

The Adventures of Meg A. Mole, Future Chemist

Dr. Elizabeth Herndon Educator and Soil Scientist



In honor of this year's NCW theme, "Chemistry Rocks!," I traveled to Kent State University in Ohio, where I met Dr. Elizabeth Herndon. Dr. Herndon is an Assistant Professor in the Department of Geology. Dr. Herndon explained that as an

environmental geochemist, she studies soil, rocks, and water to learn how people change the chemistry of their environment.

So where does Dr. Herndon do most of her work? "I spend a lot of time writing in my office," she said, "but I also teach in my classroom, run experiments in the lab, and collect more samples to analyze out in the field."

I could not wait to go outdoors with her to learn more about field sampling! When we arrived at the collection site, Dr. Herndon pulled out her auger — a metal pole with a tube on the end that she uses to collect soil samples. I told her that moles (like me) love to dig into the dirt, too!

I asked Dr. Herndon what she liked the most about her job. "Scientists never stop exploring," she said. "I get to ask questions about the world around me that no one knows the answers to, and then try to find answers to those questions." The work she does impacts a lot of people. She explained, "My work can help kids have beautiful and fun places where they can go to explore nature."

Growing up, Dr. Herndon did not have to go far to learn about science. "My dad is a high school science teacher, so I grew up around science," she said. "When I was in kindergarten, he had me help his science club build a model rocket ship out of balloons and cardboard. Our rocket flew farther than any of the others." How exciting!

I also asked Dr. Herndon why she decided to pursue a career in science. "I enjoyed learning about the mysteries of the Earth and other planets. I always wanted to find out more." She did not decide to be a soil scientist as a child, but was always interested in our planet itself. "I wanted to be an astronomer when I was growing up," she recalled. "I read books about astronomy and memorized the names of galaxies and stars in different constellations."

She also shared another memory from high school, saying, "I participated in the science fair in high school, and my experiments tested how different pollutants impacted the health of plants and creatures such as sea urchins. I had a wonderful teacher who made it possible to do these projects as part of a science class."

So, as many of you know, moles like me love dirt! I am very thankful that there are scientists like Dr. Herndon who continually study the soil, rocks, and water around us to ensure it is safe for all of us!

Mud Pie *continued*

What did you see?

Sample	Time	Observations
Mud Pie	10 minutes	
Mud Pie	24 hours	
Soil Sample #1	10 minutes	
Soil Sample #1	24 hours	

Personal Profile

Favorite color?

Green

Favorite food?

Chocolate ice cream

Birthdate?

August 24

Favorite hobby/pastime?

Running

Very interesting project you were a part of?

I went to Alaska to study how warming climate is changing the geochemistry of boreal forests and tundra ecosystems.



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