

# ANNUAL REPORT OF THE OHIO ACADEMY OF SCIENCE

1955

Organized 1891  
Incorporated 1892  
Affiliated with the American Association for the Advancement of Science

## OFFICERS AND COMMITTEES FOR 1955-56

### *President*

PAUL ROTHEMUND

### *Secretary*

R. W. DEXTER

### *Treasurer*

R. M. GEIST

### *Treasurer-elect*

ELTON PADDOCK

### *Executive Secretary, Junior Academy*

R. E. MCKAY

### *Executive Vice-Presidents*

- |   |  |
|---|--|
| A. <i>Zoology</i> : T. H. LANGLOIS              | F. <i>Geography</i> : J. T. MADDOX                   |
| B. <i>Plant Sciences</i> : R. L. WALP           | G. <i>Chemistry</i> : J. F. CORWIN                   |
| A.B. <i>Subsection on Genetics</i> : W. SPENCER | H. <i>Science Education</i> : J. W. WARGO            |
| C. <i>Geology</i> : J. H. MELVIN                | I. <i>Anthropology and Sociology</i> : M. LOVENSTEIN |
| D. <i>Medical Sciences</i> : R. W. STACY        | J. <i>Conservation</i> : R. R. FINLAY                |
| E. <i>Physics and Astronomy</i> : W. E. SINGER  |  |

### *Membership Vice-Presidents*

- |   |  |
|---|--|
| A. <i>Zoology</i> : PAUL SEYLER                 | F. <i>Geography</i> : LOWRY KARNES               |
| B. <i>Plant Sciences</i> : GEORGE BURNS         | G. <i>Chemistry</i> : J. H. BUCKINGHAM           |
| A.B. <i>Subsection on Genetics</i> : D. S. DEAN | H. <i>Science Education</i> : MRS. CLARA KENNEY  |
| C. <i>Geology</i> : G. H. CROWL                 | I. <i>Anthropology and Sociology</i> : LEO ESTEL |
| D. <i>Medical Sciences</i> : JAY JACOBY         | J. <i>Conservation</i> : C. V. RILEY             |
| E. <i>Physics and Astronomy</i> : J. W. MCGRATH |  |

*Director of Public Relations*—W. H. SHAFFER

## COMMITTEES

### *Executive*

*Ex-officio*: PAUL ROTHEMUND, R. W. DEXTER, R. M. GEIST, ELTON PADDOCK,  
R. E. MCKAY, R. A. POPHAM

*Elective*: RUSH ELLIOTT, T. H. LANGLOIS

### *Nominating*

THE EXECUTIVE COMMITTEE

### *Program*

EXECUTIVE VICE-PRESIDENTS AND THE SECRETARY

### *Library*

*Academy Librarian*, MORTON COBURN, Chairman

A. W. LINDSEY..... Term expires 1957      C. E. HOEL..... Term expires 1959

### *Publications*

A. W. LINDSEY..... Term expires 1957

C. E. HOEL..... Term expires 1959

SECRETARY, Chairman

### *Necrology*

H. H. M. BOWMAN, Chairman

Term expires 1956

PAUL ROTHEMUND..... Term expires 1957

J. T. MADDOX..... Term expires 1958

### *Ohio Flora*

E. L. BRAUN, Chairman

### *Resolutions*

J. W. GERHART, Chairman... Term expires 1956

W. H. SHIDELER..... Term expires 1957

W. C. KRAATZ..... Term expires 1958

### *Trustees of Research Fund*

G. W. BLAYDES, Chairman... Term expires 1956

R. P. GOLDTHWAIT..... Term expires 1957

H. V. KNORR..... Term expires 1958

*Academy Representatives*

- On the Joint Administrative Board of the Ohio Journal of Science:
  - A. W. LINDSEY..... Term expires 1957
  - C. E. HOEL..... Term expires 1959
- On the Council of the A.A.A.S.: R. W. DEXTER

*The Council for 1955-1956*

R. H. BOHNING  
 H. H. M. BOWMAN  
 E. LUCY BRAUN  
 J. H. BUCKINGHAM  
 GEORGE BURNS  
 MORTON COBURN  
 J. F. CORWIN  
 GEORGE H. CROWL  
 DONALD S. DEAN  
 R. W. DEXTER  
 RUSH ELLIOTT  
 LEO ESTEL  
 R. R. FINLAY

JAMES GEBHART  
 R. M. GEIST  
 C. E. HOEL  
 JAY JACOBY  
 LOWRY KARNES  
 CLARA KENNEY  
 H. V. KNORR  
 T. H. LANGLOIS  
 A. W. LINDSEY  
 MENO LOVENSTEIN  
 J. T. MADDOX  
 JAMES MCGRATH

