

Shelby L. Ziegler

Odum School of Ecology, University of Georgia
140 E Green Street, Athens GA 30602
shelbyziegler@gmail.com | www.shelbyziegler.net | @slziegler220 | she/her

Education

Ph.D.	Ecology	University of North Carolina - Chapel Hill, Chapel Hill, NC Advisor: Dr. F. Joel Fodrie Dissertation theme: <i>Effects of marsh landscape orientation and environmental setting on the habitat use and productivity of estuarine fishes</i>	2020
B.S.	Biology	College of William and Mary, Williamsburg, VA Advisor: Dr. Jonathan D. Allen	2013

Professional Appointments

2022-2024	Postdoctoral Associate, University of Georgia <i>Examining the effects of multiple stressors (water quality, land use change, predators, macroparasites, etc.) on coastal structure, function, and disease dynamics</i> Supervisor: Dr. James (Jeb) E. Byers
2021-2024	Courtesy Postdoctoral Associate, Florida International University Supervisor: Dr. Jennifer Rehage
2020-2022	Postdoctoral Research Associate, Moss Landing Marine Laboratories <i>Assessing the efficacy of California marine protected areas for mitigating climate change and anthropogenic impacts on mid-depth fish communities with community science hook and line program: California Collaborative Fisheries Research Program (CCFRP)</i> Supervisors: Dr. Scott Hamilton and Dr. Richard Starr
2021	Lecturer in Marine Sciences, California State University, Monterey Bay
2017-2020	Graduate Research Assistantship, North Carolina Coastal Recreational Fish License Grant: <i>Marsh Island</i> .
2015-2018	Graduate Research Assistantship, Coastal Waters Consortium, Gulf of Mexico Research Initiative.
2013-2015	Laboratory and Research Specialist, Marine Biodiversity Laboratory, Virginia Institute of Marine Science, Supervisor: Dr. J. Emmett Duffy.

Peer-reviewed Publications (*indicates mentee)

24. Johnston, E. M. G. T. Waltz, R. Kosaka, E. M. Brauer, **S. L. Ziegler**, E. T. Jarvis Mason, H. S. Glanz, L. Zaragoza, A. N. Kellum, R. O. Brooks, B. X. Semmens, C. J. Honeyman, J. E. Caselle, L. F. Bellquist, S. L. Small, S. G. Morgan, T. J. Mulligan, C. L. Coscino, J. M. Staton, R. M. Starr, S. L. Hamilton, B. I. Ruttenberg and D. E. Wendt. (2024). Participation in Collaborative Fisheries Research Improves the Perceptions of Recreational Anglers towards Marine Protected Areas. *Frontiers in Marine Science* doi: 10.3389/fmars.2024.1330498

23. **Ziegler, S. L.**, R. O. Brooks, L. F. Bellquist, J. E. Caselle, S. G. Morgan, T. J. Mulligan, B. I. Ruttenberg, B. X. Semmens, R. M. Starr, J. Tyburczy, D. E. Wendt, A. Buchheister, J. R. Marin Jarrin, C. Pasparakis, S. J. Jorgensen, J. A. Chiu, J. Colby, C. L. Coscino, L. Davis, F. de Castro, J. T. Elstner, C. Honeyman, E. T. Jarvis Mason, E. M. Johnston, S. L. Small, J. Staton, G. T. Waltz, B. Basnett, E. V. Satterthwaite, H. Killeen, C. D. Dibble, and S. L. Hamilton. (2024). Collaborative fisheries research reveals reserve size and age determine efficacy across a network of marine protected areas. *Conservation Letters* e13000 doi: 10.1111/conl.13000
22. Free C. M., J. G. Smith, J. Brun, T. B. Francis, J. G. Eurich, J. Claudet, J. E. Dugan, D. Gill, S. L. Hamilton, K. Kaschner, C. J. Lopazanski, D. Mouillot, **S. L. Ziegler**, J. E. Caselle, and K. J. Nickols. (2023). If you build it, they will come: coastal amenities facilitate human engagement in marine protected areas. *People and Nature* doi:10.1002/pan3.10524
21. Yando E. S., S. F. Jones, W. R. James, D. D. Colombano, D. I. Montemayor, S. Nolte, J. L. Raw, **S. L. Ziegler**, L. Chen, D. Daffonchio, M. Fusi, K. Rogers, and L. Sergienko. 2023. An integrative salt marsh conceptual framework for global comparisons. *Limnology and Oceanography Letters* doi: 10.1002/lol2.10346
20. Smith J.G., C. M. Free, C. J. Lopazanski, J. Brun, C. R. Anderson, M. H. Carr, J. Claudet, J.E. Dugan, J. G. Eurich, T. B. Francis, S. L. Hamilton, K. Kaschner, D. Mouillot, P. T. Raimondi, R. M. Starr, **S. L. Ziegler**, K. J. Nickols, and J. E. Caselle. 2023. A marine protected area network does not confer community structure resilience to a marine heatwave across coastal ecosystems. *Global Change Biology* doi: 10.1111/gcb.16862
19. **Ziegler, S. L.**, J. M. Johnson*, R. O. Brooks, E. M. Johnston, J. L. Mohay, B. I. Ruttenberg, R. M. Starr, G. T. Waltz, D. E. Wendt, and S. L. Hamilton. 2023. Marine protected areas, marine heatwaves, and the resiliency of nearshore fish communities. *Scientific Reports* 13: 1405 doi: 10.1038/s41598-023-28507-1
18. Clance, L. R.*[^], **S. L. Ziegler**[^], and F. J. Fodrie. 2023. Contaminants disrupt aquatic food webs via decreased consumer efficiency. *Science of the Total Environment* 859(2): 160245 doi: 10.1016/j.scitotenv.2022.160245. [^]co-first authors
17. Duffy J. E., J. J. Stachowicz, P. L. Reynolds, E. E. Sotka, K. A. Hovel, C. Boström, K.E. Boyer, M. Cusson, J. Eklöf, A. H. Engelen, B. K. Eriksson, F. J. Fodrie, J. N. Griffin, C. M. Hereu, M. Hori, A. R. Hughes, M. V. Ivanov, M. Jahnke, P. Jorgensen, C. Kruschel, K. Lee, J. S. Lefcheck, P. Moksnes, M. Nakaoka, M. I. O'Connor, N. E. O'Connor, R. J. Orth, B. J. Peterson, H. Reiss, K. Reiss, J. P. Richardson, F. Rossi, J. L. Ruesink, S. T. Schultz, J. Thormar, F. Tomas, R. Unsworth, E. Voigt, M. A. Whalen, **S. L. Ziegler**, and J. L. Olsen. 2022. A Pleistocene legacy structures variation in modern seagrass ecosystems. *PNAS* 119 (32): e2121425119 doi: 10.1073/pnas.2121425119
16. **Ziegler, S. L.**, R. O. Brooks, S. L. Hamilton, B. I. Ruttenberg, J. A. Chiu, R.T. Fields, G T. Waltz, C. Shen, D. E. Wendt, and R. M. Starr. 2022. External fishing effort regulates the positive effects of no-take marine protected areas. *Biological Conservation*. 269: 109546 doi: 10.1016/j.biocon.2022.109546
15. Gross C. P., J. E. Duffy, K. A. Hovel, M. R. Kardish, P. L. Reynolds, C. Boström, K. A. Boyer, M. Cusson, J. Eklöf, A. H. Engelen, B. K. Eriksson, F. J. Fodrie, J. N. Griffin, C. M. Hereu, M. Hori, A. R. Hughes, M. V. Ivanov, P. Jorgensen, C. Kruschel, K. Lee, J. S. Lefcheck, P. Moksnes, M.

