

Zackary R. Shepard  
Curriculum Vitae  
(Update 06/23/2025)

## Zackary R. Shepard

Ph.D Student | Marine, Earth and Atmospheric Sciences | North Carolina State University

Address: To be determined upon relocation to NCSU

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### Academic Training

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#### **2025 (August) – Present**

Ph.D. Student, North Carolina State University, Marine, Earth and Atmospheric Sciences

Cultural Anthropology, Environmental Anthropology, Marine Ecology

**Theme:** “Quantifying the importance of aquatic foods for the health and culture of coastal communities, providing a more holistic understanding of nearshore marine ecosystems, and the ways in which fishers occupational decisions can influence the health of nearshore systems and local levels of access to aquatic foods.”

Advisor: Dr. Eric Wade

#### **2023 (August) – 2025 (August)**

Ph.D. Student, East Carolina University, Integrated Coastal Sciences

Cultural Anthropology, Environmental Anthropology, Marine Ecology | GPA: 4.0

**Theme:** “Quantifying the importance of aquatic foods for the health and culture of coastal communities, providing a more holistic understanding of nearshore marine ecosystems, and the ways in which fishers occupational decisions can influence the health of nearshore systems and local levels of access to aquatic foods.”

Advisor: Dr. Eric Wade

#### **2021 (August) – 2023 (July)**

MA, East Carolina University, Anthropology

Primate Ecology, Stable Isotope Analysis | GPA: 3.833

**Thesis:** “Stable Carbon and Nitrogen Isotope Analysis of Captive Northern Galagos (*Otolemur garnettii*) Fed Experimental “Frugivorous” and “Insectivorous” Diets”

Advisor: Dr. James E. Loudon

#### **2018 (May) – 2021 (May)**

BA, University of North Carolina Wilmington

Major: Anthropology | Minor: Environmental Science

Cum Laude | GPA: 3.54

Advisor: Dr. Eleanora Reber

## Teaching Experience

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### Spring 2025

HNRS 2014 – 1 Section  
Adapting to Coastal Hazards and Climate Change  
Graduate Teaching Assistantship (GTA)

### Fall 2021

ANTH 2016/BIOL 2016 – 2 Sections  
Biological Anthropology Laboratory  
Graduate Teaching Assistantship (GTA)

## Research Experience

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### Summer 2024

( June 13<sup>th</sup> – 21<sup>st</sup>, 2024)

Conducted surveys with households and fishers across Southern Belize to pilot my dissertation research looking at both establishing per capita seafood consumption rates for coastal communities in order to quantify the importance of seafood in local food security and identify any trends or changes in the fishing industry that may affect local access to seafood.

ECU | Department of Coastal Studies  
Project Lead: Zack Shepard

### Summer 2024

(May 15<sup>th</sup> – 25<sup>th</sup>, 2024)

Conducted semi-structured interviews and participatory mapping exercises to better understand what finfish species are physically and culturally important for the subsistence of coastal communities identified as particularly reliant on marine resources in southern Belize. **Led the application of the Institutional Internal Review Board, and the application to conduct research with human subjects through Belize's National Institute of Culture and History's Institute for Social and Cultural Research.**

ECU | Department of Coastal Studies  
Project Lead/Faculty Supervisor: Dr. Eric Wade  
Smithsonian Environmental Research Center  
Project Leads: Dr. Steve Canty & Dr. Justin Nowakowski

### Fall 2023

Led a group of Honors College undergraduates in the surveying of lower-income communities in Northeastern Pamlico County to better understand the climate resilience of local fisheries.

ECU | Engagement and Outreach Scholars Academy  
Faculty Supervisor: Dr. Eric Wade

### Fall 2022 (2<sup>nd</sup>)

(Nov 8<sup>th</sup> – 11<sup>th</sup>, 2022)

2 Atlantic research cruises out of Delaware sampling oceanic microlayer and water column for microplastics

Ended Early due to Weather  
**Summer/Fall 2022 (1<sup>st</sup>)**  
(Aug 23, 2022 – Sep 03, 2022)

using various sampling apparatuses.  
University of Delaware  
Chief Scientist: Dr. Andrew Wozniak  
Faculty Supervisor: Dr. Siddhartha Mitra

**Summer 2022**

Prepared fecal and dietary dry matter samples collected from a captive population of *Otolemur garnettii* for stable isotopic analysis, as well as received training on a Thermo Delta V Plus Stable Isotope Mass Spectrometer and Costech 4010 Elemental Analyzer.  
UNCW-WIRMS Core Facility  
Research Specialist: Kimberly Rosov  
Faculty Supervisor: Dr. James E. Loudon

**Summer 2022**

Participated in a gut microbiome study by collecting fecal samples and behavioral data on multiple lemur species  
Duke Lemur Center  
Project Leads: Dr. James E. Loudon & Dr. Ariane Peralta

**Spring 2022 – Spring 2024**

Lab Manager/Technician

**Lab Manager** – Coordinate external laboratory use, order necessary chemicals, consumables, and equipment components, schedule planned maintenance on equipment, as well as perform laboratory safety inspections to ensure safety compliance and remedy discrepancies

**Technician** - Bi-weekly riverine water quality analysis

ECU | Organic Geochemistry Laboratory  
Department of Geological Sciences  
Graduate Research Assistantship (GRA)  
Lab Supervisor: Dr. Siddhartha Mitra