R. E. MCKAY  
 J. H. MELVIN  
 ELTON PADDOCK  
 RICHARD POPHAM  
 CHARLES V. RILEY  
 PAUL ROTHMUND  
 WAVE SHAFFER  
 PAUL SEYLER  
 W. E. SINGER  
 WARREN SPENCER  
 R. W. STACY  
 R. L. WALP  
 J. W. WARGO

## THE OHIO JOURNAL OF SCIENCE

*Editor*, R. H. BÖHNING

*Associate and Book Review Editor*, F. W. FISK

*Business Manager*, R. A. POPHAM

REPORT OF THE SIXTY-FOURTH ANNUAL MEETING OF THE  
OHIO ACADEMY OF SCIENCE

The sixty-fourth annual meeting was held on the campus of Ohio Wesleyan University at Delaware on April 21, 22 and 23, 1955. The executive committee met at 3 P.M. and the council met at 8 P.M. in the Faculty Lounge of the Memorial Union Building.

On Friday ten sectional meetings were held for zoology, plant sciences, subsection on genetics, geology, medical sciences, physics and astronomy, geography, chemistry, science education, anthropology and sociology, and conservation. The Ohio Section of the American Physical Society met in joint session with the section in physics and astronomy. The seventh annual state science day of the Ohio Junior Academy of Science was held the same day with a record number of student projects on display. Commercial exhibits were presented by four companies. On Friday afternoon the wives of faculty members in the science departments of Ohio Wesleyan University served tea to the visiting ladies. An invitation was extended to all guests to attend one of the performances of Shakespeare's play, "The Tempest," which was presented each evening during the conference. Two sections, Geology and Conservation, held field trips on Saturday.

The annual banquet and business meeting were held in the dining room of Stuyvesant Hall at 6:15 P.M. Dr. C. E. O'Neal, honorary chairman of the local committee on arrangements, served as toastmaster. Greetings from Ohio Wesleyan University were given by Dr. C. E. Ficken, Interim President, and the response for the academy was given by Dr. R. A. Hefner. The presidential address, entitled "Some Biological Factors in Aging," was delivered by Dr. Rush Elliott.

The Secretary announced the following as newly elected fellows of the academy:

ATZENHOEFFER, D. R.	GANYARD, MRS. R.	STEELE, C. O.
BARNES, W. H.	GOSLIN, R. M.	SMITH, W. H.
BLOCK, M. L.	HESSIN, TWILA	SWANSON, C. G.
BOND, R. H.	KNODER, C. E.	SWINEBROAD, JEFF
BOYCE, S. G.	LOUDIN, H. H.	VERMILION, M. T.
DAVIS, R. K.	MCGRATH, J. W.	WARNER, D. C. (posthumous)
DICKMAN, I. I.	MCKNIGHT, CLARENCE	WELTON, Miss EVELYN
DREIVELBIS, F. R.	MORSE, H. H.	WILCOX, J. A.
ESTEL, L. A.	NESSLE, J. P.	WINSLOW, J. D.
FORSYTH, JANE L.	PORTER, H. L.	WOLFROM, M. L.
GAMBILL, W. G.	SHANK, J. R.	

Mr. R. E. McKay, executive secretary of the Junior Academy of Science, announced the annual awards to outstanding high school teachers and the Kroger awards for outstanding work in science for a school in each district.

The Secretary presented the report of the Nominating Committee. Nominations were presented for the following offices: president; secretary; treasurer; director of public relations; librarian; member of library committee, publications committee, and academy representative on the Ohio Journal of Science; member of necrology committee; member of resolutions committee; and member of trustees of research funds. The newly elected officers are listed in the roster given earlier in this report.

The report of the resolutions committee was given by Dr. W. A. Manuel.

Respectfully submitted,

R. W. DEXTER, *Secretary*

#### REPORT OF THE EXECUTIVE COMMITTEE AND COUNCIL

The executive committee met on December 3, 1954, and again on April 21, 1955; the council met on December 4, 1954, and again on April 21, 1955. The fall meetings were held at Ohio State University while the spring meetings were held at Ohio Wesleyan University. Numerous matters of business were discussed at these meetings. Following is a brief summary of some of the more important actions taken. Previous arrangements for our annual meetings were interchanged so that the annual meeting for 1956 was scheduled for Wittenberg College and the meeting for 1957 scheduled for Bowling Green State University. Eight graduate students in the field of genetics were given a complimentary membership in the academy for one year. These memberships were paid by a gift from C. M. Goethe. Dr. Wave Shaffer was appointed as director of public relations. Mrs. Ethel M. Miller and Dr. Frederick H. Kreyer were elected as honorary life members. The treasury of the Junior Academy of Science was united with that of the senior academy so that all financial business would be transacted through the treasurer of the academy. It was decided to leave our research funds deposited in the First Federal Savings and Loan Association as now invested. Chairmen of all committees gave their annual reports, a digest of which will be found elsewhere in these pages.