- Nakaoaka, M. I. O'Connor, J. L. Olsen, R. J. Orth, B. J. Peterson, H. Reiss, F. Rossi, J. L. Ruesink, E. E. Sotka, J. Thormar, F. Tomas, R. Unsworth, E. P. Voigt, M. A. Whalen, **S. L. Ziegler**, and J. J. Stachowicz. 2022. The biogeography of community assembly: latitude and predation pressure drive geographic variation in community trait distribution in a guild of marine epifaunal crustaceans. *Proceedings of the Royal Society B*. 289 (1969): 20211762 doi: 10.1098/rspb.2021.1762
14. **Ziegler, S. L.**, L. R. Clance*, A. R. McMains*, M. D. Miller*, and F. J. Fodrie. 2021. Influence of marsh island size on nekton communities: intermediate optima rather than SLOSS. *Marine Ecology Progress Series*. 672: 45-56 doi: 10.3354/meps13780
13. Hovel, K., J. E. Duffy, J. J. Stachowicz, P. Reynolds, C. Bostrom, K. Boyer, M. Cusson, F. J. Fodrie, K. Gagnon, C. Hereu, M. Hori, P. Jorgensen, C. Kruschel, K. Lee, M. Nakaoka, N. O'Connor, F. Rossi, J. Ruesink, F. Tomas Nash, and **S. L. Ziegler**. 2021. Joint effects of patch edges and habitat degradation on faunal predation risk in a widespread marine foundation species. *Ecology*. 102(5): e03316. doi: 10.1002/ecy.3316
12. **Ziegler, S. L.**, R. Baker, S. C. Crosby, M. A. Barbeau, J. Cebrian, D. D. Colombano, R. M. Connolly, L.A. Deegan, B. L. Gilby, D. Mallick, C. W. Martin, J. A. Nelson, J. F. Reinhardt, C.A. Simenstad, N. J. Waltham, T. A. Worthington, and L. P. Rozas. 2021. Geographic variation in salt marsh structure and function for nekton: a guide to finding commonality across multiple scales. *Estuaries and Coasts*. 44: 1497-1507. doi:10.1007/s12237-020-00894-y
11. Colombano, D.D., S. Y. Litvin, **S. L. Ziegler**, S. B. Alford, R. Baker, M. A. Barbeau, J. Cebrián, R. M. Connolly, C. A. Currin, L. A. Deegan, J. S. Lesser, C. W. Martin, A. E. McDonald, C. McLuckie, B. H. Morrison, J. W. Pahl, L. M. Risse, J. A. M. Smith, L. W. Staver, R. E. Turner, and N. J. Waltham. 2021. Climate change implications for tidal marshes and food web linkages to estuarine and coastal nekton. *Estuaries and Coasts*. 44: 1637-1648. doi: 10.1007/s12237-020-00891-1
10. Waltham N. J., C. Alcott, M. A. Barbeau, J. Cebrian, R. M. Connolly, L. A. Deegan, K. Dodds, L. A. Goodridge Gaines, B. L. Gilby, C. J. Henderson, C. M. McLuckie, T. J. Minello, G. S. Norris, J. Ollerhead, J. Pahl, J. F. Reinhardt, R. J. Rezek, C. A. Simenstad, J. A. M. Smith, E. L. Sparks, L. W. Staver, **S. L. Ziegler**, and M. P. Weinstein. 2021. Tidal marsh restoration optimism in a changing climate and urbanizing seascape. *Estuaries and Coasts*. 44: 1681-1690. doi: 10.1007/s12237-020-00875-1
9. **Ziegler, S. L.**, M. D. Miller*, C. S. Smith, and F.J. Fodrie. 2021. Abiotic cycles mediate the strength of cross-boundary consumption within coastal food webs. *Estuaries and Coasts*. 44: 1147-1156. doi:10.1007/s12237-020-00829-7
8. Baker R., M. D. Taylor, K. W. Able, M. W. Beck, J. Cebrian, D. D. Colombano, R. M. Connolly, C. Currin, L. A. Deegan, I. C. Feller, B. L. Gilby, M. E. Kimball, T. J. Minello, L. P. Rozas, C. Simenstad, R. E. Turner, N. J. Waltham, M. P. Weinstein, **S. L. Ziegler**, P. S. E. zu Ermgassen, C. Alcott, S. B. Alford, M. Barbeau, S. C. Crosby, K. Dodds, A. Frank, J. Goeke, L. A. Goodridge Gaines, F. E. Hardcastle, C. J. Henderson, W. R. James, M. D. Kenworthy, J. Lesser, D. Mallick, C. W. Martin, A. E. McDonald, C. McLuckie, B. H. Morrison, J. A. Nelson, G. S. Norris, J. Ollerhead, J. W. Pahl, S. Ramsden, J. S. Rehage, J. F. Reinhardt, R. J. Rezek, L. M. Risse, J. A. M. Smith, E. L. Sparks, and L. W. Staver. 2020. Fisheries rely on threatened salt marshes. *Science* 370: 670-671. doi: 10.1126/science.abe9332

