

tested a wide variety of exploration techniques which could potentially aid in the future discoveries of more unconformity-type uranium deposits. The program culminated in the 1983 Geological Survey of Canada Paper 82-11, *Uranium Exploration in Athabasca Basin, Saskatchewan, Canada*.

Tom's increasing managerial responsibilities at the Survey between 1983 and 1996, meant there were fewer opportunities for field-based projects. However, he still managed to carry out significant uranium and gold deposit studies in the Beaverlodge area, notably around the old Box Gold Mine, as well as gold deposit studies and mapping in the Sulphide Lake area and base metal studies in the Hanson Lake area. Tom became the Director and Chief Geologist of the Northern Geological Survey in 1996, at Saskatchewan Energy and Mines. He held this position until May 1998, when he resigned from the Survey. Later that year Tom and Penny moved to Kimberley, BC, where they still reside. In the year following his departure from the Survey, Tom returned periodically to work in Saskatchewan as a petroleum well-site geologist.

During his 27-year career with the Survey, Tom mapped at scales ranging from the detailed deposit studies to 1:125,000 scale covering over 8100 square kilometres of the Saskatchewan shield. He authored or was a co-author of 120 papers, maps, abstracts, and geology guide books as well as co-editor of the 1985 CIM Special Volume on the Geology of Uranium Deposits. He was also a co-chair of various symposia technical programs for the Saskatchewan Geological Society and CIMM. Tom was a sessional lecturer in geology at the University of Regina in 1974. He was an external examiner, between 1990 and 1998, for a number of graduate students at the Universities of Saskatchewan, Regina, and Waterloo. Tom was an active member of the SGS during his years in Regina and at one time held the position of Secretary – Treasurer. He was also a member of APEGS. When asked what he considered to be a highlight of his career; Tom replied, "Coming to Saskatchewan".

There is, of course, much more to Tom than being a geologist. Family was a priority for him. Thus, it was not surprising that Penny and the boys visited Tom in the field most summers when he had active field projects. They also became avid cross-country and downhill skiers both here in Saskatchewan and on numerous trips to the Rockies. They eventually chose Kimberley, to invest in a ski-hill condo to which they made many trips. Tom also enjoyed gardening, having a good family dog, and the hunting opportunities that Saskatchewan provided. Once they moved permanently to Kimberley, Tom and Penny built their own home near the ski hill and have hosted numerous visits over the years from family and their friends made in Saskatchewan. They were also able to enjoy hiking in the mountains, kayaking and canoeing and spending time with their sons and their families, who reside in nearby mountain communities.

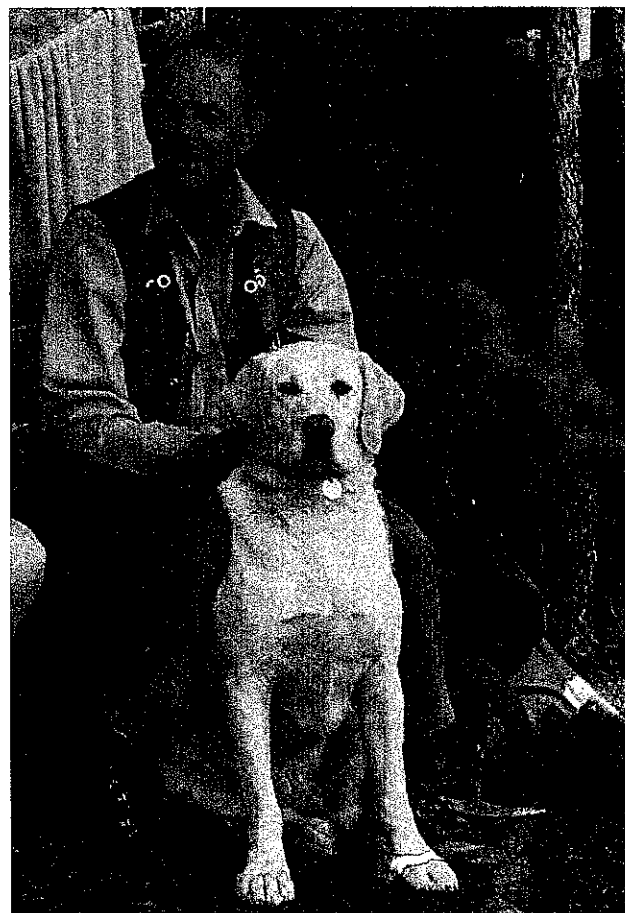
Tom's valued contributions to the geology of Saskatchewan and to the Survey are many and certainly most worthy and deserving of his induction to the Saskatchewan Geological Society's Honour Roll tonight. It is indeed an honour and a privilege to have been chosen to present this award to Tom.

Thomas I.I. Sibbald

Saskatchewan Geological Society

Honour Roll Citation

6th February 2016



Thomas Sibbald was born in England on 24th September, 1942, during the turmoil of WW2. He was raised in southern England and from age 11 to 17 he attended Clifton College, a private school in Bristol. Tom chose to follow his passion for nature and rocks and embark on a career in geology. We were fortunate that he did. He received his B.Sc Honours in Geology in 1965 from the University of Edinburgh, and completed field work in Iceland, Switzerland and northern Italy. Tom began his Ph.D geology program in 1965 at Imperial College, University of London under the guidance of renowned structural geologist, John Ramsay.

