Chad Palmer

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Research Interest Brief

My research integrates empirical field studies, Bayesian modeling, and stakeholder engagement to examine the population and community dynamics of ecosystem engineers, human–wildlife interactions, and conservation decision-making. I have developed innovative decision-support tools, including resource management games that capture "played preferences," bridging ecological theory with applied governance and restoration.

Teaching Statement Brief

I emphasize discovery-based learning, guiding students through problem-solving processes that foster critical thinking and independence, and I integrate non-traditional teaching modes to make ecological and quantitative concepts accessible and engaging. I am prepared to teach courses in ecosystem engineers, population modeling, statistics for conservation, data visualization, and science philosophy.

Education

University of Florida   Expected December 2025
Doctor of Philosophy: **Interdisciplinary Ecology** 4.0 GPA
Gainesville, FL

- Camp Lab: Fisheries and Aquaculture Governance
- Concentration in Wildlife Ecology and Conservation
- Dissertation: Density Dependence Among Ecosystem Engineers at Varying Scales: Case Studies in Reef-Building Oysters
    - Chapter 1: Conducted a systematic review of scientific literature to provide previous evidence for strong positive density-dependent dynamics in oyster fisheries and show how understanding of these dynamics has evolved over time
    - Chapter 2: Utilized an empirical field experiment with Bayesian analysis methods to determine presence of positive density-dependent dynamics among oyster recruitment at multiple spatial and density scales
    - Chapter 3: Utilized an empirical field experiment to test two different limestone types for oyster settlement preferences against a control for use in restoration.

University of Florida   December 2021
Master of Science: **Forest Resources and Conservation** 4.0 GPA
Gainesville, FL

- Valle Lab: Decision Support Tools and Bayesian Statistics
- Camp Lab: Fisheries and Aquaculture Governance
- Concentration in Public Policy and Administration
- Thesis: Simulation Games for Adaptive Management of Eastern Oysters by Industry Professionals
    - Chapter 1: Conducted semi-structured interviews using a snowball sampling method of key oyster fishery stakeholders to explore potential differences in perceptions of key issues as a potential source for mistrust
    - Chapter 2: Created an oyster fishery management video game using the input of stakeholders and conducted playtests with stakeholders to determine whether the game had educational impact and whether gameplay could inform management preferences

Arizona State University 3.78 GPA   May 2018
Bachelor of Arts: **Theater**
Tempe, AZ
- Minor in Video Game Design

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Publications

Palmer, C. R., Camp, E.V., et al. (In Preparation) Comparing Different Limestone Formations for the Restoration of Florida Oyster Reefs

Camp, E. V., Pine, W., Casola, W. R., Benjamin, E. D., **Palmer, C. R.**, Klizentyte, K., & Lorenzen, K. (in review). Implications of depensation on oyster recruitment, population collapse, restoration, and sustainable fisheries management. *Fisheries Research*.

Palmer, C. R., Camp, E.V., et al. (2025) Positive density-dependent population dynamics in reef-building oysters: a review of the evidence and empirical findings, *University of Florida Theses and Dissertations,* https://ufdc.ufl.edu/ufe0058402/00001

Palmer, C. R., Valle, D., et al. (2024). Inclusive simulation game development to enhance Florida research and management: Cedar Key oyster fishery. *Environmental Modelling & Software*, 171, 105885. https://doi.org/10.1016/j.envsoft.2023.105885

Palmer, C. R., Valle, D., et al. (2021) Studying buy-in for fishery management through the inclusion of stakeholders in the development ofsimulation games for natural resource management research, *University of Florida Theses and Dissertations,* https://ufdc.ufl.edu/ufe0058402/00001

Work Experience

New Mexico State University, Las Cruces, NM   February 2026 to Present
Post-Doctoral Researcher, Lawson and Pregler Labs

University of Florida, Gainesville, FL   August 2025 to February 2026
Data Collection, Boater Intercept Surveys

University of Florida, Gainesville, FL   August 2021 to December 2021
Teaching Assistant, Bayesian Statistics

University of Florida, Gainesville, FL   August 2019 to May 2021
Teaching Assistant, Introduction to Statistics

Icy Strait Pointe, Hoonah, AK   May 2016 to August 2019 and May 2022 to September 2022
Citizen Science Leader

Kelly Educational Staffing, Hartford, CT/Gainesville, FL   September 2018 to December 2025
Substitute Teacher

United States Forest Service, Hoonah, AK   May 2018 to September 2018
Community Outreach Coordinator