The matter of certification of science teachers in Ohio was discussed at some length. A report by Conrad E. Ronnenberg entitled, "New Requirements for Provisional Teaching Certificate in Science in Ohio," has been published in *The Science Teacher* for March, 1955. A resolution presented by Roscoe Franks to oppose the use of bait in hunting migratory waterfowl was adopted.

The total membership of the Academy as of April 21, 1955, was 1223 distributed among the sections as follows: Zoology 289; Plant Sciences 203; Geology 175; Medical Sciences 111; Physics and Astronomy 67; Geography 49; Chemistry 111; Science Education 86; Anthropology and Sociology 28; and Conservation 104. The 1956 annual meeting was scheduled for Wittenberg College, Springfield, Ohio, on April 19, 20, and 21.

Respectfully submitted,

RALPH W. DEXTER, *Secretary*

#### REPORT OF THE TREASURER

##### CURRENT EXPENSE FUND Fiscal Year 1954

###### RECEIPTS:

Bank Balance, January 1, 1954.....	\$3,380.04
Membership Dues.....	4,314.00
Sale of Publications.....	6.42
Interest U. S. Savings Bonds.....	47.50
Exhibitor Fees (Commercial).....	75.00
Gift (Goethe).....	25.00
Refund on cost of U. S. Treasury Bonds.....	6.88
Miscellaneous.....	75.10
	<hr/>
	\$7,929.94

###### EXPENDITURES:

Subscriptions and Engraving Ohio Journal of Science.....	\$2,847.93
Office Supplies and expense.....	224.97
Printing Annual Report.....	82.04
Printing Newsletter, Junior Academy.....	266.75
Programs for Annual Meeting.....	156.50
Postage, office supplies, bank charges and other administrative expense.....	436.79
Printing announcements.....	56.00
Academy Conference.....	5.00
Bank Balance, December 31, 1954.....	3,853.96
	<hr/>
	\$7,929.94

OHIO ACADEMY OF SCIENCE RESEARCH FUND  
Fiscal Year 1954

## RECEIPTS:

Bank Balance, January 1, 1954.....	\$197.33
Interest on Savings Account.....	18.99
Interest U. S. Bonds.....	7.50
Dividends, Banc-Ohio Stock.....	32.50
Grant A.A.A.S.....	190.00
	\$446.32

## EXPENDITURES:

Grant, Elizabeth W. Smith.....	\$ 50.00
Grant, Thos. D. Howe.....	40.00
Grant, Peter Chacharonis.....	100.00
Bank Charges.....	3.48
Bank Balance, December 31, 1954.....	233.85
	\$427.33

Interest on Savings Account. Still in Savings Account..... 18.99

\$446.32

Excess Income over Expense..... \$ 55.31

Respectfully submitted,

ROBERT M. GEIST, *Treasurer.*

REPORT OF THE TRUSTEES OF THE RESEARCH FUND  
Fiscal Year 1954

Bank Balance.....	\$197.33
Interest Savings Account.....	18.99
Interest U. S. Bonds.....	7.50
Dividends Banc—Ohio Stock.....	32.50
Grant A.A.A.S.....	190.00

Total Receipts..... \$446.32

## EXPENDITURES:

Grant, Elizabeth W. Smith, life histories of non-cave dwelling bats.....	\$ 50.00
Grant, Peter Chacharonis, Protozoa of sphagnum bog at Buckeye Lake.....	100.00
Grant, Thos. D. Howe, woody plants of northwestern Ohio.....	40.00
Bank Charges.....	3.48
Interest Savings Account. Still in Savings Bank.....	18.99
Bank Balance December 31, 1954.....	233.85

Total Expenditures..... \$446.32

Examination will show excess income over expense..... \$ 55.51

The following grants, made in 1955, will appear in the fiscal report for that year:

Harold G. Multer, rock thin sections, Wayne County.....	\$ 35.00
Ohio Flora Committee, expenses of committee.....	212.00
John R. Coash, glacial stratigraphy of northwestern Ohio.....	100.00
Robert E. Woodruff, distribution of Scarabaeidae (Coleoptera) in Ohio.....	50.00

\$397.00

Respectfully submitted,

RICHARD P. GOLDTHWAIT,  
GLENN W. BLAYDES,  
EDWARD S. THOMAS, *Chairman*

REPORT OF THE LIBRARIAN FOR 1954

The librarian is pleased to inform the Academy that its official journal is used in five hundred and twenty-four exchanges. Seventy-two percent of these exchanges are with institutions located abroad. Twenty-eight percent of these exchanges are with domestic institutions.

