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MEMORIAL OF ELWOOD S. MOORE

August 3, 1879-March 26, 1966

W. W. MOORHOUSE, *Department of Geology, University of Toronto, Toronto, Canada.*

Elwood S. Moore, Emeritus Professor of Geology, University of Toronto, died on March 26, 1966, in Ottawa. During his professional career he saw Canada's mining industry grow from its pioneer beginning to its present stature. In the latter part of his term as head of the Department of Geological Sciences, he had to cope with the unprecedented numbers of post-war students. These developments presented him with increasing responsibilities as a geologist, teacher, and administrator, responsibilities which he discharged with his usual quiet efficiency and unswerving integrity.

Dr. Moore was a man of friendly reserve, not easy to know well, but well worth the knowing; a quiet-spoken man, whose words carried all the



Elwood S. Moore

more conviction for their studied moderation; a conscientious man, concerned for the welfare of the University and zealous, as a geologist, for the promotion of his profession. Those who were privileged to be his students will remember with gratitude his personal interest in their work and problems, his meticulously prepared lectures, enlivened by examples from his varied and extensive professional experience, and brightened by touches of whimsical humour.

Dr. Moore was borne near Heathcote, Ontario, on August 3, 1879, to Benjamin and Hannah (Rorke) Moore. His childhood was spent in a pioneer log house built by his father. He attended country schools, to which he rode on horseback. This rural environment must have contributed much to his sturdy physique, his industry, and his love of field work. In the fall of 1900 he enrolled in the Honour Course in Natural Science, Geology Option, at the University of Toronto. Graduating four years later, he taught high school until 1907, when he entered the University of Chicago as a Fellow in Geology. In 1908, he received his M.A. from the University of Toronto, and in 1909 was awarded his Ph.D. at Chicago, *magna cum laude*.

His first academic appointment was as Professor of Geology and Mineralogy at the School of Mines, Pennsylvania State College. He was married on December 28, 1916, to Clara McTaggart, American by birth, but resident in Canada from the age of 13. They had one daughter, Ruth, who now lives in Ottawa with her husband and two children. In 1919 he was appointed Dean of the School of Mines, after serving as Acting Dean from 1912 to 1913 and from 1917 to 1919. In 1922 he was appointed Professor of Economic Geology at the University of Toronto, and director of the Royal Ontario Museum of Geology. He became Head of the Department of Geology and Palaeontology in 1937. This became the Department of Geological Sciences in 1945 when the Department of Mineralogy and Petrography was merged with it. Dr. Moore retired in 1949, becoming Professor Emeritus of the University and Director Emeritus of the Museum of Geology. The award of the honorary degree of LL.D by McMaster University, Hamilton, in 1955 gave deserved recognition to his services to his science.

Although retirement meant the end of his teaching and administrative duties, it gave him increased time for professional activities. He was continuously engaged in field work and consulting for several years. He enjoyed physical health and vigor until the summer of 1960, when he was crippled by a stroke which prevented him from walking more than a few steps, even with the aid of a cane. Fortunately, his faculties were not affected, and his mind remained alert, and his memory reliable, to the last.

Dr. Moore was a charter fellow of the Mineralogical Society of Amer-

ica. As an economic geologist, he was inevitably concerned with minerals and their origins. Thus it was appropriate that he was one of the founding group of the Society. He was at various times a Councilor, Vice-President, and in 1939, President of the Society of Economic Geologists. He was Councilor of the Geological Society of America from 1929 to 1931, and Vice-President in 1933 and 1939. A fellow of the Royal Society of Canada, he was President of Section IV (Geology) 1937-38, and President of the Society as a whole in 1945-46. He served as President of the Royal Canadian Institute, Toronto, 1944-45 and Vice-President of the Coal Mining Institute of America in the year 1921-22. He was a member of the American Institute of Mining and Metallurgy, the Association of Professional Engineers of Ontario, the British Association for the Advancement of Science, the American Association for the Advancement of Science, the National Geographic Society and the Canadian Geographic Society.

Dr. Moore's professional experience was as varied as his scientific interests. While still a student, he spent a summer working in a corundum mine in Renfrew County, Ontario, and the following year experienced his first season of geological survey work under the leadership of his Professor, Dr. A. P. Coleman, in the Sudbury area. Subsequently he spent many summers in the field, for the most part for the Ontario Department of Mines, but also on occasion for the Geological Survey of Canada, the United States Geological Survey, the Pennsylvania Topographic and Geologic survey, and various companies.

During his years at Pennsylvania State College, he developed an active interest in coal. This found expression in three papers and his book, *Coal*, published by John Wiley and Sons in 1922; a second edition appeared in 1940. The breadth of his interests is illustrated by papers published during these years, covering topics in economic geology, sedimentation, volcanology, and petrology. After his return to Toronto, he published, with the late Dr. J. E. Maynard, a paper on the "Solution, Transportation, and Deposition of Iron and Silica". This investigation, which is still referred to in modern studies of this field, was a pioneer attempt to establish experimental analogies for natural processes. Other papers treat the geology of gold, silver and iron deposits, the structure of ore deposits, and the nature and origin of batholiths and their relationship to ores. In all, he published over 50 scientific papers, 25 government reports, and four books.

It is evident from his publications that Dr. Moore was a student of natural history, interested in all the phenomena which he encountered in the field and in his world-wide travels. That the field, and its problems, was his real love and vocation is clear from the fact that he returned there summer after summer, during his teaching career and after his retire-

ment. In his first seasons, field work meant travel by canoe and portage far from rail and road. The solitude, the strenuous work, the restricted fare, were at the same time a challenge and an attraction to the hardy and vigorous. His liking, his vocation, his genius for field work, were the true measure of this man, who could outwalk many a younger and taller man on a long traverse, who would never require of an assistant that which he would not do himself, who did not disdain to share the more menial tasks of camp life. He will be remembered by those who were privileged to share the campfire with him, and by his students, as a rare geologist, and a true humanist.

A complete list of Professor Moore's publications appeared in 1966 in *Geol. Soc. Amer. Bull.*, 77, 229-231.

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MEMORIAL OF WALDEMAR THEODORE SCHALLER¹

August 3, 1882-September 28, 1967

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Dr. Waldemar Theodore Schaller, mineralogist of the U. S. Geological Survey for more than sixty years, died on September 28, 1967, at the Mar Salle Nursing Home in Washington, D. C., after an illness of about two years.

Dr. Schaller was born in Oakland, California, on August 3, 1882, the son of Theodore P. and Eliza Borneman Schaller. His father, who was deeply interested in the natural sciences, taught him the elementary principles of chemistry before he was old enough to enter high school.

At the University of California, where he was a Leconte fellow, Waldemar Schaller's latent interest in geology was greatly stimulated by Professor Andrew C. Lawson, head of the Department of Geology. Professor Arthur S. Eakle taught him mineralogy and goniometry, and he studied analytical chemistry under the guiding hand of Professor Walter C. Blasdale.

A few months after receiving his bachelor's degree in 1903 he was appointed Assistant Chemist on the U. S. Geological Survey at the munificent salary at that time of \$100 per month. Here in the Division of Physical and Chemical Research, under George F. Becker as Chief, he was associated with such giants in the field of geochemistry as Frank Wigglesworth Clarke, William F. Hillebrand, George Steiger, Eugene T. Allen, and Eugene C. Sullivan. In this environment Schaller stored up a wealth

¹ Publication authorized by the Director, U. S. Geological Survey.