During his time at Imperial, Tom was a part-time geology demonstrator from 1965 to 1970, and a part-time geology lecturer at Norwood Technical College in London from 1969-70. He also met Penny during this time and they were married in 1967. Penny and their first born son, accompanied Tom to the Swiss Alps where he completed his Ph.D field work, which formed the basis of his dissertation on the *Structural and Metamorphic Geology in the Swiss Pennine Alps*. Tom was awarded a Ph.D Geology Degree and D.I.C (Diploma of Imperial College) in 1971.

That spring Tom, Penny and their two young sons, aged 3 and 18 months, arrived in Regina, where Tom had accepted a Project Geologist position with the Precambrian Geology Division at the Saskatchewan Department of Mineral Resources, commonly called D.M.R. Tom began his 27-year career with the Saskatchewan Geological Survey. He prepared for a field project, and in less than a month after arriving in Canada, he travelled to northern Saskatchewan where he mapped the Milton Island West Half Area on Reindeer Lake.

Because he was unfamiliar with working and living in the northern Canadian wilderness, Tom was teamed with a recently graduated (1971) Geological Engineering student from Saskatoon, who would be his Senior Geological Assistant. I had already spent three summers in the bush, so I was more experienced with camp mobilization and dealing with camp issues. Tom's mentorship that summer expanded my knowledge and interest in structural and metamorphic geology, and benefitted me throughout my career.

The Precambrian Geology Division began a large-scale Reconnaissance Mapping Program in 1972 to accelerate mapping of the Precambrian Shield at 1:125,000 scale, south of 58°N latitude. Tom joined this program in 1973, mapping the Northwest Quarter of the Mudjatik Topographic sheet. He mapped the adjacent map sheet to the west the following year. The late Dr. John Lewry, another SGS Honour Roll recipient, of the University of Regina Geology Department was involved in both of these mapping projects. The synergy that developed between Tom and John together with the work of Bob Munday and Dave Pearson, who had mapped adjacent areas of the Mudjatik map sheet, resulted in ground-breaking developments in the understanding of the lithological and structural framework of the Saskatchewan Precambrian Shield. John and Tom co-authored a paper entitled, *Variation in Lithology and Tectonometamorphic Relationships in the Precambrian Basement of Northern*

Saskatchewan published in 1977, in the Canadian Journal of Earth Sciences. They described the lithological, structural and metamorphic characteristics of large tracts of the shield, and introduced the Domainal classification scheme to the geology of northern Saskatchewan. When new information became available, additions and changes were made to the Domainal scheme; however, their paper became an industry and academic standard for discussing the regional geological setting in northern Saskatchewan. Even now, nearly 40 years later, it is still one of the most commonly cited papers in this regard.

Tom joined the Economic Geology Program in 1975, which was managed by Les Beck. That summer he carried out uranium exploration in the Mudjatik Domain and then in 1976 started a multi-year Uranium Metallogenic Study in the Rabbit Lake area. By this time, a number of uranium deposits had been and were being discovered at the margin of and within the Athabasca Basin, at or near the unconformity between the Athabasca sandstones and the underlying basement rocks. Tom's keen perception and interpretation of the geological and structural details that he mapped in the Rabbit Lake open-pit uranium mine and the surrounding vicinity, was augmented by the collaborative detailed mineralogical and geochemical analyses of alteration and mineralization assemblages, carried out by Jan Hoeve at the Saskatchewan Research Council. They co-authored the founding paper for the unconformity-type uranium deposit model, entitled, *On the Genesis of Rabbit Lake and Other Unconformity-type Uranium Deposits in Northern Saskatchewan, Canada* published in the December 1978 issue of Economic Geology. Tom co-authored a number of re-iterations of the model in the ensuing years; however, that initial paper also became the industry standard for many years to follow. It had an impact on how companies explored for these deposits. Again, when new information became available, the initial model was modified. However, the essential features were still there, and their paper, is one of the most commonly cited papers dealing with uranium deposits in and around the Athabasca Basin in northern Saskatchewan.

Tom was promoted to Head of the Economic Geology Division in 1977, and in 1986, he became Director of the Mineral Development Branch at Saskatchewan Energy and Mines, which he held until 1996. He was also Acting Director of the Mines Branch in 1993-94. Tom often visited his staff in the field. These visits were highly regarded by the geologists as he typically provided valuable insight into each project. Tom's managerial style, his fairness and humour were much appreciated by the Survey employees. They often commented, even years later that Tom was one of the best bosses they had ever worked for. Tom also enjoyed socializing with the staff and it was a time of great camaraderie amongst staff and management.

Tom led numerous uranium deposit/geology field trips over the years and produced geology guide books for many of these trips. He was also a major contributor and organizer to the Nuclear Energy Agency – International Atomic Energy Agency (NEA/IAEA) Athabasca Basin Test Area Program which