Presentations

Applying Population Ecology to Fisheries Management   Guest Lecture
Guest lecture for Population Ecology, University of Florida   November 2025

Unique Intraspecific Interactions Arising from Ecosystem Engineering — Seminar Lecture
School of Natural Resources and the Environment Seminar — October 2025

Testing for Positive Density-Dependent Recruitment at Multiple Scales Among Reef-Building Oysters in Cedar Key, FL — Oral Presentation — August 2025
American Fisheries Society Symposium

Comparing Different Limestone Formations for the Restoration of Florida Oyster Reefs — Oral Presentation — May 2025
Florida American Fisheries Society Symposium, Awarded Best Student Presentation

Positive Density Dependence at Multiple Scales Among Reef-Building Oysters — Poster Presentation — January 2025
North Florida Marine Science Symposium

Positive Density Dependence: Mechanisms and Impacts — Guest Lecture — December 2024
Guest lecture for Quantitative Wildlife Ecology, University of Florida

Low Likelihood of Net-Benefit from the Exploitation of Ecosystem Engineers — Oral Presentation — May 2024
Florida American Fisheries Society Symposium

Evidence for Positive Density Dependence Among Ecosystem Engineers — Oral Presentation — May 2023
Florida American Fisheries Society Symposium

Differing Outcomes of State Management Strategies for Eastern Oyster Fisheries — Poster Presentation — April 2023
School of Natural Resources and the Environment Symposium

Studying Resource Management Buy-In and Preferences through Simulation Games — Oral Presentation — March 2022
Graduate Student Gulf of Mexico Science Symposium, Awarded Best Student Presentation

Simulation Games for the Adaptive Management of Oysters by Industry Professionals — Oral Presentation — March 2021
Forest Fisheries and Geomatic Science Symposium

<u>Software Products</u>

Oyster Fishery Game: https://chadpalmer-ufl.shinyapps.io/RevisedApp/

Guana Tolomato Matanzas National Research Reserve Data Visualization App
https://gtmnerr.shinyapps.io/Dashboard-dev/

Multistate Governance Comparison for Eastern Oysters
https://chadpalmer-ufl.shinyapps.io/MultistateAnalysisApp/

<u>Outreach</u>

Engineering Florida Shorelines — November 2025
Led a workshop for High School students at the University of Florida where students were educated about ecosystem engineers, taught their importance for maintaining biodiversity and ecosystem function, led on a field walk where they observed ecosystem engineering, and performed a lab experiment.

Ecosystem Engineer 7th and 9th grade curriculum supplementation — October 2024 to Present
Worked with teachers in the Alachua County School District and the University of Florida teaching lab to bring education about ecosystem engineers into public school classrooms

Guana Tolomato Matanzas National Research Reserve   February 2024 to March 2025
Data Visualization App
Worked with University of Florida faculty, reserve researchers, and local stakeholders to develop an app that visualized 12 years of water quality, algal bloom, and shellfish data

"Saving Anastasia" Promoting conservation of Anastasia State Park   October 2024 to December 2024
Worked with other University of Florida students and opponents of the Florida Great Outdoors Initiative to create a public facing website exploring the ecological and cultural importance of Anastasia State Park to promote conservation and non-development of the area.

Cedar Key Community Action Board   January 2022 to May 2022
Worked with University of Florida Faculty, the Florida Fish and Wildlife Conservation Commission, local oystermen, and other stakeholders to explore alternative management strategies for oysters in Cedar Key, FL

Science Fair Judge   February 2019
Worked as a judge for a state-level science fair for High School students hosted by the University of Florida

"Wing It! An exploration of bird wings from ocean to mountaintop"   June 2018 to September 2018
Worked with the United States Forest Service and Hoonah City School District to develop a program for children exploring how the morphology of wings among local avian species shifted between marine, forest, and alpine landscapes

Affiliations

University of Florida Forestry Graduate Student Organization   January 2020 to May 2022
Communications Officer

Certifications

• PADI Scuba   • Class C Commercial Driver License   • FAA 107 Unmanned Aerial Systems License

Professional References

Edward Camp, Doctoral Advisor/Lab Leader   (352)273-3652 || edvcamp@ufl.edu
Miguel Acevedo, Professor/Committee Member   (352)846-0575 || maacevedo@ufl.edu
Mathew Leibold, Professor/Committee Member   (352) 294-7544 || mleibold@ufl.edu
Geraldine Klarenberg, Project Supervisor   (352) 273-0792 || geraldine@eccoscientific.com
Andrew Altieri, Professor/Collaborator   (352)392-7748 || andrew.altieri@essie.ufl.edu