

Scientist Spotlight



Dr. Mike McCann

What is your educational background?

I received my B.S. in Environmental Science at the University of Notre Dame in 2008 and my Ph.D. in Ecology & Evolution at Stony Brook University in 2015.

What inspired you to become a scientist?

I grew up in the Hudson Valley of New York where the outdoors and environmental issues were never too far away. I knew I loved being outside, but it wasn't until I started entering my school's science fair in elementary school that I learned that I loved the tinkering and creativity of science. I first met an ecologist when I was 12 (They were judging the science fair, actually). Once, I learned that you can be a scientist that studies how things work in the outdoors for a living, I was hooked.

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

The tinkering and creativity of science got me started, but the feeling of discovery is definitely the most rewarding. Being able to make even the smallest bit of sense out of the incredible complexity of natural world is exciting. It takes a lot of work to go from a question you think up when you're out in nature to a tangible answer about how the world works. When you succeed, it's worth it. When those answers help to address a question important to society and conservation, even better!



What is your role as a scientist for CWC?

I am a Postdoctoral Researcher at Rutgers University and I work with a bunch of awesome folks in the "Fish Group." I get to go into the field to collect samples of all sorts of marsh organisms, synthesize and analyze data, and do some statistical modeling.

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

I'm interested in figuring out if and how the food web in the marsh changed as a result of the oil spill. We use a variety of tools, especially trophic biomarkers (fatty acids and stable isotopes). These chemicals can help us reconstruct the diet of a predator over relatively long time scales. I then use statistical models to make quantitative estimates of a predator's diet based on the biomarker composition of it and its prey.

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.