7. Whalen, M. A., R. D. B. Whippo, J. J. Stachowicz, P. H. York, E. Aiello, T. Alcoverro, A. H. Altieri, C. Bertolini, L. Benedetti-Cehcci, M. Bresch, F. Bulleri, P. E. Carnell, S. Cimon, R. M. Connolly, M. Cusson, M. S. Diskin, E. D'Souza, A. A. V. Flores, F. J. Fodrie, A. W. E. Galloway, L. C. Gaskins, O. J. Graham, T. C. Hanley, C. J. Henderson, C. M. Hereu, M. Helsing-Lewis, K. A. Hovel, B. B. Hughes, A. R. Hughes, K. M. Hultgrin, H. Jänes, D. S. Janiak, L. N. Johnston, P. Jorgensen, B. P. Kelaher, C. Kruschel, B. S. Lanham, K. Lee, J. S. Lefcheck, E. Lozano-Álvarez, P. I. Macreadie, Z. L. Monteith, N. E. O'Connor, A. D. Olds, J. K. O'Leary, C. J. Patrick, O. Pino, A. G. P. Poore, M. A. Rasheed, W. W. Raymond, K. Reiss, O. K. Rhoades, M. T. Robinson, P. G. Ross, F. Rossi, T. A. Schlacher, J. Seemann, B. R. Silliman, D. L. Smee, M. Thiel, R. K. F. Unsworth, B. I. van Tussenbroek, A. Vergés, M. E. Yeager, B. K. Yednock, **S. L. Ziegler**, and J. E. Duffy. 2020. Climate drives the geography of marine consumption by changing predator communities. *Proceedings of the National Academy of Sciences*. 117: 28160–28166. doi:10.1073/pnas.2005255117

6. Gilby B. L., M. P. Weinstein, R. Baker, J. Cebrian, S. B. Alford, A. Chelsky, D. D. Colombano, R. M. Connolly, C. A. Currin, I. C. Feller, A. Frank, J. A. Goeke, L. A. Goodridge Gaines, F. E. Hardcastle, C. J. Henderson, C. W. Martin, A. E. McDonald, B.H. Morrison, A.D. Olds, J. S. Rehage, N. J. Waltham, and **S. L. Ziegler**. 2020. Human actions alter tidal marsh seascapes and the provision of ecosystems services. *Estuaries and Coasts*. 44: 1628-1636. doi:10.1007/s12237-020-00830-0

5. **Ziegler, S. L.**, K. W. Able, and F. J. Fodrie. 2019. Dietary shifts across biogeographic scales alter spatial subsidy dynamics. *Ecosphere*. 10 (12): e02980. doi:10.1002/ecs2.2980

4. **Ziegler, S. L.**, J. H. Grabowski, C. J. Ballie, and F. J. Fodrie. 2018. Effects of landscape setting on oyster reef structure and function largely persist more than a decade post-restoration. *Restoration Ecology*. 26 (5): 933-942. doi:10.1111/rec.12651