There has been a 5.2% increase in the number of exchanges since the Librarian's previous report. Twenty-six exchange agreements were concluded, resulting in the addition to the library of forty-nine new periodicals.

Exchange Agreements Concluded Between the O.A.S. and Domestic and Foreign Institutions

	April 1954	April 1955	Numerical Gain	Percent increase over 1954
Domestic exchanges.....	144	148	4	2.7%
Foreign exchanges.....	354	376	22	6.2%
Total number of exchanges.....	498	524	26	5.2%

Sales of the Academy's publications for the period July, 1954 through April, 1955 amounted to twenty-four dollars and twenty-five cents (\$24.25). This sum was turned over to the Treasurer of the Academy.

Respectfully submitted,  
MORTON COBURN, *Librarian*

REPORT OF THE JOINT ADMINISTRATIVE BOARD OF THE OHIO JOURNAL OF SCIENCE

The annual meeting of the Joint Administrative Board of the Ohio Journal of Science was called for April 11, 1955. Present were Drs. Spieker and Meyer representing the Ohio State University, and Drs. Böhning, Popham, and Fisk of the Ohio Journal of Science staff.

Since neither Academy representative was present, the ensuing discussion of the affairs of the Journal was informal and unofficial.

The reports of the business manager, editor, and book review editor were read and copies were sent to the Academy representatives. The reports were approved by all members of the board (voting orally and by mail ballot). Copies of the reports are appended to these minutes. The editor indicated that he is now operating with an optimum (six months) supply of manuscripts on hand. The business manager stated that the editor may increase the size of the Journal at any time it becomes necessary to reduce the size of the backlog of approved manuscripts to an optimum number.

The present board chairman (Dr. Spieker), editor (Dr. Böhning), business manager (Dr. Popham), and book review editor (Dr. Fisk) were elected by the board (voting orally and by mail ballot) to serve for the year of 1955-1956.

The board approved (voting orally and by mail ballot) a flat charge of \$1.00 for each back copy of the Journal. Effective prices established October 15, 1949 were \$1.00 per copy or \$4.00 per volume.

A suggestion to bind one set of the Ohio Journal of Science for use of the Journal staff was approved by the board (voting orally and by mail ballot).

Respectfully submitted,  
RICHARD A. POPHAM  
*Secretary of the Board*

THE OHIO JOURNAL OF SCIENCE  
Volume 54—Fiscal Year 1954

BALANCE SHEET  
(With comparison with previous Two Years)

	Volume 52 Fiscal Year Jan. 1, 1952 Dec. 31, 1952	Volume 53 Fiscal Year Jan. 1, 1953 Dec. 31, 1953	Volume 54 Fiscal Year Jan. 1, 1954 Dec. 31, 1954
RECEIPTS:			
Bank balance at beginning of period.....	\$1,370.64	\$1,566.51	\$1,928.65
O. S. U.—paid for subscriptions.....	2,000.00	2,500.00	2,500.00
O. A. S.—paid for subscriptions.....	2,135.00	2,069.50	2,035.50
Non-members—paid for subscriptions.....	386.00	432.50	354.50
Separate numbers, volumes and reprints sold...	222.30	657.15	393.85
50 year index sold.....	0.00	555.00	197.50
O. A. S.—paid 1/2 cost of plates.....	231.14	237.84	312.43
O. A. S.—paid for annual report.....	103.32	136.28	82.04
Miscellaneous.....	17.50	34.94	597.57
Advertisements.....	737.52	387.00	280.68
Charles F. Kettering Foundation—Gift.....	0.00	0.00	500.00
	<hr/> \$7,203.42	<hr/> \$8,576.72	<hr/> \$9,182.72

EXPENDITURES			
Spahr and Glenn—printing O. J. S.....	\$4,544.00	\$4,843.80	\$5,119.80
Bucher Engraving—plates.....	585.20	624.86	606.13
Postage and express.....	214.57	281.50	237.73
Secretary and labor.....	48.50	125.06	91.08
Office expenses and bank charges.....	94.64	61.86	85.73
Advertising in the O. J. S.....	150.00	213.89	0.00
Reprints.....	0.00	236.89	24.00
Mailing envelopes.....	0.00	225.77	0.00
Refunds.....	0.00	0.00	3.00
Miscellaneous.....	0.00	34.44	597.57
Bank balance at end of period.....	1,566.51	1,928.65	2,417.68
	<u>\$7,203.42</u>	<u>\$8,576.72</u>	<u>\$9,182.72</u>
Cost of supplying one volume of six numbers....	\$2.891	\$3.085	\$3.046

