

Dear Dr. Colvin,

I am applying for the Ph.D. Assistantship in aquatic conservation. I have the knowledge, skills, and interests to be competitive for this position because of my current thesis work on aquatic species conservation and my experience with native and invasive fishes in Mississippi.

I am currently working on a Master's degree in Aquatic Resources under the direction of Dr. Timothy Bonner in the Fish Ecology Lab at Texas State University. I plan to defend my thesis early this summer. For my thesis, I am developing a methodology to identify imperiled fishes of Texas. My method is based on the conservation biology concepts of redundancy, resiliency, and representation, which are currently used by USFWS to develop the Species Status Assessments that serve as the basis of federal listing decisions. I am incorporating these concepts by comparing spatial distributions and relative abundances of different Texas fishes. The purpose of my study is to come up with a quantitative tool that provides information that managers can use for the prioritization of Texas species conservation. My method will be easily adjustable for application throughout Texas, and even outside the state.

Outside of my own thesis work, I have been fortunate to help my fellow lab mates with their projects from fieldwork to editing drafts of manuscripts. By helping with other projects, I have gained considerable field experience seining and electroshocking rivers all around Texas. In addition to sampling itself, I have prepped for trips, led sampling crews, and taught field fish ID to species level. Outside of the field, my colleague, Cody Craig, and I are working with Dr. Bonner to develop a more intuitive dichotomous key to Texas freshwater fishes. We have been field testing our key in the ichthyology lab which I have taught for the past two semesters. I learned so much from this experience, and I would love to apply what I have learned here in Texas to the Mississippi watersheds where I grew up.

I have always been interested in the Mississippi watershed and local fish ecology around my home in Vicksburg. I was able to gain experience with native and invasive fishes of the Mississippi while earning my bachelor's degree from Louisiana Tech University by working part-time as a laboratory technician under the direction of Dr. Jack Killgore and Dr. Jan Hoover at the USACE Engineer Research and Development Center (ERDC). While at ERDC, I conducted swimming performance trials on invasive species such as Bighead and Silver Carp as well as native species such as Gizzard Shad and Atlantic Sturgeon. I also worked with other non-native species: Sea Lamprey and Suckermouth Catfish. I am currently collaborating with Dr. Hoover to finish a manuscript on the response of Paddlefish to hypoxia. Both my experiences at ERDC and my recent work at Texas State have strengthened my desire to pursue a Ph.D.

I am very excited at the prospect of working with you. I was thrilled to find that your research projects are so similar to my interests. Thank you for your consideration. I look forward to hearing from you.

Sincerely,
Nicky Hahn