Phyllis K. Kennedy
Dept. of Biology
The Univ. of Memphis
Memphis, TN 38152

President-elect
Michael L. Daley
Dept. of Electrical Engineering
The Univ. of Memphis
Memphis, TN 38152

Director, Junior Academy
Jack Rhoton
East Tennessee State Univ.
Box 70684
Johnson City, TN 37614-0684

1995-1997 Member-at-large
David Bruce Conn
Dept. of Biology
The Univ. of the South
Sewanee, TN 37383

Meeting Coordinator
C. Steven Murphree
Dept. of Biology
Belmont Univ.
1900 Belmont Blvd.
Nashville, TN 37212-3757

James D. Caponetti

Dept. of Botany

The Univ. of Tennessee

Knoxville, TN 37916

Secretary
Sarah H. Swain
Dept. of Biology
Middle Tennessee State Univ.
Murfreesboro, TN 37132

Director, Collegiate Division Richard Raridon 111 Columbia Drive Oak Ridge, TN 37830

1996-1998 Member-at-large
Darlene Loprete
Dept. of Chemistry
Rhodes College
Memphis, TN 38112

EDITORIAL BOARD

Managing Editor
Phyllis K. Kennedy
Dept. of Biology
The Univ. of Memphis
Memphis, TN 38152

Chemistry
Martin V. Stewart
Dept. of Chemistry
Middle Tennessee State Univ.
Murfreesboro, TN 37132

History of Science
Phillip J. Lorenz
Dept. of Physics
The Univ. of the South
Sewanee, TN 37375

Physics and Astronomy

Martha Weller

Dept. of Physics and Astronomy

Middle Tennessee State Univ.

Murfreesboro, TN 37132

Engineering
Michael L. Daley
Dept. of Electrical Engineering
The Univ. of Memphis
Memphis, TN 38152

Math and Computer Science
Kirk Menser
Dept. of Math. and Computer Sci.
Austin Peay State Univ.
Clarksville, TN 37044

Science and Math Teachers
Sarah F. Barlow
Dept. of Biology
Middle Tennessee State Univ.
Murfreesboro, TN 37132

Ethics in Science and Technology
Robert Riser
Computer and Information Sci.
East Tennessee State Univ.
Johnson City, TN 37614

Medical Sciences
Robert O'Bannon
Dept. of Biology
Lee College
Cleveland, TN 37311

Zoology I
Gerald L. Vaughan
Dept. of Zoology
The Univ. of Tennessee
M313 Walters Life Sci. Bldg.
Knoxville, TN 37996-0810

Cell and Molecular Biology
Charles J. Biggers
Dept. of Biology
The Univ. of Memphis
Memphis, TN 38152

Geology and Geography
David N. Lumsden
Dept. of Geological Sciences
The Univ. of Memphis
Memphis, TN 38152

Microbiology
Anthony L. Newsome
Dept. of Biology
Middle Tennessee State Univ.
Murfreesboro, TN 3713332

Zoology II
Michele Barnard
Pulmonary Res. Lab., Michael
Reese Hospital and Med.Center
2929 S. Ellis, D-501
Chicago, IL 60616

The TENNESSEE ACADEMY OF SCIENCE was founded in 1912 at Nashville, Tennessee. 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. Annual dues are \$20 for members and fellows, except students and emeritus members whose dues are \$10. Life membership is \$200. Applications for membership should be addressed to the Treasurer.

Affiliated societies of the Academy are: American Association for the Advancement of Science (AAAS); Barnard Astronomical Society, Clarence T. Jones Memorial Observatory, Chattanooga; Barnard-Seyfert Astronomical Society, Nashville; National Association of Academies of Science; Tennessee Association of Science Department Chairs; Tennessee Junior Science and Humanities Symposium; Tennessee Ornithological Society, Nashville; Tennessee Psychological Association; and Tennessee Science Teachers' Association.

The JOURNAL OF THE TENNESSEE ACADEMY OF SCIENCE (ISSN 0040313X) is published quarterly by the Tennessee Academy of Science, Department of Biology, Tennessee Technological University, 900 N Dixie Avenue, Cookeville, TN 38505, for all members not in arrears for dues. The subscription rate is \$20 per year. Single copies of recent issues are \$10. Whole sets of back issues on microfilm are available from AMS Press, Inc., 56 E. 13th Street, New York, NY 10003. Periodicals Postage paid at: Cookeville, TN, and at additional mailing offices. POSTMASTER: Send address changes to: JOURNAL OF THE TENNESSEE ACADEMY OF SCIENCE, C/O DR. JOHN W. HARRIS, DEPARTMENT OF BIOLOGY, TENNESSEE TECHNOLOGICAL UNIVERSITY, P.O. BOX 5063, COOKEVILLE, TN 38505.

This Journal is abstracted by Biological Abstracts, Chemical Abstracts, and Nuclear Abstracts and is indexed by Science Citation Index and Agricola Citations.