The Coastal Waters Consortium Presents:

Scientist Spotlight

Dr. Troy D. Hill

What is your role as a scientist for CWC?
I support the CWC in my role as a Biologist with the US Environmental Protection Agency's Office of Research and Development. I continue to collaborate with my postdoctoral mentor, Brian Roberts, and his lab at LUMCON to understand oil spill impacts on plant dynamics and nutrient cycling.

Can you summarize your oil spill research and describe any surprising findings you have come across?
Our research has largely been focused on separating oil spill impacts from other changes occurring at the same time; sea level rise, nutrient enrichment, salinity changes. Our work has helped understand drivers of plant productivity on the Gulf Coast, and has advanced low-impact monitoring of plant communities. We are also developing and applying novel approaches for non-destructive measurement of belowground plant production.

What is your educational background?
Ph.D., Forestry and Environmental Studies, Yale University (2015)
M.S., Environmental Science, Yale School of Forestry (2008)
B.A., Environmental Science and Policy, Clark University (2006)

What inspired you to become a scientist?
When I was growing up, I spent many hours chasing blue crabs through tidal creeks and digging in soil. Those experiences instilled a curiosity about the world around me that grew into a desire to understand the impacts that humans have on natural ecosystems. Environmental science provides powerful tools for understanding our world and helping to restore damaged ecosystems.

Can you describe what you enjoy the most about conducting scientific research?
Tough question! I love analyzing data to answer questions. But my favorite part of the research process has to be kayaking through a wetland on an evening or weekend while thinking about the patterns and processes occurring around me. A healthy dose of unstructured time in an ecosystem is an essential step in my research. It helps me think of compelling questions, interpret results, and maintain a sense of humility about the complexity of the ecosystems we study.

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.

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