

Heather Cross

Introduction to Geotechnique?

After completing my BA at Queen's University, and while working at Dalhousie University, I took a hydrogeology course taught by John Jones. He was inspirational, I knew that hydrogeology was my calling, and I signed up for a graduate program with John as my supervisor. Of the eight students in John's class, four of us went on to become hydrogeologists!

Other women in your classes?

There were very few women in the geology department at Dalhousie. There were fewer in the engineering courses that I took at the Technical University of Nova Scotia (now part of Dalhousie) during my graduate studies.

Difficulty getting your first job?

No. At that time, if you had a university degree, it was relatively easy to find employment in your field.

Career focus?

Teaching hydrogeology and other courses at university and leading seminars/workshops, through which I have met many wonderful people of varied ages and backgrounds, has been most memorable. Other memorable projects include preliminary evaluation of groundwater springs in Nova Scotia, assessment of water supplies at a number of our beautiful provincial parks, and a surface water project that required canoeing to reach the monitoring sites.

Involvement with CGS and other organizations?

I have been a CGS member in the past, but not currently.

I am a long-standing member of the International Association of Hydrogeologists-Canadian National Chapter (IAH-CNC). I am also a member of the Nova Scotia Ground Water Association (NSGWA) and Groundwater Relief (previously known as Hydrogeologists without Borders), and an Emeritus member of the [US] National Ground Water Association (NGWA).

In the late 1990's, I was a founding member of the Association of Professional Geoscientists of Nova Scotia (APGNS), and was involved with the Admissions Board from 1999 to 2015, when I retired.

Education

- 1969 BA; Queen's University
- 1974 MSc (Geology with Hydrogeology specialization from Dalhousie University; my thesis was "*Natural and Manmade Variations in Groundwater Flow and Chemistry in the Birch Cove and Sackville Areas, Halifax County, Nova Scotia*")
- Past certifications include 'Certified Ground Water Professional' with NGWA; 'Pump Installer and Well Digger' under the NS Well Construction Regulations; and 'Qualified Person Level II' under the NS On-site Sewage Disposal Systems Regulations.

Employment

- 1974-1980; 2000-2002 Nova Scotia Department of Environment.
- 1984-2015 I had my own hydrogeology consulting company, based in Halifax, but worked all over Nova Scotia. I carried out water quality and quantity investigations and assessments for a wide range of clients.
- I also taught part-time for several years at Dalhousie University (Earth Sciences and Civil Engineering departments), served on the Program Advisory Committee of the Nova Scotia Community College Water Resources Technology Program, and assisted NSGWA with contractor training and exams.

Notable Achievements

- 1983 NS Environmental Award
- 2001 and 2015 NSGWA's W.E. Brown Founders Award
- 2009 APGNS Excellence in Geoscience Award
- 2014 Fellow of Geoscience Canada
- I was a founding member of the Association of Professional Geoscientists of Nova Scotia; membership #002 and the first registered female member. I am still a PGeo.

Who were your mentors?

John Jones, who was my supervisor at NSE and my first hydrogeology professor, was my first mentor. Others at Dalhousie University included Dr. Marcos Zentilli, Dr. Basil Cooke, Dr. J.G. Ogden and my fellow grad students Erik Nielsen and Milton Graves. At the Nova Scotia Department of Environment, mentors included co-workers Michael and Theresa Rushton, John Gibb, James Vaughan, Fred and Lynn Baechler, and manager Dr. Chang Lin.

The support and encouragement of my family, especially my husband, Jerry, really kept me going!

On being a woman in a man-dominated profession?

In the earlier years it was a little more difficult, since it was new and different for men to have women in a leading role in the field and on tough job sites; a period of adjustment was to be expected. The men I worked with quickly became more accepting because I did not focus on being a woman but rather on doing my job like everyone else.

It was, and still is, important to be willing to work long hours under all types of conditions without complaining, to respect co-workers' knowledge and experience, both men and women, and to be willing to listen and learn.

Advice to other women?

Here is my 'A-list':

ACCEPT others for who they are without discrimination based on gender, ethnic origin, faith, etc; ADMIT when you are wrong; never be afraid to ASK for advice or opinions and to give both humbly and honestly if asked; ASSIST and mentor others to the best of your ability; keep a positive ATTITUDE and be kind to others; AVOID focusing on being a woman and take satisfaction in doing the job, and doing it to the best of your ability; ADDITIONAL training...continue learning life-long...if you think you've 'arrived' or know it all, think again; ALWAYS remember how you became who and where you are today.

Be thankful for the grace of God, the love and support of family and friends, and the encouragement of colleagues and co-workers—no one is an island!

Photographs



Heather Cross: front row, third from right. Photo taken at the Fellows of Geoscience Canada recognition ceremony in Halifax in 2014 (courtesy APGNS, Geogazette, Vol IV Issue 1, Winter 2014)



International Association of Hydrogeologists, Canadian National Chapter
Association internationale des hydrogéologues
Chapitre National Canadien



