SECME: Going Out On a STEM

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Exhilarating. This is the first word (along many others) that comes to my mind when I think of science. When I was young, I had limited access to technology, and as I was curious to the world around me, I didn't really give technology much thought, like the typical teenagers we all know and love. Instead, I turned to the backyard. The outdoors held a strong pull, and I was continuously sucked into its diverse beauty.

Our backyard was crawling with lizards. Nearly everywhere you looked there one was. I became very interested in these funny little things and spent days, minutes, hours learning about them. I also went hands-on with my learning, picking up the lizards, watching them eat (feeding them myself) and seeing behavioral dances.

When I was 8 years old I made an important discovery, I lifted up a rotting log to get some insects for my lizards and there, in all its beauty, was a little ring-neck snake. Without hesitating, I snatched it up, looking at it carefully. A few days later I was learning all that I could. Snakes held a greater appeal for me than lizards for they held a great mystery – their means of locomotion. I had spent hours on end watching, learning, hypothesizing. My enthusiasm for reptiles was so great that after a few months (OK, years of begging), my parents consented to buy me a pet snake. Curious of what others thought of my interests, I asked around. No surprise there, everyone knows I love snakes, lizards and all manner of reptiles and amphibians. Teachers say "science;" friends say "creepy crawlies;" and sisters say "do you have to ask?"… It all comes down to the same thing.

One day, I decided to research something else. "Study of snakes"… I type in to the search engine. A word flashes up on the screen. "Herpetology," it says. Herpetology is the study of reptiles and amphibians, perfect for a girl like me. Unfortunately, there aren't very many jobs open for herpetology. Herpetologists might work with bioengineers, environmentalists, or medical scientists because of other skills those colleagues might possess. It is very unusual for a job to want you for being a herpetologist first.

The word herpetology comes from a Greek word that means creeping, and the suffix –ology is also Greek, meaning study. Herpetology is a very small branch of the tree of biology, but my parents have encouraged it anyway. Actually, it's more like a twig off the branch of zoology on the tree of biology, so it's even more remote.

There is not much known about herpetologists, because jobs are few. Most jobs for herpetologists are in colleges or universities. Others work at zoos, labs, field studies / surveys, and breeding areas. Most colleges do not offer degrees in herpetology, so people usually take courses in science, inorganic chemistry, organic chemistry, biochemistry, calculus, statistics, physics and earth science (its a lot, I know). Other courses, like foreign languages and computer use will be useful too. Most herpetologists get degrees in zoology or biology but specialize in reptiles and amphibians in some way.

Davidson College is the only college I have found in my hours of searching that offers a degree in herpetology. It is located in North Carolina, which isn't too far from here. They offer courses in Animal Physiology, Herp Conservation, Independent Research, and Organisms,

Evolution, and Ecosystems. Other colleges that claim to have courses in herpetology have more general courses.

I have loved reptiles since I was a little kid, always playing with them, and later, watching them. I love the diversity of nature, from the largest desert to the smallest snowflake. I have been STEMulated in my interests – what once was a spark, is a fire of knowledge and awe. I have learned about the grueling road ahead of me, and have just picked up the walking stick so I may charge happily into a hard road, but that will not stop me from going any less slowly…