

# LEADING THROUGH SERVICE AND CULTIVATING A HEALTHIER COMMUNITY USING AQUACULTURE

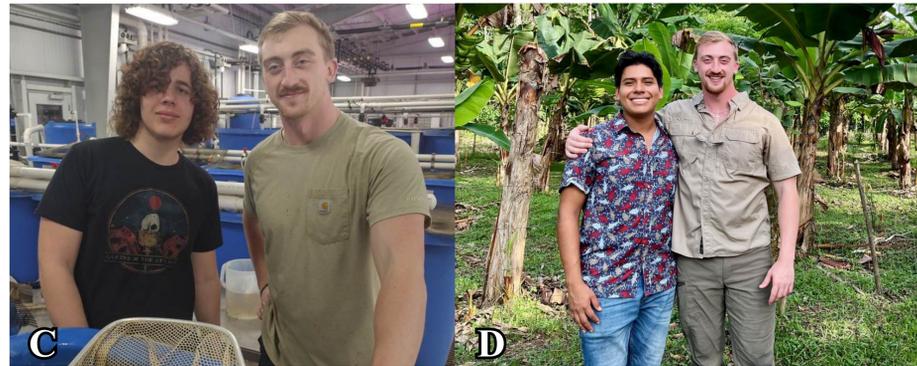
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**Introduction.** Sustainable aquaculture plays a vital role in food security, environmental stewardship, and community well-being. At Kentucky State University (KSU), a Historically Black College and University, the Aquaculture Research Center (ARC) uses aquaculture as a multidisciplinary platform for education, service, leadership development, and collaboration. The program brings together faculty, staff, and students from diverse geographic, cultural, and academic backgrounds, fostering a learning environment that builds technical expertise alongside communication, mentorship, and leadership skills. This poster reflects my experiences as a graduate student and highlights how aquaculture at KSU extends beyond food production and creates a foundation for service-driven leadership and healthier communities.



**YouTube Projects to Politics.** Students are empowered with the tools and support to translate aquaculture science into accessible educational content. Student-led media projects such as *Tilapia Farming Process – From Spawning to Harvest* (A) reach broad audiences beyond academia. KSU's annual Legislative Fish Fry bridges science and policy, bringing together students, state legislators, and community leaders. Events like this allow students to meet incredible people like Freddie Johnson, an internationally known bourbon representative and storyteller (B).



**Cultivating Mentorship.** Jacy, our local high school intern and later technician, found an appreciation and natural skill for aquaculture, becoming an essential component of my thesis research (C). Javier, an undergraduate intern from Earth University, Costa Rica, made sure there was never a dull moment at the ARC. Javier enjoyed his time in KY so much that he invited us to tour around Costa Rica (D).



**Historic Flooding & The Great Fish Rescue.** KSU's hometown, Frankfort, KY, was devastated by a flood in April 2025. Aerial footage of my neighborhood (E) and Buffalo Trace Distillery (F). KSU was at the forefront of the relief efforts, delivering meals and supplies, assisting with house deconstruction, clearing debris, and rescuing native fish (G)(H). The KSU team was able to relocate over 250 pounds of fish and one dozen native species back to the Kentucky River. Among the rescues were several Bigmouth Buffalo, one of the longest-living freshwater species in the U.S. It was a perfect match for Buffalo Trace, the nation's oldest continuously operating distillery.



Over a dozen news outlets covered the story of The Great Fish Rescue including; local stations like LEX18 (I), to national platforms like Fox News, Sports Illustrated, and The Weather Channel (J).



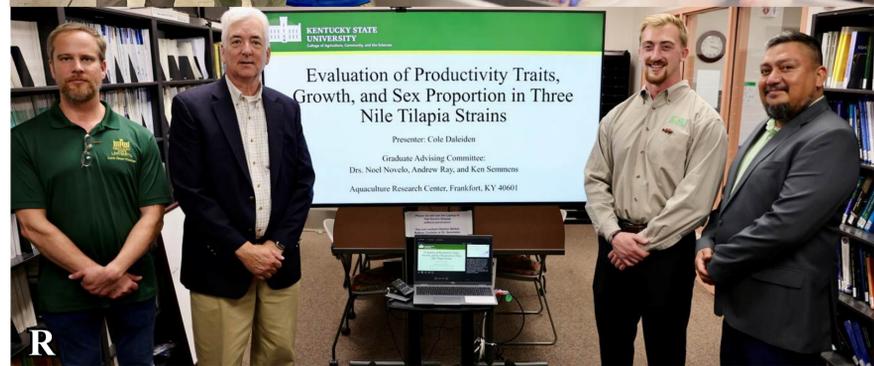
**What's Next?** Among the many challenges and opportunities that emerge throughout graduate school to strengthen leadership and build perspective, it also has a unique way of cultivating inspiration within our own careers. I am excited to share that the direction of my own path will continue at the University of Minnesota – School of Dentistry this May for a Summer Research Fellowship, followed by the start of the DDS program in August.



**Environmental Stewardship.** The impact of aquaculture and aquatic sciences stretches well beyond the farm. Together, we assessed wild fish populations (K), analyzed ecosystem health and biodiversity (L), and experienced wastewater treatment on small and commercial scales (M)(N).



**Proposal to Research.** Collaboration is key to writing student grants and synthesizing research. The thesis research was supported by the grant *Expanding Aquaculture and Healthy Food Choices to Reduce Economic and Health Disparities Affecting Minority and Limited-Resource Stakeholders*, funded by USDA-NIFA Capacity Building Project (O)(P). *Empowering Future Aquaculture Food Safety Experts: Student Food Health Certification* was a USAS-funded grant for the KSU subunit (Q).



**Data to Dialogue.** Opportunities to present research and practice scientific communication are endless. Three years of sharing research guided by my graduate committee (R), with stakeholders locally at KSU, and all over the US (S)(T) have led to lifelong connections.



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