

Gretchen Minning

Introduction to Geotechnique?

As an undergraduate at Lawrence University, I was initially interested in history, and then became interested in the history of the Earth. A field camp in the Boundary Waters Canoe Area, in northeast Minnesota, sold me on geology as a career. When I was a graduate student, the Department Head at the University of Washington was an Engineering Geologist and, although I was studying Quaternary Geology, he suggested I become a Teaching Assistant for the “Geology for Engineers” course. This circuitous route led me indirectly into the geotechnical field.

Other women in your classes?

I was the only female geology graduate student while at the University of Washington.

Career Focus?

I had no difficulty getting my first job. In 1967, the Geological Survey of Canada (GSC) in Ottawa was looking for Quaternary Geologists to help with energy development in northern Canada. I first worked on a large field mapping project in remote Labrador. This was followed by another such project in the Mackenzie Valley, NWT, in support of proposed oil and gas development, then a granular materials mapping project in the southern Mackenzie Valley for a proposed all-weather highway.

In 1973, I joined Northern Engineering Services Company Ltd. (NESCL) in Calgary, and carried out terrain mapping, borrow investigations and routing studies for the Canadian Arctic Gas Study Limited pipeline from Prudhoe Bay, Alaska to Alberta. I was also a witness at the Berger Inquiry. The outcome of that inquiry ended the project and NESCL.

I joined Hardy Associates in 1977, where I was involved in geological studies associated with geotechnical and environmental projects mostly related to northern pipelines, transmission lines, oil spill contingency and dams. All of these studies included substantial field work in remote areas of northern Canada.

A sole practitioner for the past 38 years, I have worked with government agencies, engineering and environmental consulting companies, utility, oil and pipeline, mining and forestry companies. My work has largely been related to assisting clients understand how the surficial geology, that is the stratigraphy and properties of near-surface soil and rock, relates to proposed development and/or construction.

Education

- 1965 BA in Geology; Lawrence University, Appleton, Wisconsin
- 1967 MSc in Geology; University of Washington, Seattle, WA

Employment

- 1967-1973 Terrain Sciences Division of the Geological of Canada, based in Ottawa, ON and Calgary, AB
- 1973-1977 Northern Engineering Services Company Ltd. (NESCL), based in Calgary, AB
- 1977-1980 Hardy Associates (1978) Ltd., based in Calgary, AB
- 1980-present G.V.M. Geological Consultants Ltd, based in Calgary, AB

Notable Achievements

- 2001 I was one of four women to be awarded the CGS’s first Certificates of Appreciation for helping organize the 54th CGS Annual Conference
- I believe I may be the first woman in Canada to have established a consulting firm in the geotechnical field
- My favourite accomplishment was working several times on the Mackenzie Valley pipeline (1973-2006) that finally obtained a government permit in 2006. Unfortunately, it hasn’t been constructed to date.
- 2018 Calgary Geotechnical Society Award

Involvement with CGS and other organizations?

I joined the Calgary Geotechnical Society (the southern Alberta Section of the CGS) when I moved to Calgary in 1973. I was on the organizing committee of 54th CGS Annual Conference in 2001. I have been a longtime supporter of the Canadian Foundation for Geotechnique.

I find the CGS to be a valuable organization, particularly for younger members to meet like-minded individuals from other companies and organizations.

Who were your mentors?

At the GSC, Bruce Craig, Bob Fulton, Nat Rutter and John Scott gave me opportunities and helped advance my career.

Jack Clark (Hardy Associates) and Phil Dau (William Brothers) encouraged me to join NESCL. Jack Clark continued to be a mentor when I worked with Hardy Associates. Jack, Jim Code (Monenco) and Grahame King (Consultant) encouraged me to form my own consulting firm in 1980.

On being a woman in a man-dominated profession?

At the GSC, there was one other woman working with me, but she did not go into the field. My supervisor, Bruce Craig, supported me when I wanted to do field work, first in Labrador and then in the Mackenzie Valley.

There were a couple of other women professionals working with me at NESCL and Hardy Associates.

For the most part everyone that I’ve worked with has been encouraging and supportive. Initially, the men didn’t always believe I was as capable, but I went forward and did my job to the best of my ability. I remember a recruiter in 1967 telling me that I would never get a job in geology and that I should consider being a school teacher. Fifty-one years later, I think I’ve proved him wrong!

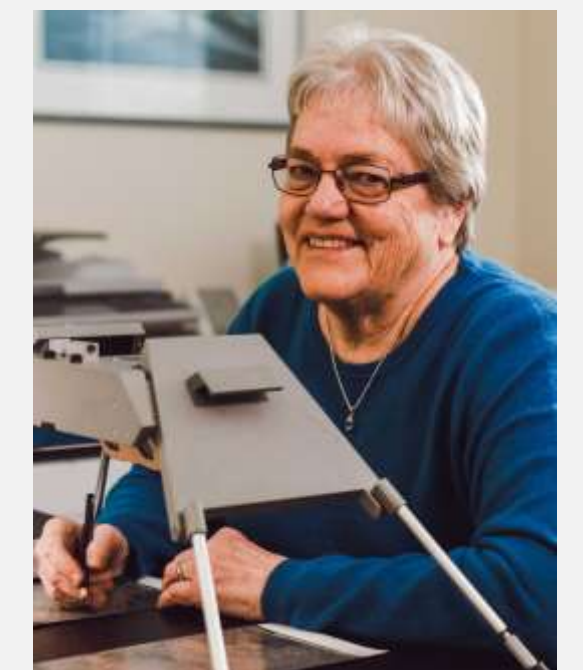
Advice to other women?

This advice is for both men and women. Work hard and competently on the jobs at hand even though they may seem boring. Remember, not everyone can be a manager or committee chairperson, but competent workers are always needed.

Photographs



Gretchen with Sarah Verwey (left) and Amy Rentz (middle) in 2018



Gretchen hard at work, 2018