

# Emelie M. Foster

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## Education

University of Louisiana at Lafayette, Lafayette, LA 2020-Present

Master of Science in Biology

Advisor: James Nelson, Ph.D.

University of Louisiana at Lafayette, Lafayette, LA 2016-2020

Bachelor of Biology with a concentration in Marine Biology, Ecology, and Evolution

GPA: 3.7

## Relevant Experience

University of Louisiana at Lafayette, Lafayette, LA. May 2020- Present

Graduate Research Assistant | Advisor: James Nelson, Ph.D.

- Analyze stable isotope data using Bayesian mixing models and hypervolume niche metrics
- Develop and execute experimental plans regarding changes in trophic interactions amongst offshore species in response to sand mining
- Mentor undergraduate student workers

Louisiana Sea Grant, Baton Rouge, LA. Fall 2020-Spring 2021

Graduate Research Scholar | Program Director: Danielle Dilullo

- Science communication and community engagement training

Texas A&M University at Galveston, Galveston, TX. Summer 2019

NSF REU Student | Advisor: Anna Armitage Ph.D.

- Mangrove field work
- Individual and team-based lab work
- Developed and executed experimental plans regarding changes in *Littoraria irrorata's* feeding preferences in response to mangrove encroachment
- Presented research at the 2019 Texas A&M research symposium and at the 2019 Coastal & Estuarine Research Federation Conference

Louisiana University Marine Consortium, Chauvin, LA Summer 2018

Student Researcher | Advisors: Brain Roberts, Ph.D., Beth Stauffer, Ph.D., James Nelson, Ph.D.

- Marsh field work
- Conducted short term experiments testing basic ecosystem theory

## Relevant Skills

- R
- Collecting nekton samples using trawls, longlines, and box cores
- Image Analysis using ImageJ
- Open Water Diver (PDIC)
- Knowledge of how to safely use basic laboratory tools
- ArcGIS
- Thorough understanding of the scientific method
- Attentive and organized
- Positive and eager attitude
- Data management

## Relevant Course Work

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|--|-------------|
| • Marine Ecosystem Ecology             | Summer 2018 |
| • Marine Biology and Estuarine Ecology | Fall 2018   |
| • Oceanography and Limnology           | Spring 2019 |
| • Invertebrate Zoology                 | Fall 2019   |
| • Fish Ecology                         | Spring 2020 |
| • Landscape Ecology                    | Fall 2020   |
| • Wetland Plants                       | Fall 2020   |
| • Statistical Ecology                  | Spring 2021 |
| • Spatial Data Analysis and Management | Spring 2021 |
| • Quantitative Ecology                 | Fall 2021   |

## Publications

Geoke J.A., Foster E.M., Armitage A.R. (2021) Negative Outcomes of Novel Trophic Interactions Along Mangrove Range Edges. *Oecologia~ In Review*

Foster E.M., James RJ., Doerr J.C., Nelson J.A. (2022) Seasonal shifts in resource use alter niche size, niche overlap, and trophic position in salt marsh consumers. *Journal of Fish Biology~ In Review*

## Activities and Awards

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|---|---------|
| • Member of Biology Society at University of Louisiana at Lafayette | 2016-18 |
| • Elmer's Island beach clean up                                     | 2017    |
| • Rising TIDES Award  | 2019    |
| • Texas A&M scientific writing workshop                             | 2019    |
| • Texas A&M research presentation workshop                          | 2019    |
| • Texas A&M ALLY for LGBTQ+ workshop                                | 2019    |
| • Implicit Bias workshop at CERF                                    | 2019    |
| • CERF Participation Award  | 2021    |