



Wolfville, Nova Scotia, Canada, B4P 2R6
 Department of Earth and Environmental Science
 Phone: (902) 585-1208
 Fax: (902) 585-1816
 e-mail: ees@acadiau.ca
 Acadia University

- Home
- Earth & EnvSci links
- Faculty and Staff
- Our Accomplishments
- Maps and General Information
- Programs and courses
- FAQs about our programs
- Morton Centre
- Graduate Studies
- Honours Research
- Alumni
- Cycle of Opportunity
- Careers in Earth and Environmental Science
- Fletcher Geology Club
- Environmental Science Students' web page

[Acadia University main page](#)
[Faculty of Science page](#)
[Department printers](#)
[Department plotter](#)

WHERE ARE THEY NOW?

Each year we ask a graduate to write an article on his/her past and current activities since leaving Acadia. This year we invited Alison Steele, who studied at Acadia from 1983-87.

I'm a fringe geologist. I'm not talking capillary fringe – I'm talking periphery of the discipline.

I never intended to be this way – in fact, my decision to become a geologist was based on a traditional field experience. I remember the day of that decision well, because it was my birthday. I awoke in a mood most foul: it was cold, raining, and Nancy VanWagoner had scheduled her Intro class for a trip to the Fundy coast to look at Triassic rift basalts. Well, I had two major problems with that. First, I already knew about Triassic rift basalts; I'd been collecting zeolites since I was eight years old. More importantly, it was my NINETEENTH birthday! I wasn't supposed to be freezing my butt off listening to some newly minted Associate Prof prattle on about old-news lava. I was supposed to enjoy a leisurely afternoon that would include a sashay down to the NSLC for my liquor ID, and a minor walk-of-fame back to the dorm with a mighty case of Keith's under my arm, in full view of the world for the first time ever. Of course, my cohorts and I already had a beer cache that would have made William S. McCoy proud, but that wasn't the point. The point was that this field trip fiasco was interfering with my crowning moment of legal-age glory. I thought long and hard about skipping out but in the end, I decided to live up to the goody-two-shoes persona for which I was already legendary. I didn't cut the class, although I did reserve the right to resent that decision for the rest of my life.

What happened next became one of those moments that truly define the transition from childhood to adulthood for those of us lucky enough to experience it. Teeth chattering, glasses foggy, wet hair matted to my head, I listened dumbfounded, as Nancy brought the geology to life in a way that no self-taught experience ever could have. "My God," I

thought to myself. “I’ve been crawling around these beaches since I was a kid, but it took this woman from Los Angeles to make me SEE them for the very first time.” I understood everything then. I understood my own mistakes. I understood that I wanted to be a geologist, to do THIS kind of work. I think I came of age on that day, but not in the way that I had originally anticipated.

I worked hard after that. I worked for Nancy that first summer, on a research grant she shared with the Biology Department for the purposes of studying Minas Basin sedimentary processes. I spent my second summer at the University of Ottawa doing stable isotope work. My third summer job produced fifteen minutes of national fame – an internship at Johnson Space Center. After ten transformative weeks in Houston, Texas, I returned to Acadia for my senior year, took a bronze medal at graduation, and headed for the Ph.D. program in the Department of Earth & Planetary Sciences at Washington University in St. Louis, Missouri.

Grad school disagreed with me for two reasons. First, although the members of my research group were extraordinary on both personal and professional levels, I suffered from an acute case of “undergrad withdrawal”. One day, I expect to see a Slate article (probably to be authored by a similarly suffering psychology grad student) describing this phenomenon, which is every bit as common and powerful as post-traumatic stress disorder (PTSD). Sometimes, the undergraduate experience is just SO GOOD that EVERYTHING following it is a severe anticlimax, to the point where the student has a hard time maintaining perspective. Such was my post-Acadia reality. To make matters worse, my interests shifted in a way that was not compatible with my school: I became interested in environmental affairs. “I see what's happening,” I would tell members of my new Department. “This environmental stuff is going to be big, and I want to get in on the ground floor.” But I was discouraged from saying “environmental” in any context of study or career because, in those years (late 1980’s), it was a dirty word associated with “soft science”, “social activism”, or “Rocks for Jocks”. “Environmental is not an option befitting someone of your academic calibre,” I was told. Unsupported and disenchanted, I left with a Masters degree, headed back to Texas, and spent three unemployed months sneaking into the University of Houston library to study everything “environmental” that I could get my hands on.

