

Abigail Pratt

Abigailmpratt1@gmail.com

Education

Southern Illinois University, Carbondale, IL

Ph.D in Zoology (In Progress) 2020-Present

3.8 GPA

University of Louisiana, Lafayette, LA

M.S. of Biology 2018-2020

4.0 GPA

Humboldt State University, Arcata, CA

B.S. in Zoology 2014-2018

Minor in German Studies

3.76 GPA

PhD Research

I study the evolution and biogeography of decapodiform squid. My dissertation is comprised of three projects: effect of RNA-editing on transcriptomic phylogenies of cephalopods, evolution of buoyancy mechanisms in squids, and the past, present, and future biogeography of Pyroteuthid squids.

Master's Research

I researched the habitat choice and species distribution of deep-sea octopods in the Western North Atlantic. Using Coastal and Marine Ecological Classification Standard, I characterized octopus habitats seen in ROV videos. I utilized R to create species distribution models of two species of octopods.

Awards, Fellowships, and Grants

Morris Fellowship, Southern Illinois University (2020-Present)

University of Louisiana Master's Fellowship (2018-2020)

Collegiate Rowing Coaches Association, Scholar Athlete Award (2015, 2016, 2017, 2018)

Relevant Experience

August 2019- May 2020, Teacher's Assistant

University of Louisiana

I taught lab sections for undergrad classes in the biology department. I taught labs for Fundamentals of Cell and Molecular Biology, teaching techniques like DNA extraction and PCR, and Survey of Human Anatomy and Physiology, leading dissections and experiments exploring human physiology.

August-December 2019, Level 1 Teaching Assistant Certification Course

University of Louisiana, Department of Biology

I took a five-week course for Teaching Assistants in the Biology Department which taught us how to set course objectives, plan and use instructional time wisely, and use diverse forms of assessments when teaching undergraduate courses.

January 2017-May 2018, Lab Member

Craig Lab, Humboldt State University

We studied the differences in structure and life history of two similar species of bryozoans, *Watersipora subtorquata* and a recently discovered *Watersipora* species. I helped execute an experiment investigating larval settlement rates in different concentrations of copper.

May-August 2017, NHRE Intern

Smithsonian National Museum of Natural History

Through the Natural History Research Experience internship program, I researched the diversity of octopods living in the mesophotic and deep-water reefs of Curacao. I used photos, videos, and specimens collected by a manned submersible to identify the specimens to species.

August 2013-August 2014, Volunteer

San Diego Natural History Museum

Photographed and catalogues specimens for the Amphibian and Reptile Atlas of Peninsular California. Identified specimens of California Legless Lizards and recatalogued.

Publications

Lindgren A, Pratt A, Vecchione M, Anderson FE. 2022. Finding a home for the ram's horn squid: phylogenomic analyses support *Spirula spirula* (Cephalopoda: Decapodiformes) as a close relative of Oegopsida. *Org Divers Evol*. <https://doi.org/10.1007/s13127-022-00583-7>

Pratt A, France SC, Vecchione M. 2020. Survey of bathyal incirrate octopods in the western North Atlantic. *Mar Biodivers*. <https://doi.org/10.1007/s12526-021-01191-y>

Pratt A, Baldwin CC, Vecchione M. 2020. Octopods of the deep reefs off Curacao, southern Caribbean including the description of one newly discovered species. *Bull Mar Sci*. <https://doi.org/10.5343/bms.2019.0040>

Conference Presentations and Posters

“Survey of cirrate octopod diversity and description of cirrate egg-coral associations from ROV videos”, Oral Presentation, 2022 Cephalopod International Advisory Committee Conference

“Finding a home for the ram's horn squid (*Spirula spirula*) using phylogenomics”, Oral Presentation, 2021 American Malacological Society Conference

“Characterization of Deep-Sea Octopod Habitat from ROV Videos in the Western North Atlantic”, Poster, 2020 Ocean Sciences Meeting

“Octopods of the Deep Reefs off Curacao”, Poster, 2018 Cephalopod International Advisory Committee Conference

“Octopods of the Deep Reefs off Curacao”, Poster, 2018 Ocean Sciences Meeting

Relevant Skills

R Programming

Basic Linux Programming

Outreach Experience

“Cephalopod Research”

Skype-a-Scientist, October 2022

3rd-4th Grade, Skyline School IB, K-8

Portland, OR

Wetlands Table

Family Eco Festival, September 2022
All Ages, Alto Vineyards
Alto Pass, IL

“RNA Editing in Cephalopods”
Skype-a-Scientist, April 2022
Intro Bio, Northeastern University
Boston, MA

SIU Darwin Week
Co-organizer, February 2022
Open to the Public
Carbondale, IL

SIU Zoology Field Trip
Co-organizer, October 2021
9th-12th Grade, Carterville High School
Carbondale, IL

“A Deep-Sea Food Web”
Zoom Presentation, February 2021
2nd Grade, Del Mar Hills Academy
Del Mar, CA

“Deep Sea Adaptations”
Zoom Presentation, February 2021
3rd Grade, Del Mar Hills Academy
Del Mar, CA

“Deep Sea Adaptations”
Zoom Presentation, February 2021
3rd Grade, Del Mar Hills Academy
Del Mar, CA

“Octopus Diversity and Habitat”
Skype-a-Scientist, October 2020
9th Grade, Indian Hills High School
New Jersey, USA

“Marine Biology”
Skype-a-Scientist, October 2020
9th Grade, Western Michigan Christian School
Michigan, USA

“Squids and Other Cephalopods”
Skype-a-Scientist, September 2020
1st Grade, Homeschool Group
Connecticut, USA

“Cephalopod Circulatory Systems”
Presentation, December 2018
5th Grade, Del Mar Hills Academy
Del Mar, CA

“Octopods of the Deep Reefs off Curacao: How to Present a Scientific Poster”
Presentation, December 2017
6th Grade, Del Mar Hills Academy

Del Mar, CA

“Studying Octopuses”

Museum Exhibit Booth, August 2017

Smithsonian National Museum of Natural History

Washington, D.C.

Popular Media Publications

“Deep-sea footage helps researchers understand octopod real estate”

Lauren Lipuma, American Geophysical Union Blog

Interviewee

Other Experiences

Secretary, Zoology Graduate Student Association, Southern Illinois University (2021-Present)

Certifications

Beginner SCUBA Certification, NAUI

References

Frank E. Anderson, Professor, Department of Zoology, Southern Illinois University Carbondale

Michael Vecchione, Research Zoologist, NOAA National Systematics Lab, (202) 633-1751

Scott France, Professor, Department of Biology, University of Louisiana at Lafayette (337) 482-6320