### THE OHIO JOURNAL OF SCIENCE

REPORT OF THE EDITOR OF VOLUME 54, 1954,  
to the Joint Administrative Board  
April 11, 1955

Volume 54 of The Ohio Journal of Science contained 440 pages of which 398 pages were devoted to 65 scientific papers in nine fields of science (designated by sections of The Ohio Academy of Science) and 42 pages to announcements, book notices, advertising, and index.

Respectfully submitted,  
R. H. BÖHNING, *Editor*

### REPORT OF JUNIOR ACADEMY OF SCIENCE ACTIVITIES

This report culminates the first year's activities of the Executive Secretary since taking over from Dr. Krecker in 1954.

I am not aware of the number of scholarships that were awarded at the close of the 1954 Science Day nor how many students made application for scholarships.

On September 10 and 11, 1954, a meeting of the Junior Academy Council convened at Bowling Green State University for an over-night session to discuss problems and policy for 1955. Approximately 22 persons were present and a very successful meeting was held. This meeting eliminated the necessity of having the regular October Council meeting, but one was held in January, 1955.

The District Science Days for 1955 were held as follows with the numbers present:

March 26, 1955	Muskingum	104
April 2, 1955	Ohio University	145
	Bowling Green	772
	Kent State	407
	Wittenberg	119
	Ohio State	385
April 16, 1955	Miami	338

There was a total of 2268 students in all grades from 7 through 12. The total registration for the State Science Day on April 22, is approximately 350.

During the present year, the Kroger Company has increased the number of awards to schools to 7, one for each District.

We are hoping that in the near future we can approach other industries to make similar awards in order to encourage high school students to go into the Sciences.

One of the most serious problems that we must meet in both the District Science Days and the State Science Day is that of securing judges. I want to thank the various sectional vice-presidents for their cooperation in helping me secure college judges for the State Science Day and I sincerely hope I can have all future vice-presidents cooperate in this regard. We shall attempt to diminish, as nearly as possible, the number of entrants in the State Science Day in order for these judges to attend their sectional meetings.

These are the main items of interest as reviewed for the past year. I am very happy to have the very fine cooperation of all the officers of the Senior Academy and I sincerely hope I may have their continued help.

Respectfully submitted,

ROBERT E. MCKAY  
*Executive Secretary*

## THE OHIO FLORA COMMITTEE

The Ohio Flora project has progressed significantly during the past year. The principle accomplishments are as follows:

1. A "Preliminary List of the Grasses of Ohio" by Dr. Clara Weishaupt was prepared and distributed in June, 1954.
2. Work on the Legumes of Ohio by Dr. William Gambill was continued to the point that a preliminary list is now almost ready for distribution.
3. A Preliminary list of the Pteridophytes of Ohio by William Adams is now ready for mimeographing.
4. Manuscripts on *Crataegus* by Dr. E. J. Palmer and *Salix* by Dr. C. R. Ball are nearly ready for publication.
5. Collection of specimens and of herbarium slips has continued in significant volume.

Respectfully submitted,

J. ARTHUR HERRICK  
Secretary, Ohio Flora Committee

## REPORT OF COMMITTEE ON RESOLUTIONS

Be it Resolved, that we the members of the Ohio Academy of Science express our sincere appreciation and thanks to our hosts, Ohio Wesleyan University, and especially to the members of the host committees, who provided the facilities and the efficient organization which enabled our sessions to proceed smoothly and pleasantly.

Be it further Resolved that we the members of this Academy express to Dr. R. M. Geist our gratitude for his very fine work as Treasurer of the Academy, and that we extend our best wishes to him as he completes seven years of distinguished service in this office and transfers his interests more completely to his subject matter area, Section A.

Respectfully submitted,

J. W. GEBBART  
W. H. SHIDELER,  
W. A. MANUEL, *Chairman*

## REPORT OF THE NECROLOGY COMMITTEE

This report covers the period from April, 1954 to April, 1955 and records the passing of members of the Academy in that interval.

## CHARLES CLEMON DEAM

Botanist of Indiana and former Indiana State Forester and author of *Trees of Indiana*. Member of The Ohio Academy of Science from 1906-1953.