The public part of the rest is history, to the point where I now teach a continuing education module on how and why it happened: environmental career opportunities exploded and, for a while, just about every non-faculty, non-post-doc’ing geologist seemed to be

accepting employment in the field. That it's mainstreaming and legitimization coincided with an early-1990's oil industry downturn seemed to make the trend even more vivid.

Privately, the environmental boom sealed my fringe fate. As much as I love fieldwork, I tend to be "book smart" – I can recall and manipulate large volumes of information (much of which is of questionable value). Well, that skill translates wonderfully into regulatory analysis. The Peter Principle cannot be opposed – like it or not, we get promoted to our level of incompetence. Many people want to become environmental geologists, but not many people want to digest and apply the principles that underlie the regulatory frameworks that stimulate the need for environmental geologists in the first place.

The niche was too open and too lucrative to pass up. After working for "The Man" in conventional employment settings for more than a few years, I formed my own company about 18 months ago (see www.EnviroSteele.com). I now have 33 industrial, commercial, and local government clients, and more success than I predicted.

Houston itself is partly to blame for me doing less "real" geology than I would like. Basically, this town sits atop 50,000 feet of muck. I don't even feel like invoking correct terminology (e.g., sedimentary basin, coastal plain, fluvial depositional regime) – "muck" seems like a better fit. Occasionally, I will tear myself away from regulatory compliance long enough to accept a monitor well installation contract. I usually start those jobs in mild euphoria, because I'm finally getting to go outside and behave like the real geologist I wanted to be in the first place. But glee often turns to despair, because muck has a nasty habit of being unpredictable. Subtle variations in porosity and permeability can produce significant shallow groundwater behavioral differences. On a bad day, I base my productivity prediction less on my well log, and more on the number of teeth remaining in my driller's head (drillers are a tough, well-worn bunch). If he has an even number of teeth, then let's predict that the hole will make water. Odd number of teeth, and it's probably going to be dry for at least 10 feet below where I expect to find that all-important cap fringe. J

I may have found a way to make some peace with my fringe status, however. I like to develop specialty educational materials to complement both conventional academic instruction and on-the-job training. I've delivered some courses on a contract basis, and I've reserved a few lectures for nonprofit settings. I was the speaker for the November 2007 meeting of the Houston Geological Society's

Environmental and Engineering group. As I began my talk, I couldn't help but think, "A lot of these guys in the audience get to work with ACTUAL ROCKS." As the evening drew to a close, the committee chair mentioned that my talk had drawn the largest crowd in four years. Maybe I'm a fringe geologist so that I can be of some use to those who are not.

Every year, this Alumni column showcases a geologist who graduated from Acadia and went on to do even bigger and better geology. This is not exactly one of those columns. I'm not sure what the moral of my story is... work hard, try to be perceptive about trends, and you can craft yourself a darned good living, even on the periphery of a discipline?? But with market demand for geologists at an all-time high, I'm not sure that any of you NEED a moral to this story! I do recommend that every geologist should experience a period of self-employment, for the unprecedented perspective that it provides. But maybe not right now - maybe you should think about that farther down the road, once you have harvested the low-hanging fruit of our current economic situation. Best of luck in the process. And feel free to call me if you ever want to go see some muck.

Alison Steele Mandadi, P.G. (BScH 1987)
Steele Environmental Services, LLC

Alison@EnviroSteele.com