

The Coastal Waters Consortium Presents:

# Scientist Spotlight



## Anna Perez-Umphrey

### What is your educational background?

I received my B.S. in Wildlife Biology from Colorado State University in 2013. Currently, I am starting the second year of my Ph.D. program at Louisiana State University.

### What inspired you to become a scientist?

I had a high school biology teacher who had been trained as a wildlife biologist. He made sure most of our class sessions were held outside, and instilled in me a love for the outdoors. This love of nature eventually also transformed into a desire to understand and protect it, which was solidified by the three years I spent working across the country as a field technician on different wildlife research projects.

### Can you describe what you enjoy the most about conducting scientific research?

First and foremost, I love having a job that takes me outside. But I believe what fundamentally draws me to science is the enjoyment in detecting unseen patterns; teasing out the mechanisms working beyond what may not be immediately or visually obvious, and this is what particularly excites me about genetics work. I enjoy working in natural systems because the research is connected to the broader local and global ecosystem level.

### What is your role as a scientist for CWC?

I am a second-year Ph.D. student at Louisiana State University working in Dr. Sabrina Taylor's Conservation Genetics Laboratory. My work focuses on the effects of oil spills on terrestrial vertebrate species, and we combine field data collection and lab work to understand population and molecular-level effects.

### Can you summarize your oil spill research and describe any surprising findings you have come across?

I am looking at the long-term effects of the oil spill on marsh rice rats, which are a semi-aquatic small mammal native to the saltmarshes of the Eastern U.S. In particular I am interested in the relationship between disease prevalence, immune gene variation, and oil exposure. One surprising finding is the disappearance of marsh rice rats from one of our typically well-populated field sites.



The Coastal Waters Consortium's mission is to assess the chemical evolution, biological degradation, and environmental stresses of petroleum and dispersant within Gulf of Mexico coastal and shelf ecosystems.