Mr. Deam was born at Bluffton, Indiana on August 30, 1865 and lived most of his life in that town. He attended De Pauw University for two years until 1887 when he became a railroad surveyor and later a pharmacist. In 1891 he bought a drug store in Bluffton which he retained as long as he lived in a successful business with a partner. His interest in plants stemmed from pharmacy but he later took trips to Mexico and Guatamala for botanical exploration with a party of scientists from Ohio State University in 1904 when he collected 438 species. In 1909 another trip to tropical America was made and in the same year he was appointed by the Governor of Indiana to the newly created board of Forestry. In this position he started the State Forestry Reservation in Clark County and installed modern forestry practice by farmers all over the state. In 1911 he published the *Trees of Indiana*, one of his major works. The 5th. Edition being published in 1953. He served as State Forester until 1928 and after that as Research Forester and remained active in publishing some works and revising old works until his death. In 1940 his work was reviewed and collected by the Indiana State Department of Conservation and published as the *Flora of Indiana*.

Mr. Deam was honored by many learned and academic bodies. In 1920 he received an honorary A.M. by Wabash College, 1932 honorary D.Sc. by De Pauw, in 1939 honorary LLD by Indiana University and an honorary banquet by the city of Bluffton in 1938. In 1940 he was awarded the Pugsley medal by the Historical Society of New York and a certificate of Distinction from Purdue University in 1944. A second celebration of Appreciation was held by the city of Bluffton in 1952. On May 29, 1953 Mr. Deam died of the infirmities of age and was interred in Six Mile Cemetery at Bluffton. In 1893 he had married Stella Mullin, a teacher in Bluffton Schools, and by whom he had a son who died in infancy and a daughter, Roberta Elizabeth Deam Ortenburger. Mrs. Deam preceded her husband in death by a month. She was his constant helper in his arduous botanical researches and he named 3 species of plants for her. There is published a long list of new plants from the American tropics and many new species in Indiana discovered by Mr. Deam as well as a list of 33 rusts collected in Indiana. He has been honored by membership in 26 scientific societies.

## DR. WILLIAM LLOYD EVANS

Professor of Chemistry at Ohio State University from 1905 to 1941. Member and Fellow of the Chemistry Section.

Prof. Evans was born in Columbus, Ohio on December 22, 1870 and educated in the public schools of the city and was graduated with the Bachelor of Science degree from Ohio State University in 1892 taking his major in chemistry. After a short period of employment as chemist for a Columbus Tile Company, he returned to the University's Graduate School and secured a Master of Science degree in 1896. A few years later he received the Ph.D. degree from the University of Chicago in 1905. From 1898 to 1902 he had been instructor in Chemistry in a high school and while at Chicago he was occupied as a Fellow in Chemistry. After securing the degree at Chicago he returned to Ohio State University as assistant Professor of Chemistry in 1905 and then was made head of the Department from 1928 to 1941 when he became emeritus professor. During World War I Dr. Evans served as a Captain in the Reserve Officers Corps in 1917. Dr. Evans was a prolific writer as well as an inspiring teacher. In his long career as Professor of Chemistry at Ohio State University he wrote numerous textbooks and Laboratory Manuals for chemistry as well as many articles in the chemistry journals. One unique publication was his popular song book collection called "Songs of Ohio State University."

Many honors came to Dr. Evans. He served as president of the Ohio Academy of Science in 1939 and 1940. He was a Fellow of the A A A S and Vice-President of the Chemistry Section in 1933-34. He was elected into Phi Beta Kappa, Sigma Xi and received the William Nichols Medal in 1929. The medal of the Amer. Institute of Chemists in 1942 and an honorary Doctor of Science from Capital University in 1939.

In 1911 Dr. Evans married Cora Ruth Roberts and to them were born three children, Lloyd Robert Evans, M.D., Jane Ann Evans Nielsen and William Arthur Evans Lt. jg. deceased in World War II.

Dr. Evans died of pemfigus on Oct. 18, 1954 and was buried in Green Lawn Cemetery, Columbus, in his 84th year.

## DR. HERBERT OSBORN

Zoologist and Entomologist at Ohio State University from 1916 to 1933—Fellow of the Zoology Section.

Dr. Osborn was born March 19, 1856 at LaFayette, Wisconsin and received the B.Sc. degree at Iowa State College in 1879, the M.Sc. in 1880. From 1897 to 1898 he served through the ranks of instructor to Professor of Zoology and Entomology at Iowa State College and from 1890 to 1898 as Iowa State Entomologist.

