

The Coastal Waters Consortium Presents:

Scientist Spotlight

Jeffrey Zingre



What is your role as a scientist for CWC?

Within CWC I am investigating the influence of crude oil from both the Macondo oil spill (plus storm resurgence) and seeping oil from the rigs within Terrebonne and Barataria bays. I am using diatoms (siliceous phytoplankton) preserved in the sediments to use as indicators of oiling according to biodiversity changes. My data will be compared to hopane and alkane data as well.

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

Through the biodiversity index, I am surprised that there is such a high variety of shapes and sized of these diatoms in a well-known oiled location (Eastern Barataria Bay). In my mind I would think that few species would exist but in just one sample I am finding over 100 individual species. This could mean that they are well adapted to chronic, low level oiling and have potentially recovered from the Macondo oil spill.

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.

What is your educational background?

I acquired my Bachelors of Science in Marine Science in the Spring of 2015. I am currently working to finish up my Masters of Science in Environmental Science with an expected graduation of Fall 2017.

What inspired you to become a scientist?

All throughout my youth I loved the water and being in nature. I'm an avid fisherman and outdoor enthusiast. In order to pursue my dream of having a "job" in this field I decided to work towards the route of protecting what I love. It all started with the idea of becoming a marine scientist with no idea of what direction to take (i.e. geology, chemistry, biology, etc.). Throughout my undergraduate career and through experience in the lab I found a particular enjoyment in looking at large scale processes, so I pursued an oceanographer outlook on the oceanic systems. This eventually led me to Dr. Parson's lab with ciguatera research and eventually where I'm at today with research on the Macondo oil spill.

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

There's two parts of scientific research that I thoroughly enjoy, the first is shared among many scientists, the feeling of finishing a large project. The second however, is the enjoyment of collaboration with other scientists and meeting the people behind the research.

