## **CARL BENSON CRAWFORD (1923-2010)**



Carl was born in Dauphin, Man. on Oct. 2, 1923. He died in Vancouver on Aug. 28, 2010, surrounded by his wife, Adah, and their four children, Nora, Henry, Meg and Blair. Carl and Adah were married for nearly 62 years and during that period shared the joys of having children and of travel to many countries, both for pleasure and for Carl's work.

Carl served as a navigator in the Second World War. After the war, Carl attended Queen's University in Kingston graduating in 1949 with a degree in civil engineering, followed by post-graduate degrees from Northwestern University in Illinois and Imperial College in London.

While at Queen's, Carl attended a lecture by R.F. Legget and was so impressed, he joined the National Research Council in Ottawa working for Legget in the Soil Mechanics Section of the Division of Building Research. This launched Carl's illustrious career in geotechnical engineering.

Carl is perhaps best known for his pioneering work on Leda clay, a highly sensitive clay which leads to of numerous landslides and major settlement problems. Carl developed testing apparatus and measurement techniques to measure the behaviour and properties of Leda clay and published several papers on this work. He also worked closely with Laurits Bjerrum and other leading researchers at the Norwegian Geotechnical Institute who were studying the sensitive Scandinavian clays at the same time.

Carl became Director of the Division of Building Research in 1974, a position he held until his retirement in 1985. During this period, he chaired the National Research Council's Associate Committee on Soil Mechanics which had considerable influence on geotechnical research and practice in Canada.

After his retirement, Carl continued his research interests spending time at Cambridge University in England, the Norwegian Geotechnical Institute in Oslo, the Centre for Cold Oceans Research in St. John's, NL, and at the University of British Columbia. During this period, Carl documented several valuable case histories where long term settlement records could be compared with predicted settlements.

Carl received many honours over the course of his career, including the 6<sup>th</sup> R.F. Legget Award from the Canadian Geotechnical Society in 1975; the Julian C. Smith Medal from the Engineering Institute of Canada in 1989; and the 1996 R.M. Quigley Award for Carl and his co-authors for the best paper of the year in the Canadian Geotechnical Journal. Carl was elected as a Fellow of the Engineering Institute of Canada (FEIC) in 1983 and, in 1985, he was invited by the Canadian Geotechnical Society to undertake a two week Cross Canada Lecture Tour. In 1984, he received an honorary doctorate of law from Concordia University in Montreal.

In addition to his family, one of Carl's true pleasures was the family cottage that he had designed and built at Sharbot Lake, located about two hours southwest of Ottawa. After Carl had retired, and he and Adah moved to Vancouver, every summer they would make the long drive back to the cottage, stopping to visit friends and family along the way. Over the years they made 40 of these trips.

Carl Crawford made a significant impact in the field of geotechnical engineering research, and particularly our knowledge of the properties and behaviour of sensitive clays. His work is an enduring contribution to international geotechnical practice.