## Awards, Grants, Fellowships

**Spring 2025 – Present**

Smithsonian Environmental Research Center  
Pre-doctoral Fellowship (\$5000)

**Spring 2024 – Spring 2025**

Smithsonian Environmental Research Center  
Pre-doctoral Fellowship (unfunded)

## Relevant Training & Certifications

**Summer 2025**

Scientific Diver Certification (includes CPR/First Aid/Oxygen Administration, Full Face Mask, Drysuit, and

Nitrox), American Academy of Underwater Sciences & Technical Diving International | ECU  
Director of Diving and Water Safety: Mark Keusenkothen  
Dive Safety Manager: Ryan Bradley  
CPR Renewal Due: 02/28/2027

**Summer 2024**

Open Water Scuba Diver Certification, National Association of Underwater Instructors  
Rum Runners Dive Shop | Instructor: Carolyn Wagner

**Summer 2022**

Saf-T-Pak Inc. certification to ship Category B Biological Substances  
Online Training & Certification | ECU

**Summer 2022**

Institutional Animal Care and Use Committee (IACUC)  
Online Training & Certification | ECU

**Spring 2022 – Exp. 2025**

Human Research | Social/Behavioral Research  
Investigators and Key Personnel  
CITI Program | ECU

**Fall 2021**

Chemical Hygiene/Lab Safety: Faculty, Staff, Doctoral and Graduate Students  
Cornerstone | ECU

**Fall 2020 – Exp. 2030**

Human Research | Social/Behavioral Research Course  
CITI Program | UNCW

## **Analytical Equipment-Specific Training**

If interested I can provide the specific analytical equipment I have received training on and have experience with.

## **Statistical and Analytical Software Experience**

**Spring 2025 – Present**

RStudio (Beginner) | Utilizing R to analyze regional aquatic food trade data for Mexico, Central America, and the Caribbean, between the years 2000 and 2020, as part of my dissertation.

**Fall 2024 – Present**

Stata (Intermediate) | Training on manipulating socio-demographic data, experience utilizing it to understand fisheries production, trade, and consumption data.

<b>Fall 2024 – Present</b>	FishStatJ (Intermediate)   Experience filtering out global aquaculture production data for over 50 countries to understand global production trends.
<b>Spring 2024 - Present</b>	NVIVO (Intermediate)   Thematic analysis and coding of semi-structured interviews and surveys.
<b>Spring 2022</b>	SPSS (Beginner)   Specific experience examining and manipulating human health data.

## **Professional Development**

<b>Fall 2024</b>	Social Field Safety: Understanding Risks for Marginalized and Historically Excluded Individuals Who Professionally Work Outdoors Workshop   Field Inclusive
<b>Summer 2024</b>	Accelerated Evidence-based Decision Making in Conservation: From Theory to Reality Workshop   Global Conservation Solutions

## **Publications**

<b>2023</b>	Shepard, Z.R. (2023). Stable Carbon and Nitrogen Isotope Analysis of Captive Northern Galagos ( <i>Otolemur garnettii</i> ) Fed Experimental “Frugivorous” and “Invertebrate” Diets. <i>East Carolina University</i> .
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## **Posters & Presentations**

<b>Summer 2024 (Presentation)</b>	Shepard et al. (2024). Exploring Climate Resilience Planning in Lower-Income Small Scale Fishing Communities. North American Congress for Conservation Biology 2024.
<b>Spring 2024 (Presentation)</b>	Shepard et al. (2024). Exploring Climate Resilience Planning in Lower-Income Small Scale Fishing Communities. ECU Research and Creativity Award Week 2024.
<b>Spring 2024 (Presentation)</b>	Shepard. (2024). Belize: The Social Complexities of Rights-Based Management Strategies within Small-Scale Caribbean Fisheries. ECU Sociology Research Symposium 2024.

### **Spring 2023 (Poster)**

Shepard et al. (2023). Dry matter digestibility and stable carbon and nitrogen isotope analysis of captive northern galagos (*Otolemur garnettii*) fed experimental “frugivorous” and “invertebrate” diets. Annual Conference for the American Association of Biological Anthropologists 2023.

## **Professional Association**

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<b>2024 – Present</b>	The Coastal Society
<b>2023 – Present</b>	American Fisheries Society
<b>2023 – Present</b>	International Association for Society & Natural Resources
<b>2023 – Present</b>	Society for Applied Anthropology
<b>2023 – Present</b>	Society for Conservation Biology
<b>2020 – 2023</b>	American Association of Biological Anthropologists
<b>2020 – Present</b>	Lambda Alpha National Anthropology Honors Society

## **Relevant Volunteer Work**

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<b>2020-2021</b>	Public Archaeology Corps (PAC) Wilmington, NC 50 + Hours of Excavation Executive Director: Jonathan Schleier
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## **Before Academia**

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<b>2013-2018</b>	United States Marine Corps   Avionics Technician – MV22 Collateral Duty Inspector   QA/QC Possessed the expertise to diagnose, repair, and ensure the reliability of all aircraft electrical systems and equipment during high operational tempos
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## **Academic References**

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Dr. Michaela Howells  
Associate Professor of Biological Anthropology  
University of North Carolina, Wilmington  
Email: howellsm@uncw.edu

Dr. James E. Loudon  
Assistant Professor of Anthropology  
East Carolina University  
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Dr. Eric Wade  
Assistant Professor of Coastal Studies  
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Dr. Siddhartha Mitra  
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