

# STEM SPOTLIGHT

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**Q** How did you select your college major?

**A** I was undecided about a career path for about two semesters. Then, I started working at an elementary school assisting with physical and occupational therapy. I decided that would be my path, so I started on a Biology degree because the credits matched up pretty well with the program for which I wanted to apply. Changed my mind about physical/occupational therapy, fell in love with environmental biology, and here I am.

**Q** What was the biggest influence in your selection of major/career?

**A** I went on a weeklong trip with one of my professors down the Mississippi

River from Cape Girardeau, MO to Baton Rouge, LA. Our mission was to conduct a survey of interior least tern (*Sterna antillarum athalassos*) nesting colonies along the Mississippi River. That trip really opened my eyes to possibilities in a wildlife biology career. In college, I was fortunate enough to have professors who really engaged with the students. I was always given opportunities to participate in research and plenty of field work. After that I was sold, fell in love with all things Lower Mississippi River Basin.

**Q** If you could go back to high school and select any elective course to take that would have better prepared you for college, what would it be?

**A** I wish we had more ecology type classes. Stuff where you get to go outside and do science.



**Q** What is your favorite aspect of your job?

**A** Wildlife surveys. In the Memphis District, we perform surveys for federally threatened and endangered mussels and bats. We locate and/or monitor

American bald eagles' nests although they have been removed from the endangered species list. I've had the opportunity to locate one bald eagle's nest that was previously unrecorded, and also, to help monitor a nest to be sure the chicks left the nest (fledged) before project construction could begin. My favorite is the mussel surveys, we hand search the bottoms of creeks to locate freshwater mussels. Sometimes the areas are really cool, and being able to identify an endangered mussel is something I feel I can be proud of.

**Q** How do you/your company make a positive impact on society/our community?

**A** As the nation's environmental engineer, the U.S. Army Corps of Engineers manages one of the largest federal environmental missions: restoring degraded ecosystems; constructing sustainable facilities; regulating waterways; managing natural resources; and, cleaning up contaminated sites from past military activities. The Corps is the Nation's number one federal provider of outdoor recreation, and restores, creates, enhances or preserves tens of thousands of acres of wetlands annually.

**Q** What is the most interesting thing you have been able to do in your career?

**A** I've travelled to Olympia, Washington and New Orleans, Louisiana for training. This fall, I will travel to Key West for three weeks to train and become certified as a working diver for the Army. I've surveyed the bottoms of creeks for endangered mussels and set up acoustic equipment to detect endangered bats. I've had the opportunity to board Corps dredge ships and other working boats, operate small water crafts and lead the effort in monitoring a wetland site near Reelfoot lake. I also plan and carryout projects that will enhance and protect west Tennessee's wildlife diversity and abundance.



**Q** What makes you get up each morning excited about your profession?

**A** I know I am making a difference. I am able to help the public understand the projects we will be executing and how the activities will be beneficial in their area. I enjoy talking to people to find out what help communities need; and also, helping the public understand the importance of their natural environment. It is also critical to show my daughter that she can be a strong professional in any career or field that she chooses.

**Q** How does your career incorporate STEM?

**A** Along with a team, I am able to help advise the District on the risks and benefits of proposed USACE projects. We plan ecosystem restoration projects and restore wetlands. We perform studies to determine presence or absence of certain populations of endangered species. I enjoy the interdisciplinary aspect of this career. Working with engineers, hydrologists, and geo-tech among many other partners to plan and execute projects has taught me a good deal about teamwork and problem-solving.

**Q** What advice would you like to share with K-12 students who are considering your profession?

**A**

1. Talk to people who already work in the field in which you are interested. Email, arrange visits, go to public meetings, etc. People love to talk about what they do.
2. Read everything.
3. Go outside. Become familiar with your natural areas. Walk around look at trees and birds and bugs. Be patient, and you'll notice amazing interactions you may have never seen.