3. McCann, M. J., K. W. Able, R. R. Christian, F. J. Fodrie, O. P. Jensen, J. J. Johnson, P. C. López-Duarte, C. W. Martin, J. A. Olin, M. J. Polito, B. J. Roberts, and **S. L. Ziegler**. 2017. Key taxa in food web responses to stressors: The Deepwater Horizon Oil Spill. *Frontiers in Ecology and the Environment*. 15(3): 242-149. doi:10.1002/fee.1474

2. Duffy J. E., **S. L. Ziegler**, J. Campbell, P. Bippus*, and J. S. Lefcheck. 2015. Squidpops: A simple tool to crowdsource a global map of marine predation intensity. *PLoS ONE* 10(11): e0142994. doi:10.1371/journal.pone.0142994

1. Allen J. D., A. F. Armstrong, and **S. L. Ziegler**. 2015. Environmental induction of polyembryony in echinoid Echinoderms. *Biological Bulletin* 229: 221–231. doi:10.1086/bblv229n3p221

Publications in Review or Revision

1. **Ziegler, S. L.**, W. Atencio, J.M. Carroll, J. E. Byers. (In Revision). Universally high microparasite prevalence in an ecosystem engineer across a large spatial scale. *Oecologia*

2. Gross C. P., J. E. Duffy, K. A. Hovel, M. R. Kardish, P. L. Reynolds, C. Boström, K. A. Boyer, M. Cusson, J. Elköf, A. H. Engelen, B. K. Eriksson, F. J. Fodrie, J. N. Griffin, C. M. Hereu, M. Hori, A. R. Hughes, M. V. Ivanov, P. Jorgensen, C. Kruschel, K. Lee, J. S. Lefcheck, P. Moksnes, M. Nakaoaka, M. I. O'Connor, J. L. Olsen, R. J. Orth, B. J. Peterson, H. Reiss, F. Rossi, J. L. Ruesink, E. E. Sotka, J. Thormar, F. Tomas, R. Unsworth, E. P. Voigt, M. A. Whalen, **S. L. Ziegler**, and J. J. Stachowicz. (In Review). A latitudinal cline in the structure and taxonomic

turnover of eelgrass epifaunal communities is associated with plant genetic diversity. *Global Ecology and Biogeography*

Technical Reports

3. Caselle, J.E., K.J. Nickols, J.G. Smith, C. Lopanzanski, J. Bruen, C. Free, C. Anderson, M. Carr, J. Claudet, J. Dugan, J. Eurich, T. Francis, D. Gill, S. Hamilton, K. Kaschner, D. Mouillot, P. Raimondi, R. Starr, and **S.L. Ziegler**. 2023. A Synthesis of ecological and social outcomes from the California MPA network. California Ocean Protection Council. doi:10.25494/P6430V
2. Hamilton, S.L., R. Starr, D. Wendt, B. Ruttenberg, J. Caselle, B. Semmens, L. Bellquist, S. Morgan, T. Mulligan, J. Tyburczy, **S.L. Ziegler**, R. Brooks, G. Waltz, E. Mason, C. Honeyman, S. Small, and J. Staton. 2022. California Collaborative Fisheries Research Program (CCFRP) – Monitoring and Evaluation of California Marine Protected Areas. CA Sea Grant.
1. Starr, R.M., J. Caselle, A. Kahn, A. Lauermaun, J. Lindholm, B. Tissot, **S.L. Ziegler**, C. Bretz, P. Carlson, K. Cieri, J. Hoeke, C. Jainese, G. Martel, S. McDermott, J. Mohay, and P. Salinas-Ruiz. 2022. Monitoring and Evaluation of Mid-Depth Rock Ecosystems in the California MLPA Marine Protected Area Network. CA Sea Grant.

Grants, Fellowships, and Awards (\$578,735 awarded; \$304,591 pending)

Research Grants

- 2023-2024** NOAA NERR Science Collaborative Grant. “Evaluating oyster reefs as habitat: Comparing the utility of ecological metrics to assess ecosystem function” **\$199,943 (\$51,531 UGA portion)**. M.E. Kimball, R.P. Dunn, **S.L. Ziegler** et al. (UGA PI)
- 2021-2023** Georgia Coastal Incentive Grant “Spatial & temporal patterns of disease in Georgia oyster reef habitat.” **\$160,000**. J.E. Byers, J.M. Carroll, **S.L. Ziegler**, M.D. Kenworthy, and E.J. Resetarits.
- 2017-2019** NCDMF Coastal Recreational Fishing License Grant. “Effects of isolated marsh islands and fringing mainland marshes on secondary production and food web dynamics in tidal estuaries” **\$195,331**. F.J. Fodrie and **S.L. Ziegler**

Research Grants in Review

NSF BIO-OCE. Collaborative Research: Trophic Consequences of Climate Migration. (**\$304,591 VU portion**). J.A. Nelson, D.S. Johnson, **S.L. Ziegler** and A. Heil. (VU PI)

Fellowships

- 2022-2023** Southeastern Conference (SEC) Emerging Scholars Postdoctoral Award, **\$10,000**.
- 2011-2012** Teachers for a Competitive Tomorrow Fellowship. VA Department of Education. **\$7,200**

Research Awards

- 2020** UNC Graduate School Horizon Award, **\$500**.
- 2018** Rutgers University Marine Field Station Visiting Scientist Grant. **\$2,770**.
- 2017-2018** Gulf of Mexico Research Initiative (GoMRI) Scholar.
- 2012** Mary E. Ferguson Memorial Research Award. College of William and Mary. **\$250**.

