Finding Her Environment

Sometimes it takes just one event to change the course of someone’s future. According to Lily Conrad, this was definitely the case when it came to her education. Lily, now a senior and an Environmental Science major, came to the University of Northern Iowa to study Exercise Science.

“I played soccer for most of my life so I was really curious about the whole rehab and injury prevention and physical therapy process when it comes to sports and athletic injuries. I had decided on this when I was a sophomore in high school. I got like 50 hours shadowing in different clinic settings,” she said. “I said that I was not going to be one of those students who comes into college and switches their major. I thought, ‘I know what I’m doing.’”

However, a few weeks before her first semester, Lily started working at the Panther Plot, UNI’s student-run garden. Through that job, she was able to attend a sustainability conference in Minneapolis. She spoke with both students and professionals who worked fields like in sustainability, environmental science, and biology. This changed all of her plans.

“It was really powerful... I changed my major because the conference opened up my mind to the meaning behind this work and not just doing something because it’s what you’ve been planning on doing. In high school you don’t know what you’re going to do,” she explained.

Since then, Lily has been extremely active and involved at UNI. During her freshman year, she helped organize a recycled art showcase in Rod Library for Earth Month. She also got a better compost bin for the Panther Plot. Last year, with Green Project, the Earth Science Honors Society, AmeriCorps, and the UNI rugby team, she ran a kite flying event to promote awareness for the outdoor trails around UNI’s campus.

“We were out by the wetland by the WRC parking lot, and the humane society brought dogs for people to walk. I was there with Green Project and some other people and we had kites for people to fly. It ended up being like the least windy day ever in Iowa, conveniently, but it was still a lot of fun,” she said of the event.

More recently, Lily and the Earth Science Honors Society acquired funding from the Green Fund to replace all of the fluorescent hallway lights in Latham with LEDs. The Green Fund is a fund recently set up by NISG through which students can apply for funding for various projects ranging from sustainable-progressive projects to educational programs and activities that promote sustainability.

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Because she participated in the National Student Exchange program, she spent her sophomore year in Oregon, making her junior year her first complete year as an Environmental Science major at UNI.

“I'm glad I didn't transfer because this program is really amazing. The department is small, but the support is overwhelming. There are so many opportunities! I've had research opportunities and teaching assistant opportunities and leadership opportunities. There are a lot of opportunities in the department that have really helped me grow into my major and find the part of Environmental Science I'm really passionate about.”

Sedimentary geology was one of her favorite courses she has taken at UNI. “There were a lot of fieldtrips and Dr. Sedlacek is very knowledgeable. I do well with her teaching style, so it was really enjoyable,” she said. Another course she enjoyed was Hydrology, in large part because she wants to work in that field. Hydrology is the study of the properties of Earth’s water. “That class tends to get mixed reviews because it's really intense, but it's one of my favorite ones.”

Lily has had quite a few research opportunities at UNI, and she has taken advantage of them. She has done some research with Dr. Mark Myers involving pollinator habitat restoration and flower quality analysis, and she thought it was a lot of fun, but her current research is more related to the field she wants to go into after graduation: Hydrology.

“My main research that I do right now is that I'm a part of a long term water quality monitoring project of the Cedar River and Dry Run Creek . . . I also manage the hydrology lab from the environmental science department,” she said. Dr. Mohammed Iqbal is her adviser for this project. As part of the project, she has taken samples from 15 different sites ranging from Janesville to Waterloo. She does some field tests when she collects the samples, then takes them back to the lab for an analysis process that lasts around 5 days. The data from the long term project is available on UNI’s Hydrology website: https://www.uni.edu/hydrology/

“I was able to present the data I collected at the Geological Society of America’s conference last fall. It was a temporal and spatial analysis of the water quality in the Cedar River . . . and comparing it to the West Okoboji Lake,” she explained. “I had an internship at Lakeside lab last summer so I was able to take some samples there while I was working. So I could compare the two and see the difference between a moving body of water and a standing body of water. It's been a great experience since I want to go to graduate school for Hydrology.”

Lily has also been working on independent research with a professor from Colorado State University. His study focuses on modeling, which Lily wanted to gain more experience in because it is not something anyone specializes in when it comes to Hydrology at UNI. She said her work with him has supplemented the research she has done at UNI because it has added the modeling component and given her a new way to work with data.
Lily would like to encourage current and future STEM students to look for interesting opportunities. “Don't be afraid to be inquisitive when it comes to opportunities that extend beyond the classroom setting,” she said. “I feel like when I talk to a lot of people about internships or research, they just don’t ask about it, so they miss all of these opportunities. It’s pretty easy to ask someone to help you find a direction and keep asking until it works. That’s what I did, and now I feel more confident and qualified for applying to graduate school and other things in the future.”

Green Iowa AmeriCorps is offering paid summer jobs and internships in Cedar Falls, IA!

Applicants must be over 18.

Dates: May 20th-August 16th

Apply at

https://www.greeniowaamericorps.org/open-positions

Spring 2019 Snapshot Volunteer Water Monitoring Event

The Black Hawk Soil & Water Conservation District is partnering with the Iowa Department of Natural Resources to host another snapshot water monitoring event in the Cedar Valley!

Date: Saturday, April 27th

Time: 9 AM – 11:30 AM

Meet at the Cedar Falls Tourism Center

Contact: Josh Balk at 319-296-3262 ext. 3 or josh-ua.balk@ia.nacdnet.net