

## Young Professional Spotlight

Young Professional members of AIFRB represent the next generation of leaders in fisheries science and management. Through *Briefs* and our social media platforms we will be highlighting our Young Professionals as a way to introduce them to the full membership and create opportunities for collaborations. AIFRB's Young Professional Representative, Connor Capizzano ([connor.capizzano001@umb.edu](mailto:connor.capizzano001@umb.edu)), will be showcasing a new Young Professional each month through a series of biographical interviews. This month's Young Professional Spotlight features Beth Bowers, Florida District and PhD candidate in the Integrative Biology program at Florida Atlantic University in Boca Raton, FL.

---

### *Beth Bowers – Florida District*



***What is your current position, with what company/organization, and what is the focus of your research/work?***

I am a doctoral candidate at Florida Atlantic University in the Integrative Biology program. I also serve as the Lab Supervisor of the FAU Elasmobranch Research Laboratory. My doctoral dissertation focuses on the migratory patterns of the blacktip shark, *Carcharhinus limbatus*, in the western Atlantic Ocean. By instrumenting individuals with acoustic transmitters and in conjunction with collaborative acoustic telemetry networks, I am able to track their movements along the entire Atlantic Seaboard as they perform their annual migrations.

***Where did you receive your education, and what helped pave your way to your current position?***

I earned my Bachelor's degree in Biology, a Master's in Biology with a Neuroscience certificate, and a Master's degree in Geosciences with an emphasis in Geographic Information Systems, all from Florida Atlantic University. During my undergraduate degree, I suffered the loss of three family members in succession. As my family home went into foreclosure, I struggled to justify entering the field of marine biology where my pay may be too low to financially support my remaining family. As I battled with the idea of becoming a dentist, a kind professor steered me back toward my passion, while he explained to me that no amount of money was worth having a career that wouldn't make you happy. As I re-entered the world of marine science, my current major advisor, Dr. Stephen Kajiura, took me under his wing as a volunteer. As I proved my work ethic and dedication to Dr. Kajiura, he provided me with training and emotional and financial support and that would groom me to be the scientist that I am today. Although a straight and narrow path into marine biology would have saved time, I don't believe I would have the same amount of persistence and drive that I do now after having had that meandering experience.

***How does your work apply to, or influence, fishery management (e.g., stock assessments, sportfishing, commercial regulations, habitat protection, etc.)?***

The blacktip shark is a highly migratory species that is popular in recreational fisheries. My work outlines the seasonal areas where it may be important to manage this population now and in the future. I track the movements of these individuals along their migratory route, investigate the differences in migratory patterns between sexes, and use environmental indicators to predict their future movements. As global climate change continues to impact



the movements of marine animals, it will become increasingly more important to have the means to rapidly shift marine policy and protected habitat.

***What is your professional outlook for fisheries management? In other words, what will the future of fisheries management look like 10-20 years from now. What are we doing correctly, what needs to be improved (e.g., in research, policy, education)?***

As we become more technologically advanced in terms of monitoring, we as fisheries biologists will need to develop analysis methods that are appropriate for those high-resolution data. Additionally, as information becomes more available to the masses, we too will need to make our information public and justify our share of taxpayer dollars. Social media makes it possible for us to educate many viewers and reach out to stakeholders who may influence the security of our jobs in the future. We have a duty to share what we have learned with the general public and to advocate for the need for fisheries management.

***What is the importance of young fishery professionals today and for the future of fishery management?***

Young fishery professionals have the ability to influence how future fisheries management is decided. By learning integrative analysis methods now and gaining an understanding of the limitations of current sampling and analysis techniques, young professionals can minimize the error in fisheries estimates and create more accurate estimates for stock assessment and better inform fisheries policy.

***What drew you to AIFRB, and what does AIFRB do for you and what can it do for other young professionals in this field?***

I initially joined AIFRB outside of the Monsters of Climate Change workshop that was sponsored by the Institute at the 148th American Fisheries Society annual meeting. Every speaker at the workshop danced down the aisle to their favorite rock song while laser lights flashed around the room. The all-inclusive, fun, yet informative atmosphere at this workshop made me want to be a part of this group. The AIFRB puts me in contact with and gives me reasons to speak to professionals in this field that I otherwise would be too intimidated to converse with. I have learned so much already from the many friendly faces that represent the AIFRB. Other young professionals can have the same experience by joining the Institute.

**Please contact Beth ([mbowers8@fau.edu](mailto:mbowers8@fau.edu)) to continue the conversation!**