Travel Awards

- 2023** UGA Postdoctoral Scholar Travel Award, **\$1,291**.

2019 UNC Graduate School Transportation Grant, **\$400.**
2019 Coastal Estuarine Research Federation Student Travel Award, **\$150.**
2015 Professional and Staff Development Grant. Virginia Institute of Marine Science. **\$600.**
2013 HHMI Travel Grant, College of William and Mary. **\$300.**

Previous Proposals Not Awarded

NSF Biological Oceanography. “The interaction of temperature, predators, and disease on a coastal ecosystem engineer” **\$739,139.** **S.L. Ziegler** and J.E. Byers. 2023

Georgia Sea Grant. “Sublethal effects of disease on filtration capacity and provisioning of water quality by oysters in southeastern estuaries” **\$150,000.** J.E. Byers, **S.L. Ziegler** and E.J. Resetarits. 2023

NOAA NCCOS RER 2021 “Scientists, Anglers, and Managers: Leveraging information on connectivity, fish-habitat associations, and a long-term citizen science MPA research program to improve management of California MPAs” **\$1,993,447** B.I. Ruttenberg, D.E. Wendt, S.L. Hamilton, R.M. Starr, and **S. L. Ziegler.** 2021

Teaching Experience

Summer 2023 Instructor of Record, ECOL 4225: Methods in Marine Ecology (UGA)
Taught two-week intensive course (80-100 hrs/wk) that provides an in-depth understanding of ecological processes and interactions in marine and estuarine environments through hands-on studies in the field and in the lab on Sapelo Island, GA. Students learn the basic physical, chemical, geological, and biological oceanographic and ecologic processes and that operate in the coastal zone focused predominately on intertidal and shallow subtidal ecosystems.

Summer 2023 Instructor of Record, ECOL/BIOL/MARS 4960R: Undergraduate Research I
Mentored 14 undergraduate students through individual independent research projects over the course of two-weeks. Students developed research questions, conducted field-based research, ran statistical analyses, and wrote research paper.

Fall 2021 Instructor of Record, MS 113/213: Advanced Marine Ichthyology (MLML)
Led a graduate-level course focused on the taxonomy, morphology and ecology of fishes. Lectured 3 hours weekly, led field and laboratory work, proctored and graded exams. Co-instructor with Dr. Scott Hamilton

Spring 2021 Instructor of Record, MSCI 445: Projects in Marine Ecology (CSUMB)
Virtually taught a project-based group capstone course for upper-level marine science students. Work with 20 students to develop skills for data collection, statistical analysis, scientific writing and presentation. Co-instructor with Dr. Alison Haupt

Fall 2019 Teaching Assistant, BIOL252: Anatomy and Physiology
Instructor: Dr. Corey Johnson (UNC-CH)
Taught 2 - 3-hour courses per week. Responsibilities consisted of preparing or adapting lecture materials, lecturing for 1.5-2 hours with hands-on group activities, assisting with model identifications, exam preparation, proctoring and grading.

2016-2018 Graduate Research Consultant, ENEC 304: Restoration Ecology

Instructor: Dr. Geoffrey Bell (UNC-CH)

Mentored student groups of 5-6 students through semester long research project from development to final report and presentation. Designed and gave guest lectures to class.

2015-2016 Teaching Assistant, ENEC202: Introduction to Environmental Sciences

Instructor: Dr. Geoffrey Bell (UNC-CH)

Led 2 – 3 hour lab sections per week. Organized laboratory supplies and activities. Developed protocol/methodology for and implemented a hands-on hydrology laboratory. Assisted with exam preparation, proctoring and grading for entire course.

Invited Guest lectures

Boston University CAS BI 260: Marine Biology, “Estuaries” (Spring 2023)

UGA ECOL 4050/6050: Ichthyology, “Marine Fisheries and Conservation” (Fall 2022)

CSUMB MSCI 185: Adventures in Marine Science, “Perspectives of a postdoc: marshes to MPAs” (Spring 2021)

UNC MSCI 101: Introduction to Marine Sciences, “Linkages between coastal habitats and fisheries” (Spring 2020)

UNC ENEC 304: Restoration Ecology, “Oyster reef restoration” (Fall 2016, Fall 2018)

