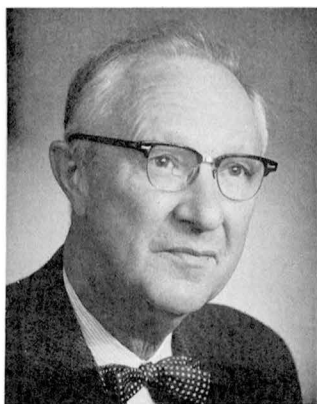


Memorial to John Willis Ambrose 1904-1974

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John Willis Ambrose, distinguished Canadian mining geologist, Emeritus Professor of Geology, and long-time teacher at Queen's University, died at Kingston, Ontario, on February 19, 1974. At the time of his death, Dr. Ambrose was interim director of the Queen's University Centre for Resource Studies and editor of the *Canadian Journal of Earth Sciences*. He had returned to Kingston in December, 1973, after a four-month appointment with the United Nations in Rangoon, Burma, where he presented a course in mining geology at the University of Rangoon. He is survived by his wife Agnes; three daughters, Mrs. Douglas McCallum (Katherine), Fort Erie, Ontario, and Patricia and Elizabeth at home; and by his brother Richard of Manilla, Philippine Islands.

Willis Ambrose was born in Pincher Creek, Alberta, on June 20, 1904. He grew up in southwestern Alberta where the prairie wheat fields merge with the ranching country of the Rocky Mountain foothills. After completing high school, he studied for a year at the Normal School in Calgary, and then, at the age of 19, began teaching in the public and junior high schools of Alberta. His teaching career was interrupted in 1927 when he enrolled in the mechanical engineering program at the University of Alberta. A summer job in 1929 with the Alberta Gas and Fuel Company turned him toward a career in geology. As a field assistant to geologists engaged in exploration for petroleum and natural gas, he worked in the foothills southwest of Pincher Creek, Alberta, in the area that was to become, some 25 years later, the site of the Waterton gas field. The petroleum geologists, recognizing his interests and talents for geological work, directed Willis to Stanford University, where he graduated in 1932 with the degree of bachelor of arts in geology. From Stanford he proceeded to Yale, and there, under the direction of Professor Adolf Knopf, he undertook a study of the progressive regional metamorphism and deformation of the Precambrian Missi Series in the Canadian Shield near Flin Flon, Manitoba, for the Geological Survey of Canada. This was to mark the beginning of many fruitful years of field studies in the Canadian Shield and elsewhere. Speaking of his first field season on the project, Willis said, "It was a delightful summer. The rocks were well exposed because the smelter had taken care of all the vegetation, and it was a lovely place to work."

Willis completed his Ph.D. in April 1935, at the height of the depression, when employment opportunities were rare. However, it was his good fortune that this should be "the million dollar year" of the Geological Survey of Canada. The Canadian Government, in an effort to combat unemployment, had provided a ten-fold increase in the

budget of the Geological Survey, and Willis Ambrose was hired immediately as a geologist by the Survey. To quote Willis: "The Survey people simply hired everybody who could tell the difference between a rock and a horse, and perhaps even that wasn't necessary. They literally bought every canoe, tent, and Brunton in the whole of Canada." Hordes of students, many of them having had little or no exposure to geology, were sent into the field under the supervision of a greatly augmented scientific staff.

During the pre-World War II years Willis Ambrose worked with H. C. Gunning in the Abitibi greenstone belt of northwestern Quebec. After the outbreak of the war, he was assigned to strategic mineral studies in the Grenville Province of the Canadian Shield and the eastern townships of Quebec. In 1945, after ten years of service, Willis resigned from the Geological Survey of Canada to establish a consulting practice as a mining geologist in Toronto. The same year also marked the beginning of his association with Queen's University. Professor E. L. Bruce invited him to accept a part-time appointment as a special lecturer in the department of geology. For the next three years he maintained a gruelling travel schedule, moving from his consulting practice in Toronto to his teaching duties at Queen's and to various mining properties in northern Ontario and Quebec. While in Toronto, he was instrumental in the formation of the Geological Association of Canada, and in March 1947 was elected first president of the association.

In 1948, after three years of commuting between his consulting practice in Toronto and his teaching duties in Kingston, Willis Ambrose accepted a full-time appointment as Professor of Geology at Queen's. From 1962 to 1968 he served as head of the department of geological sciences which had been formed in 1950 by amalgamating the departments of geology and mineralogy. During his 28 years on the teaching staff at Queen's, he endeared himself to thousands of students as an outstanding teacher, wise counsellor, and a man of great humour and compassion. At a dinner in 1973, commemorating his formal retirement from teaching at Queen's, he was honoured by three generations of Canadian geologists who had assembled in Kingston from all parts of the country for the occasion.

Willis Ambrose was a Fellow of the Geological Society of America and served the Society as a member of Council, a member of the Nominations Committee, and an associate editor. He was also a Fellow of the Royal Society of Canada, and a member of the Society of Economic Geologists, the Canadian Institute of Mining and Metallurgy, and the Society of Sigma Xi. In recognition of his many contributions to Canadian mining geology, he was made an Honourary Life Member of the Prospectors and Developers Association in Canada.

Willis Ambrose will long be remembered as a man of great wisdom and wit, whose insistence on the highest academic standards was matched by his deep personal concern for the people seeking to meet those standards. He was able to combine a deep sense of appreciation for the beauty and wonder of his science with a pragmatic approach to the business of finding and developing mineral deposits. It is characteristic of Willis Ambrose that in the days preceding his fatal illness, although formally retired from his teaching duties, he was busy counselling students while tending to the affairs of the Queen's Centre for Resource Studies and making plans to serve as an advisor on mineral resources to the native peoples of the James Bay area of Quebec. Those of us who knew Willis Ambrose have lost a cherished friend.

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