In 1916 he transferred to Ohio State University as Professor of Zoology and Entomology where he remained until he became emeritus in 1933. He was Director of the Lake Laboratory from 1898 to 1918 and Director of the Ohio Biological Survey since 1912 and from 1885 to 1894 he was a special agent in entomology for the U. S. Dept. of Agriculture. Since 1913 he was a consultant of the Maine Expt. Station and Consulting entomologist to the Tropical Plant Research Foundation and a Collaborator of the U. S. Bureau of Entomology since 1930.

Dr. Osborn was a Fellow of A.A.A.S. and Vice-Pres. of Section F in 1917; President of the Iowa Academy of Science in 1887 and Editor of the Proceedings from 1890 to 1898; President of the Assn. of Econ. Entomologists in 1898; of the Ohio Academy of Science in 1904-05 and of the Amer. Microscopical Soc. 1907-1909 and the Entom. Soc. of Amer. in 1911. Editor of its Annals from 1908 to 1928. Trustee of Biological Abstracts 1927-1937 and Trustee of the Research Fund of the Ohio Acad. Sci. since 1917. He was author of too many books and articles on insects to list here, but his most important were contributions to economic entomology.

Dr. Osborn received honorary membership in many foreign entomological societies and was a member of Sigma Xi, Phi Kappa Phi, Alpha Zeta, Gamma Alpha. In Columbus he was a member of the University Club and the Faculty Club.

In 1883 Dr. Osborn married Alice I. Sayles and to them were born two sons, Morse F. Osborn and Herbert Y. Osborn and three daughters, Evelyn Osborn Knapp, Dorothy Osborn Bagg and Margaret Osborn Lounsbury. All of whom survive him.

On Sept. 20, 1954, this most distinguished scientist and best beloved biologist of Ohio passed away due to a coronary thrombosis and was buried in Columbus, Ohio in his 98th year.

## HENRY CLYDE SHETRONE

Curator of the Archeological Museum at Ohio State University and Fellow of the Anthropology Section of the Academy of Science.

Dr. Shetrone was born on August 10, 1876 at Millersport, Ohio and attended college for a few years at Denison University. He became interested in the archeology of Ohio especially the culture of the Mound Builders and was an active member of the Ohio Archeological Society and the Ohio Historical Society. In 1905 he married Miss Tillie May Klinger, but to this marriage accrued no issue.

In 1921 he became curator of the Archeological Collection in the Ohio State Museum which position he held until 1928. Then he was appointed Director of Ohio State Historical Society housed in the Ohio State Museum at Columbus. He served in this capacity until 1946.



Mr. Shetrone was distinguished with an honorary Master of Arts from Ohio University at Athens, in 1929 and an honorary Doctor of Science from his alma mater, Denison University, in 1944. He was a Fellow of the American Association for the Advancement of Science and a Fellow of the American Anthropological Association.

He served the Ohio Academy of Science as a president and as a member of the Council of the Association of American Museums. He was also a member of the Ohio State Chapter of the Sigma Xi. Mrs. Shetrone died sometime prior to Dr. Shetrone's death which occurred on November 23, 1954 of a cerebral hemorrhage. His remains were interred in Columbus, Ohio. The greater part of his life of 78 years was given to the conservation of the archeological relics found in Ohio.

#### DAVID CLARK WARNER

Water Conservation, Consultant for State of Ohio from 1912 to 1954—Member of Section J. (Conservation) in 1952—elected Fellow Posthumously in 1954.

Mr. Warner was born in Central New York State on Dec. 5, 1872 but moved to Logan County, Ohio with his parents at an early age. His youth was interesting and checkered with attempts at scientific experiments such as building an experimental telegraph line along White Oak Creek near Higginsport, Ohio and converting water power to electricity to operate it.

In 1892 he completed a course at Buffalo State Normal School and received a teaching certificate. However, he never seems to have held a teaching position. Intrigued by scientific exhibits he received a position as a special policeman at the Panama Exposition in 1900 in Buffalo due he claims to influence of Pres. Theodore Roosevelt in his behalf. In 1904 to 1906 he was a special policeman at the St. Louis World's Fair but in 1912 he was on the city police force of Columbus, Ohio and active as a lobbyist for water conservation in the State legislature. He is said to have often appeared before committees to speak for a special bill in which he was interested in his policeman's uniform. In 1917 he associated himself with the Y.M.C.A. and was sent to Paris with the U. S. troops in World War I. Here he met a famous Parisian tenor with whom he studied music. After the war he returned to America and associated himself as a singing evangelist in Chicago with Dwight L. Moody.

