**Riley Egan** (229) 977-1957

RileyEgan47@gmail.com

**Relevant Skills**

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| --- | --- | --- |
| * Ecological research * Habitat assessment * Stream and wetland delineation * Technical report writing * Environmental policy * Project management | * Environmental science * Aquatic and terrestrial wildlife surveys * Scientific writing * R, RStudio * Collaboration | * Identification of the flora and fauna of the Southeast * Data management * Environmental data analysis * Environmental education * GIS (ArcGIS, QGIS) |

**Education**

## M.S. Environmental and Biological Sciences (In Progress) - Troy University

January 2022 – present

* Thesis: Effects of Dams and Invasive Species on Assemblages and Trophic Interactions of Stream Crayfishes in the Cahaba River Watershed, Alabama.
* Relevant coursework: Issues in Aquatic Ecology, Sustainable Development, Research Methods and Experimental Design, Environmental Ethics, Spatial Analysis Using GIS, Public Health

## B.S. Biology - Georgia Southern University

### August 2015-May 2019

* Concentration: Environmental Sustainability
* Undergraduate research technician in Georgia Southern’s Freshwater Ecology Lab: Assisted in processing, and identification of benthic macroinvertebrates for graduate research projects
* Relevant Coursework: Aquatic Ecology, Marine Ecology, Fisheries Biology, Conservation Biology, Global Sustainability and Innovation, Principles of Geology I & II, Ecology and Evolution

**Professional Experience**

## Graduate Research Assistant – Troy University, Dept. of Biological and Environmental Sciences

January 2022 – present

* Leading research funded by USFS: Investigating the effects of dams and invasive crayfish on native stream crayfishes in the Cahaba River watershed. Particularly interested in using stable isotope analysis and gut content analysis to determine trophic position, diet, and prey selectivity of crayfishes. We are also interested in assessing crayfish community assemblages, benthic macroinvertebrate assemblages, and quantifying stream habitat characteristics following USEPA and USFS protocols.
* Presented at Alabama Water Resources Conference, 2022
* Additional research involvement: Endangered mussel surveys on the Pea River in Southeast Alabama.
* Instructor for undergraduate General Ecology Lab.

## Program Specialist - Golden Triangle Resource Conservation and Development Council

March 2021 – December 2021

* Operation of grant-funded programs emphasizing natural resource conservation, community development, and outreach in Southwest Georgia.
* Conducted sediment-risk-index surveys for unpaved-road stream crossings following USFWS protocols, executed water well tests for rural residents, managed loan programs for rural-low-income residents, set up workshops with state and federal agency partners, involved in environmental education and outreach opportunities for the public, advised private landowners and connected them to conservation services and programs according to their needs and wants.
* Collected and managed groundwater quality data for the development of an interactive Water Quality Map of Southwest Georgia alongside Georgia Water Planning & Policy Center

**Aquatic Ecology Technician -** Kaskaskia Biological Station, Illinois Natural History Survey

September 2020 - March 2021

* Field work: Conducted fish surveys in reservoirs across Illinois (boat-electrofishing, fyke netting), maintained and operated boats and fisheries equipment.
* Lab work: Processed and identified benthic macroinvertebrates following state protocols, conducted water quality analysis, managed macroinvertebrate and fisheries data for state partners, graduate research projects, and on-going long-term monitoring projects.
* Assisted in the development of a report on the efficacy of citizen science water quality monitoring using benthic macroinvertebrates to develop indices of biotic integrity.

**Forest Entomology Research Technician –** Forest Entomology and Microbiology lab, TheJones Center at Ichauway

October 2019-April 2020

* Field work: Executed rigorous terrestrial insect sampling efforts using multiple techniques for graduate research projects, and the development of long-term monitoring studies in the Longleaf pine ecosystem.
* Lab work: Processed insect samples, identified thousands of insects, pinned, mounted, and preserved hundreds of insect specimens, helped maintain insect collection, managed entomological data.

**Fisheries Technician -** Kalispel Natural Resources Department & Idaho Conservation Corps

June 2019-October 2019

* Worked on a crew conducting strenuous and extensive backpack-electrofishing and stream habitat surveys for a Cuthroat Trout restoration project in remote streams in the Pend Orielle River Basin.