Invited Seminars

-
- | | |
|-------------|--|
| 2023 | Ziegler, S. L. Patterns and drivers of spatial variation in coastal ecosystem structure and function. <i>College of William and Mary. Department of Biology Homecoming Seminar.</i> October 2023 |
| 2023 | Ziegler, S. L. Drivers of spatial variability in coastal habitat structure and function. <i>Coastal Carolina University, Coastal, Marine and Wetland Studies Graduate Seminar.</i> March 2023. |
| 2022 | Ziegler, S.L. Environmental drivers of fish-habitat linkages across space and time. <i>University of Georgia. Department of Marine Sciences Seminar Series.</i> September 2022. |
| 2022 | Ziegler, S. L. Environmental drivers of community structure, food web dynamics, and disease across coastal seascapes. <i>University of Georgia. Odum School of Ecology Seminar Series.</i> August 2022. |
| 2021 | Ziegler, S. L. Spatial variation in fish-habitat linkages across diverse coastal seascapes. <i>Old Dominion University. Biological Sciences Seminar.</i> September 2021. |
| 2021 | Ziegler, S.L. Geography drives variation in coastal habitats for fish communities: a tale of three seas. <i>North Carolina State University. Center for Marine Science and Technology (CMAST) Seminar Series.</i> March 2021. |
| 2021 | Ziegler, S.L. Geographic variation in salt marsh structure and function for fish communities. <i>UC Davis Wildlife, Fish and Conservation Biology Seminar Series.</i> January 2021. |
| 2020 | Ziegler, S.L. Geographic variation in predator-prey and food web dynamics across salt marsh-estuarine boundaries. <i>The University of Texas Marine Science Institute Seminar Series.</i> June 2020. |

- 2019** **Ziegler, S.L.**, K.W. Able, and F.J. Fodrie. Dietary shifts across biogeographic scales alter spatial subsidy dynamics. *Concepts and Controversies in Tidal Marsh Ecology, Revisited workshop*. November 2019.
- 2018** **Ziegler, S.L.**, J. H. Grabowski, C. J. Ballie, L.A. Yeager and F. J. Fodrie. Landscape ecology influences estuarine community dynamics and service delivery. *OneNOAA Science Seminar Series*. April 2018.

Presentations (* indicates mentee)

- 2023** **Ziegler S.L.**, G. Gibbs*, M. J. Pierce, J. S. Lesser, J. A. Nelson, M. Alber, and J. E. Byers. Intra- and inter-site variation in marsh resource use by estuarine consumers. Coastal Estuarine Research Federation Biennial Meeting. November 2023.
- 2023** Pierce M., J. Grissett, S. Williams, T. Lynn, **S. L. Ziegler**, M. Alber, S. Pennings, D. Mishra, C. Angelini, and J. E. Byers. Scaling the effects of wrack across a salt marsh disturbance-scape. Coastal Estuarine Research Federation Biennial Meeting. November 2023.
- 2023** Yando E. S., S. F. Jones, W. R. James, D. D. Colombano, D. I. Montemayor, S. Nolte, J. L. Raw, **S. L. Ziegler**, L. Chen, D. Daffonchio, M. Fusi, K. Rogers, and L. Sergienko. 2023. An integrative salt marsh conceptual framework for global comparisons. Coastal Estuarine Research Federation Biennial Meeting. November 2023.
- 2023** Gibbs, G.*, E. J. Resetarits, and **S. L. Ziegler**. Effects of marsh edge types and parasitism on consumption in salt marshes. Sapelo Island Research Symposium. July 2023. Poster.
- 2023** **Ziegler, S. L.**, and J.E. Byers. Effects of multiple environmental stressors in southeastern oyster reefs. 51st Annual Benthic Ecology Meeting. April 2023.
- 2023** Pierce M., J. Grissett, S. Williams, T. Lynn, **S. L. Ziegler**, M. Alber, S. Pennings, D. Mishra, C. Angelini, and J. E. Byers. Effect of wrack disturbances on *Spartina alterniflora* and saltmarsh invertebrate communities. 51st Annual Benthic Ecology Meeting. April 2023.
- 2023** Moore, K.P.*, **S.L. Ziegler**, and J. E. Byers. The effects of physical traits and parasite infection on Eastern oyster engineering function. 51st Annual Benthic Ecology Meeting. April 2023. Poster.
- 2023** Ellis, W.T.*, **S.L. Ziegler**, and J. E. Byers. Do predators prefer bored prey? The effects of boring sponge on prey selection by the Atlantic oyster drill. 51st Annual Benthic Ecology Meeting. April 2023. Poster.
- 2023** Moore, K.P.*, **S.L. Ziegler**, and J. E. Byers. Size doesn't matter: the effects of physical traits on filtration by Eastern oysters. Odum School of Ecology Graduate Student Symposium. January 2023. Poster. **(Winner of Best Poster Award)**
- 2023** Ellis, W.T.*, **S.L. Ziegler**, and J. E. Byers. Do predators prefer bored prey? The effects of boring sponge on prey selection by the Atlantic oyster drill. Odum School of Ecology Graduate Student Symposium. January 2023. Poster
- 2022** **Ziegler S.L.** J. M. Johnson*, R. O. Brooks R. M. and S. L. Hamilton. Do marine reserves protect fish communities from the effects of marine heatwaves? 50th Annual Benthic Ecology Meeting. March/April 2022.
- 2021** **Ziegler, S. L.**, R. O. Brooks, S. L. Hamilton, B. I. Ruttenberg, J. A. Chiu, R.T. Fields, G T. Waltz, C. Shen, D. E. Wendt and R. M. Starr. External fishing effort regulates the positive effects of no-take marine protected areas. 102nd Annual Western Society of Naturalists Meeting. November 2021.
- 2021** Johnson, J. M.*, **S. L. Ziegler**, R. O. Brooks, S. L. Hamilton and R. M. Starr Examining the effects of the 2014-2015 marine heatwave on fish community composition along the