He returned to Columbus and Ohio where he remained for the rest of his life. In 1912 he had helped pass legislation on reforestation and legalizing Conservation Districts. He was one of the co-authors of the bill setting up the Ohio Conservancy Act in 1913. He remained active in water conservation promotion and was Executive Secretary of the Ohio Water Conservation Board from 1931 to 1936. He served as Consultant to the Muskingham Conservancy District and was author of the Ohio Farm Pond Law in 1937. With a change in political administration he was ousted by the Governor from his position but he defied the governor and retained an office in the State House. When light and telephone service were cut off he paid the bills himself, but continued to promote water conservation without pay for his services. In 1941 a happy political turn restored him again to his position as Executive Secretary for the Water Conservation Board and Counselor of Public Works in 1949.

Mr. Warner was made an honorary member of Friends of the Land and honorary life member of the Ohio Forestry Association and an honorary member of both the National Society of Professional Engineers and the Ohio Society of Professional Engineers. He is referred to in the Annual Report of the Ohio Conservation Commission as "The Father of Water Conservation in Ohio" and more particularly as the "Promotor of Watershed Conservancy Districts."

Mr. Warner's private life is not too well known. He had married and was the father of three children, viz. Henry Warner, who owned and operated the Columbus testing laboratory, John Warner, a teacher in South High School, Columbus and Miss Helen Warner, a nurse by profession.

On March 14, 1955, this great exponent of Conservation, who battled for the welfare of Ohio under great obstacles and discouraging lack of public support in the beginning, succumbed to cancer of the lungs in the 84th year of his life which was spent for the good of many future generations of Ohio citizens.

Much of the material for this sketch of Mr. Warner's life was found in an account of his career in "The Land" Vol. II, pp. 263-264, Jan. 1953.

#### PROFESSOR RALPH WHEATON WHIPPLE

Professor of Geology at Marietta College from 1919 to 1954. Fellow of the Geology Section.

Dr. Whipple was born in Philadelphia, Pa. on October 5, 1890 and attended the Dean Academy of Franklin, Mass. for his precollege education. Then he entered Amherst College and received the B.Sc. degree in 1914 and the Master of Arts degree in 1917. He remained at Amherst as assistant in Geology until 1917 when he joined the military forces in World War I. He was the recipient of the Croix de Guerre in 1919. In June of the same year he married Miss Marjorie Davis after having served with distinction in the U. S. Ambulance Corps with the French Army during the entire War, 1917 to 1919.

After the war Mr. Whipple became instructor in Geology at Marietta College in 1919 and in 1920 was promoted to Assistant Professor. In 1925 he was appointed to the Ebenezer Baldwin Andrew Chair of Natural Science at Marietta, and the Curator of the Museum which posi-

tions be held until his death. In 1928 and 1929 Professor Whipple studied at the Sorbonne in Paris.

Two children were born to Professor and Mrs. Whipple, Miss Ann Whipple and James Wheaton Whipple. In addition to the Croix de Guerre he was honored with membership in the Geological Society of America, the AAAS, the Ohio Academy of Science.

On Dec. 4, 1954 Professor Whipple died of cardiac failure in the 64th year of his life survived by his wife and children. After cremation his remains were interred in Columbus, Ohio.

#### DR. FRANK JAMES WRIGHT

Professor of Geology at Denison University from 1924 to 1949. Member and Fellow of Geology Section.

Frank James Wright was born at Bridgewater, Va. on Nov. 22, 1888 and received the B. A. degree from Bridgewater College in 1908, and the M. A. degree from the University of Virginia in 1911 and his Ph.D. in geology from Columbia University in 1918.

He served as professor of geology and biology at Bridgewater College from 1911 to 1916, then geologist at Bryn Mawr College in 1918, and again at Bridgewater from 1919 to 1924 when he joined the Denison faculty. From 1912 to 1924 he also was employed as the assistant geologist to the Virginia Geological Survey and was for many years the instructor in geology at Columbia University summer sessions. His special field of study was the geology of the Southern Appalachian mountains and the physiography of the James River Basin.

Among the honors Dr. Wright received were the Walker Prize of the Boston Society of Natural History and the Cressy Morrison Prize of the New York Academy of Science in 1931. He was a member of the A.A.A.S.; Fellow of the Geological Society; The Geography Association and Fellow and Vice-President (1931) of the Ohio Acad. Science. He was also a member of the A.A.U.P., Phi Gamma Delta, Phi Beta Kappa, Sigma Xi and Omicron Delta Kappa.

In 1914 Dr. Wright married Anna Catherine Zigler and to them was born two sons—Robert James Wright and Harold Douglas Wright. On September 5, 1954 Dr. Wright died of a cerebral hemorrhage and later was buried at Bridgewater, Va.

Respectfully submitted,

H. H. M. BOWMAN, *Chairman*  
J. H. MELVIN  
PAUL ROTHMUND

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