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), will be showcasing a new Young Professional each month through a series of biographical interviews. This month's Young Professional Spotlight features Elise Koob, New England District and Research Technician in the Age & Growth Laboratory at the Massachusetts Division of Marine Fisheries in Gloucester, MA.

Elise Koob - New England District



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

I work as a Research Technician in the Age & Growth Laboratory of the Massachusetts Division of Marine Fisheries (MA-DMF). This lab provides age data to stock assessments for commercially and recreationally important species in Massachusetts waters, including striped bass, winter flounder, summer flounder, black sea bass, tautog, river herring, cod, bluefish, scup and American shad. We use a variety of structures to determine the age of these species, including otoliths, scales, opercula and fin spines.

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

I completed a B.S. in Marine Biology from the University of New Hampshire and I am currently working towards a M.S. in Marine Science and Technology from the University of Massachusetts Boston.

I was introduced to the age and growth world during a summer internship during my undergraduate career with the Commonwealth Scientific and Industrial Research Organization in Cleveland, Australia. There I learned how to make age determinations using the otoliths of golden trevally (*Gnathanodon speciosus*) and how these data are used to estimate a variety of parameters used in stock assessments. The skillset I acquired from this project led to an age-related research position at the Gulf of Maine Research Institute in Portland, ME working with bluefin tuna and swordfish and from there I applied to my current position at MA-DMF.

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

The data collected by the MA-DMF Age & Growth lab informs fisheries managers about status of many important species in Massachusetts waters. Age data are imperative for estimating a variety of parameters that are used in stock assessments, including age at maturity, size at age, mortality, growth rates and productivity



parameters. These data increase the accuracy of models used to manage fisheries, ensuring that the decisions made from this information best reflect current stock status.

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)?

I hope that future fisheries management is even more collaborative than it is currently and that there is better understanding between all fisheries stakeholders. Though many great collaborations exist already, I think that there is a wealth of knowledge and opportunities yet to be fully tapped. Further linking of experts from a wide-variety of backgrounds to achieve a better understanding of the problems we face in fisheries research can only result in improved management opportunities. Additionally, there is (and will continue to be) conflict between interest groups and protecting fish stocks for the future. Though wishing for universal agreement and cooperation is a bit farfetched, my hope is for increased willingness between researchers, fishermen and managers to work together towards a common goal.

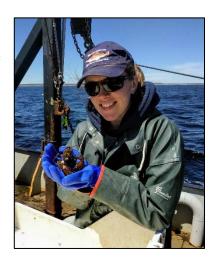
What is the importance of young fishery professionals today and for the future of fishery management?

Young fishery professionals today have the opportunity to introduce new ideas as well as a vivacity to the field of fishery science. Young professionals are often full of grand ideas that, with the guidance of experienced mentors, spark an eagerness and determination into projects. The hard-work and energy that young professionals bring to a project are qualities that will help progress the field into the future.

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 was introduced to AIFRB at the 148th annual AFS meeting in Atlantic

City in 2018 by co-workers who were already members. I was immediately invited to join the AIFRB social that evening and connected with other members as well as fisheries stakeholders from the area. I thought this was a unique and great opportunity for people from a variety of fisheries-related interest groups to meet and talk about their respective backgrounds and goals for the future. AIFRB also provides the opportunity for regional networking events between the larger conference meetings that allow for new ideas and collaborations to begin. I think this is extremely important for young professionals looking to expand skillsets, explore new opportunities and foster ideas for future projects.



Please contact Elise (elise.koob@mass.gov) to continue the conversation!