- central California coast. 102nd Annual Western Society of Naturalists Meeting. November 2021. Poster.
- 2021** Brooks, R.O., **S. L. Ziegler**, S. L. Hamilton and R. M. Starr. Assessing fish spillover using 14 years of tag-recapture data across four central California MPAs. 102nd Annual Western Society of Naturalists Meeting. November 2021.
- 2021** **Ziegler, S.L.**, A. R. McMains, P. C. Lopez-Duarte, J.A. Olin, M. J. Polito and F. J. Fodrie. Geographic variation in marsh-derived carbon contribution to transient estuarine predators. Coastal Estuarine Research Federation Biennial Meeting. November 2021.
- 2020** **Ziegler, S.L.**, J. Caselle, A. Kahn, A. Lauermann, J. Lindholm, B. Tissot, C. Bretz, K. Cieri, J. Mohay, P. Salinas Ruiz, and R. Starr. Changes in fish communities in deep rocky portions of California MPAs. 101st Annual Western Society of Naturalists Meeting. November 2020.
- 2019** **Ziegler, S.L.**, L.R. Clance*, A.R. McMains*, M.D. Miller*, F.J. Fodrie. Influence of marsh island size on nekton communities: intermediate optima rather than SLOSS? Coastal Estuarine Research Federation Biennial Meeting. November 2019.
- 2019** Clance, L.R. *, **S.L. Ziegler** and F.J. Fodrie. Contaminants disrupt aquatic trophic interactions via decreased predator efficiency. Coastal Estuarine Research Federation Biennial Meeting. November 2019. Poster.
- 2019** **Ziegler, S.L.**, K.W. Able, and F.J. Fodrie. Dietary shifts across biogeographic scales alter spatial subsidy dynamics. Concepts and Controversies in Tidal Marsh Ecology, Revisited workshop. November 2019.
- 2019** **Ziegler, S.L.** F.J. Fodrie. How do lower-estuary marshes support fishery production in NC. Research Applied to Managing the Coast Symposium. March 2019.
- 2018** **Ziegler S.L.**, K.W. Able, and F.J. Fodrie. Regional differences in trophic interactions among marsh-associated fishes. 47th Annual Benthic Ecology Meeting. March 2018.
- 2018** **Ziegler S.L.**, K.W. Able, and F.J. Fodrie. Regional differences in trophic interactions among marsh-associated fishes driven by tidal regime. 32nd Annual Tidewater Chapter of the American Fisheries Society Meeting. January 2018.
- 2018** Clance L.R. *, **S.L. Ziegler**, and F.J. Fodrie. Effect of edge-to-area ratios of marsh habitat and seasonality on condition of juvenile fishes. 32nd Annual Tidewater Chapter of the American Fisheries Society Meeting. January 2018. Poster. (**Winner of Best Poster Award**)
- 2017** **Ziegler S. L.**, F. J. Fodrie, Snailed it: the effects of tidal inundation and structural complexity on predator-prey dynamics in salt marshes. 46th Annual Benthic Ecology Meeting.
- 2015** **Ziegler S. L.**, P. M. Bippus*, and J. E. Duffy. BiteMap: A simple, scalable assay to quantify predation pressure along environmental gradients. 44th Benthic Ecology Meeting.
- 2015** Allen, J.D., A.F. Armstrong, **S.L. Ziegler** and S.T. Abdel-Raheem. Environmental induction of polyembryony in echinoderms. Developmental Biology of Sea Urchins.
- 2014** **Ziegler S. L.**, J. S. Lefcheck, J. P. Richardson and J. E. Duffy. Shifts in mesograzer community structure following two major eelgrass die-offs in the Chesapeake Bay. 43rd Benthic Ecology Meeting. Poster.
- 2014** Richardson, J.P., J.S. Lefcheck, **S.L. Ziegler**, and J.E. Duffy. Size structure drivers of crustacean grazer epifauna in a Chesapeake Bay *Zostera marina* bed. 43rd Benthic Ecology Meeting.
- 2013** **Ziegler, S.L.**, and J.D. Allen. Developmental responses to multiple environmental stressors in echinoid echinoderms. 42nd Benthic Ecology Meeting. Poster.

