

# REPORT OF THE TREASURER OF THE TENNESSEE ACADEMY OF SCIENCE FOR THE CALENDAR YEAR, 1953

JAMES W. WHITE

*The University of Tennessee, Knoxville, Tennessee*

**Cash Balances, January 1, 1953:**

Current Fund, First Amer. Natl. Bank, Nashville .....	\$2,031.47
Life Membership Fund, Nashville Trust Co. ....	478.07
Endowment Fund, Third Natl. Bank, Nashville .....	346.23
	<u>\$2,855.77</u>

**Academy Income:**

One-half of membership dues .....	777.25	
Interest on current fund .....	10.41	
AAAS Research Grants .....	147.64	
Gifts .....	70.50	
	<u>2,105.80</u>	1,005.80

**Journal Income:**

One-half of membership dues .....	777.25	
Subscriptions .....	239.94	
Reprints sold .....	906.81	
Journals sold .....	59.00	
Gift to Journal .....	200.00	
Advertising .....	493.00	
	<u>2,676.00</u>	2,676.00

**Life Membership and Endowment Fund Income:**

New Life Member .....	50.00	
Interest on Endowment Fund .....	6.95	
Interest on Life Membership Fund .....	9.85	
	<u>66.80</u>	66.80
Total income .....	\$3,748.60	
Total income plus Jan. 1, 1953, balance .....	6,604.37	

**Academy Expenses:**

Postage .....	62.45	
Addressographing .....	16.84	
Printing .....	109.95	
Supplies .....	6.83	
Office help .....	76.37	
Travel .....	89.72	
Research Grants .....	147.64	
Junior Academy expense .....	26.72	
Academy meeting expense .....	37.41	
Shaver gift .....	206.10	
	<u>780.03</u>	780.03

**Journal Expenses:**

Printing of Journal .....	1,986.86	
Engravings for Journal .....	326.16	
Mailing expense and postage for Journal .....	30.68	
Cost of reprints .....	321.15	
Addressographing .....	13.91	
	<u>2,678.76</u>	2,678.76
Total expenses .....	3,458.79	

**Cash Balances, December 31, 1953:**

Current Fund, W. Knoxville Br. Hamilton N. Bank .....	1,244.07
Current Fund, Home Federal Savings and Loan .....	1,010.41
Life Membership Fund, Nashville Trust Company .....	537.92
Endowment Fund, Third Natl. Bank, Nashville .....	353.18
Total balance .....	3,145.58
Balance plus expenses .....	\$6,604.37

The Auditing Committee of the Tennessee Academy of Science has examined the books of James W. White, Treasurer, and it has found them to be correct and in order for the year 1953.

J. A. Cooley, Alvin H. Nielsen, *Auditing Committee*

## THE MOSQUITOERN (AZOLLA CAROLINIANA WILLD.) IN TENNESSEE

JESSE M. SHAVER

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### MOSQUITOERN

*Azolla caroliniana* Willd.

This very small floating water-fern has much the appearance of a very small-leaved duck weed (*Lemna* sp.) or a moss. It has been called "mosquito fern" because it may entirely cover or blanket the surfaces of still ponds and sloughs and this has been said to prevent the breeding of mosquitoes there. It is known that *Azolla caroliniana* multiplies asexually very rapidly by the breaking apart of the branches. Benedict (1924) reports that 20 colonies of this or a very similar species planted in the spring (May 15) in a branch and pool that were dry in winter, increased to at least 200 colonies in one month. Clute (1928, p. 182) states that R. S. Cocks reported in the Fern Bulletin for 1904 that a pond about one acre in size in Audubon Park, New Orleans, Louisiana, had no less than fourteen cartloads of *Azolla* weighing a total of seven tons, removed between June and September.

The appearance of the floating mat of these plants is well shown in figure 241. In color the plants are green with more or less red. It has been assumed that the plants growing in the sun are more or less reddish and those in the shade greenish. The lower lobes and the border of the upper lobes of the leaves are often reddish with the center of the upper lobe either green or reddish (Small, 1938). Sometimes the entire plant, with the exception of the roots, is reddish. The changes of colors from summer through autumn have been described by Benedict (1923), probably from *A. filiculoides* (Svenson, 1944, and personal letter from Dr. Benedict, 1953). He found that the red color of leaf margins became more intense with the advent of cold. In shaded plants there was less color and in greenhouse plants, none at all. The color cannot be due to drying. It