

ENSU 1000

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Reflective Essay

As a teenager, I never saw myself as someone who belonged outdoors. I was active in sports—basketball, volleyball, swimming—but always in controlled environments. The gym and the pool were familiar, predictable. Nature, on the other hand, felt uncomfortable. I had allergies that made being around plants miserable, and bugs? I wanted nothing to do with them. Even though I swam competitively, I never once swam in a lake. The idea of being out in nature felt intimidating, almost like there was a disconnect between me and the world outside. So, I stuck to what I knew and avoided the rest.

That changed when I started at Thompson Rivers University (TRU). Suddenly, the things I had ignored or even disliked started to make sense. Bugs, which once seemed like alien creatures, became fascinating examples of evolution. My perspective shifted further as I took more environmental-focused courses. In CHEM 3020, I learned about the northern lights—not just as something beautiful, but as a scientific phenomenon. Now, I have the Aurora app on my phone, and every time I get a notification, I rush to my window, hoping to catch a glimpse. I also learned about cultural burning, an Indigenous practice of controlled burns that helps protect and rejuvenate the land. The idea that setting things on

fire could actually support plant growth was completely unexpected. Over time, I realized that the environment wasn't just "gross lakes with plants that tickle your feet"—it was a complex, interconnected system that I could study, understand, and even contribute to.

That idea—contributing to the environment—excited me. My research journey started with a research assistant position under Dr. Kingsley Donkor, where I developed methods to separate and detect compounds. That skill has stuck with me. Now, I apply it to my current research, analyzing microcystins in lake water near Kamloops. My goal? To help locals swim in the lake without worrying about whether the strange new colors in the water are safe.

Beyond research, the biggest change I've noticed is in my lifestyle. My interest in the environment has extended beyond the classroom. During winter, I ski every weekend, completely immersed in the mountains—even in harsh weather. I've spent so much time outdoors that my allergies have nearly disappeared. In the summer, you can find me golfing at Big Horn, watching the bighorn sheep migrate across the fairways. The outdoors, which once felt uninviting, has become a space where I feel at home.

Attending the Canadian Mineral Analysts (CMA) conference in September 2024 pushed my perspective even further. It wasn't just about presenting my own research—I got to see firsthand how industry advancements are making environmental analysis more accessible. I was fascinated by new mobile instruments that allow researchers to analyze soil samples on-site, reducing costs and increasing efficiency. Another defining experience was my NSERC USRA project at the University of Alberta in the summer of 2024. I attended the Lecture Series, where I heard from professors across North America. One talk stood out: an American professor using gold nanoparticles to enhance watermelon growth. The idea that something as small as a nanoparticle could play a role in something as large as food production was incredible. More than that, I saw the potential for nanoparticles to support global efforts in conservation—helping plants grow more efficiently while maintaining their integrity. This research could even be applied to saving endangered plant species.

Through everything I've learned—whether Indigenous practices like cultural burning or cutting-edge advancements like nanoparticles—I've gained a deep appreciation for the balance between traditional knowledge and modern science. Moving forward, I hope to pursue graduate studies with a focus on integrating Indigenous techniques with Western technology. My goal is to develop environmentally sustainable practices that minimize waste while maximizing impact.

Looking back, my journey from avoiding nature to embracing it has been more than just a change in hobbies—it's been a shift in mindset. What once felt foreign and uncomfortable now feels like something I am not only connected to but responsible for. I am excited to use this new sense of responsibility to continue contributing to the environment.