Mentoring

- 2023-pres.** Elianna Fox, Undergraduate student (UGA). The effects of learning on predator foraging behavior.
- Hanna Demmler, Undergraduate student (UGA). Influence of microparasite infection on ecosystem engineering function.
- Camy Teichman, Undergraduate student (UGA). Oyster community ecology.
- 2022-pres.** Jordan Cutts, Undergraduate student (UGA). Oyster disease ecology.
- 2023** Grace Gibbs, GCE LTER intern/REU Student (Juniata College), The effects of salt marsh edge geomorphology on consumption.
- 2022-2023** William Ellis, Undergraduate student (UGA), Effects of boring sponge (an oyster ectoparasite) on prey selection by the Atlantic oyster drill. ***Senior Thesis**
- Katherine Moore, Undergraduate student (UGA). Effects of individual traits (body size and condition) and parasites on filtration rates by the Eastern oyster. ***Senior Thesis**
- Sarah Piña Serrano, Undergraduate student (UGA). Scaling up filtration from individuals to reefs.
- Blake Bayer, Undergraduate student (UGA). Influence of shellfish density and size structure on filtration capacity.
- 2022** Sofia Markiewicz, REU Student/Honor's thesis (Scripps College), Spatial variation in oyster macroparasites across the Georgia coast. ***Senior Honor's Thesis**
- 2021** Jasmin Johnson, REU Student (CSUMB), Examining the effects of a marine heatwave on fish diversity and community composition along the central coast of California.
- 2018-2019** Andrew McMains, Research technician, Assessing the residency of juvenile fishes to marsh islands of varying size and shape.
- 2017-2019** Lily Olmo, Undergraduate student (UNC), Blocking marsh access for nekton to explore trophic flows at the marsh-estuary boundary.
- 2017-2018** Lauren Clance, Research technician, Contaminants disrupt aquatic trophic interactions via decreased predator efficiency & Effect of edge-to-area ratios of marsh habitat and seasonality on condition of juvenile fishes.
- 2016-2019** Marianna Miller, Undergraduate student (UNC), Impacts of structural complexity and edge effects on predation in a salt marsh.
- 2018** Claire Spear, summer intern (Univ. of Tampa). Coastal fish ecology.
- 2014** Paige Bippus, REU Student (College of Charleston), Predation pressure across a salinity gradient in Chesapeake Bay tidal marshes

Graduate committees

- 2022-pres.** Wil Atencio, Georgia Southern University. Master's Thesis.

Outreach

2022	Participant, EcoReach, Community Wetland Education Day for Jefferson City Schools
2021-2022	Presenter, CCFRP Moss Landing, Angler Appreciation Workshops
2021	Committee member, Monterey Bay Society for Women in Marine Science
2019	Presenter, Skype a Scientist, >100 students from Iowa, Illinois, and Nebraska
2018	#WhatFishWednesday, Twitter Educational Outreach
2017	Participant, NC Science Festival (NovoSci) Invite-a-Scientist Program
2016-2018	Logistics Lead, SciREN Coast, Science Research and Education Network
2016-2018	Participant and Organizer, NC Seafood Festival Education Day
2016-2017	Outreach Chair, Graduate Student Association, UNC-IMS
2016	Participant, University of North Carolina Science Expo
2015-2018	Student Blogger, UNder the C Blog

Professional Service

2023	Lead convener, Coastal Estuarine Research Federation (CERF) conference 2023 Special Session, Cross-habitat energy flows in coastal and estuarine systems. Nov 2023
2023	Co-convener, Coastal Estuarine Research Federation (CERF) conference 2023 Special Session, Ecological patterns and processes of coastal ecosystem dynamics in changing `scapes`. Nov 2023
2023	Steering committee member, UGA Postdoctoral Scholars Program: Future Faculty for Inclusive Research Excellence (FFIRE)
2022-pres.	Postdoctoral collaborator, Georgia Coastal Ecosystem Long Term Ecological Research (LTER)
2022-pres.	Postdoctoral collaborator, Florida Coastal Everglades LTER
2022	Undergraduate Presentation Judge, Benthic Ecology Meeting, March/April 2022
2021	Lead convener, Coastal Estuarine Research Federation (CERF) conference 2021 Special Session, Cross-habitat energy flows in coastal and estuarine systems. Nov 2021
2020	Session chair, Western Society of Naturalists (WSN) conference, Community Ecology session & General 15-minute session, Nov 2020
2020	Student Presentation Judge, WSN conference, Nov 2020
2020	Mentor, WSN DEI mentorship program (2 students), Nov 2020
2019	Moderator, CERF conference, Population & Community Ecology session, Nov 2019
2019	Undergraduate Presentation Judge, CERF conference, Nov 2019
2018-2019	Seminar Chair, UNC Environment, Ecology and Energy Program.

Workshops:

2021-pres.	Working group member, National Center for Ecological Analysis and Synthesis (NCEAS), California MPA network performance
2022	Co-organizer, Synthesizing LTER data to determine drivers of food webs. 2023 LTER All Scientist Meeting. Co-Organizer. Sept. 2022
2022	Co-organizer, Incorporating animal movements into ecosystem models. 2023 LTER All Scientist Meeting. Co-Organizer. Sept. 2022
2021	Participant, Coastal and Estuarine Restoration: Identifying and Assessing Habitat Service Benefits to Fish and Invertebrates, Nov. 2021
2019	Presenter, Concepts and Controversies in Tidal Marsh Ecology, Revisited. Nov. 2019
2016	Participant, Structural Equation Modeling Workshop by Dr. Jarrett Byrnes. Jan. 2016

Grant reviewer: NOAA Marine Fisheries Initiative (MARFIN), NOAA RESTORE Science Program

Peer reviewer:

Global Change Biology; Journal of Applied Ecology; Estuaries and Coasts; Biological Conservation; Ecosphere; Marine Ecology Progress Series; BioInvasions Records; Environmental Biology of Fishes; ICES Journal of Marine Science; Ecological Engineering; Ecology Letters; Bulletin of Marine Science; Hydrobiologia; Journal of Experimental Marine Biology and Ecology

Society Memberships:

Coastal Estuarine Research Federation, Benthic Ecology Meeting Society, American Fisheries Society-Tidewater Chapter, Sigma Xi, Western Society of Naturalists, Society of Women in Marine Sciences, Southeastern Estuarine Research Society