

COMMITTEE OF PROVINCIAL AND TERRITORIAL GEOLOGISTS MEDAL

2011 WINNERS: GAYWOOD MATILE AND GREG KELLER MANITOBA GEOLOGICAL SURVEY

BACKGROUND

The CPTG Medal has been awarded annually since 1999 by the Committee of Provincial and Territorial Geologists to geoscientists who have produced outstanding work at one of Canada's provincial or territorial Geological Surveys.

The award recognizes major contributions in the areas of geoscience research and related applications that serve to meet the mandates of the Geological Surveys. Winners are selected by a three-person committee with members from academia, industry, and the Geological Survey of Canada.

CITATION

Gaywood Matile and Greg Keller have had one of the most productive collaborative professional relationships in the history of the Manitoba Geological Survey. They have developed innovative methods to integrate surficial and bedrock datasets to produce digital three dimensional models of the geology in southern Manitoba. The 3-D models unite these diverse datasets and put them into a single standardized nomenclature, which can then be used in a variety of applications such as bedrock stratigraphy, hydrocarbon, groundwater and industrial-mineral resource development, and geological education.

Their pioneering 2-D and 3-D mapping techniques have resulted in their participation in multi-jurisdictional projects with neighbouring states and provinces. This work has brought them international notice and they are regularly asked to demonstrate their results at international conferences. Their work has been highlighted in keynote addresses around the world and they were invited to be the first non-federal participants in OneGeology.org.

They have accomplished this synergy by working closely together; Gaywood supplying an intimate knowledge of the surficial geology and Greg supplying the GIS and 3-D modelling skills required to integrate data and build geological models.

BIOS

Gaywood Matile graduated with a B.Sc. in Geology from the University of Manitoba in 1976. He has been with the Manitoba's Mineral Resources Division since 1977; originally in the Mines Branch an Aggregate Resources geologist and since 1991 with the Manitoba Geological Survey. He is currently responsible for Quaternary geology and has recently completed new 1:1 million and 1:250 000 surficial geology map sets for the entire province. The back of the new 1:1 million Surficial Geology of Manitoba was designed entirely for educational purposes.

Gaywood's past science interests include aggregate inventory, Lake Agassiz research, and mineral exploration.

Greg Keller joined the Manitoba Geological Survey in 2000 following one year with the Geological Survey of Canada. He received his B.Sc. Hons. in Physical Geography from the University of Winnipeg in 1998. Since joining the Survey Greg has been intimately involved with 3-D geological mapping, developing methods and protocols which have been adopted by other jurisdictions across North America. He is currently responsible for advanced GIS and database methods development for the Geological Survey. In addition to the partnership with Gaywood in developing 3D models for Manitoba, his work can be seen in the 1:250K digital compilation of the Surficial Geological Map of Manitoba as well as the Phanerozoic geology of southern Manitoba map set.

