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# Erin P. Kiskaddon

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## Research & Professional Interests

Estuarine and coastal management, conservation, and restoration with an emphasis on ecosystem services.

## Education

2014-2017 M.S. in Biology
University of South Florida, Department of Integrative Biology, Tampa, FL
Thesis: *Resource use by and trophic variability of* Armases cinereum *(Crustacea, Brachyura) across human-impacted mangrove transition zones*

2009-2013 B.Sc. in Biology, Whitman College, Walla Walla, WA

## Professional Appointments

2021-present **Research Scientist 1**
Department of Coastal Ecology, The Water Institute of the Gulf, Baton Rouge, LA

2019-2021 **Research Associate 2**
Department of Coastal Ecology, The Water Institute of the Gulf, Baton Rouge, LA

2017-2019 **Laboratory Manager & Research Technician**
Sediment Ecology Lab, Dauphin Island Sea Lab, Dauphin Island, AL

## Selected Projects

2022-present **Mobile City-Wide Resilience Assessment and Plan.** *The Water Institute of the Gulf, City of Mobile.* The Water Institute has been tasked with performing a resilience assessment and developing a resilience plan for Mobile, AL. In close collaboration with the City's Chief Resilience Office and key internal and external stakeholder groups, work is ongoing to ensure that Mobile has the capacity to survive, adapt, and thrive in the face of acute shocks or chronic stressors it may experience. Specific roles on this project include: 1) project management, 2) partner coordination, and 3) technical writing.

2022-present **Unlocking the Power of Blue Carbon.** *The Water Institute of the Gulf, Chevron Technology Center.* The Water Institute is continuously innovating the assessment of carbon sequestration potential and net ecosystem carbon balance in coastal habitats. This project involved remote sensing and deep learning methodology to map vegetation of Port Fourchon, LA; these data were used to update a Coastal Wetland Carbon Model specific to black mangroves and was validated through field observations. Specific roles on this project include: 1) field coordination, and 2) technical writing.

2020-present **Louisiana Climate Action Plan.** *The Water Institute of the Gulf, Louisiana's Governor's Office of Coastal Activities.* This project involved assisting the Governor's Office in development of Louisiana's first Climate Action Plan through a high-engagement stakeholder-driven approach based around structured decision making. This project is ongoing through development of the first annual report summarizing progress towards plan implementation. Specific roles on this project include: 1) project management, 2) partner coordination, and 3) technical writing and advising.

2022 **Review and Analysis of USACE Strategic Plans for the Integration of Science and Technology.** *The Water Institute of the Gulf, U.S. Army Corps of Engineers.* This project involved workshop facilitation and drafting of an actionable strategic response plan addendum to the USACE Southwestern Division's Civil Works Strategic Plan. Specific roles on this project included: 1) project management, 2) meeting facilitation, and 3) partner coordination.

2021-2022 **Development of a Lower Trophic Level Baseline Inventory and Monitoring Program to Support Restoration of Living Resources in Barataria Estuary, LA.** *The Water Institute of the Gulf, National Oceanic, Atmospheric Administration (NOAA).* This collaborative effort between the Water Institute of the Gulf and NOAA engaged scientific experts from Louisiana State University, University of Louisiana Lafayette, and Dynamic Solutions to develop a plan to improve the understanding of the foundation of the food web through inventory and assessment of lower trophic levels of the Barataria Estuary. Specific roles on this project include: 1) technical leadership, 2) project management, 3) partner coordination, and 4) technical writing.

2019-2021 **Advancing the Goals of SECAS: A Program to Improve SECAS Blueprint Utility in the Gulf of Mexico.** *The Water Institute of the Gulf, U.S. Fish and Wildlife Service*. This project was conducted to advance the management applicability and use of the SECAS blueprint in prioritizing, executing, and assessing conservation and restoration projects in the northern Gulf of Mexico. Specific roles on this project included: 1) technical development of the Gulf wide application of the SECAS blueprint, 2) project management, and 3) partner engagement and coordination across state, federal, and private agencies.

2019-2021 **Support for LA TIG Monitoring and Adaptive Management Planning**. *The Water Institute of the Gulf, Coastal Protection and Restoration Authority*. Development of a Monitoring and Adaptive Management Strategy for the LA Trustee Implementation Group (TIG) with coordination with LA TIG Trustees. Project roles included: 1) Trustee coordination and facilitation support, 2) project management, and 3) technical writing.

2015-2019 **Investigating Shallow Infaunal Responses to the Deepwater Horizon Event.** *University of South Florida, the Dauphin Island Sea Lab*. A multi-disciplinary research effort to assess long-term recovery of benthic invertebrate communities in the Chandeleur Islands, LA. Field campaigns were conducted between 2015 and 2016 in the Chandeleur Islands, LA, and Tampa Bay, FL, followed by mesocosm experiments at the Dauphin Island Sea Lab. Laboratory analyses and sample processing was conducted through 2019. Project roles included: 1) project management, 2) field and laboratory coordination across multiple PIs, 3) data management, 4) data analysis and technical writing.

2018-2019 **Investigating the Infaunal Activities on Acoustic Wave Propagation in Marine Sediments.** *The Dauphin Island Sea Lab*. Laboratory and field-based research to understand how sound can be used to characterize infaunal burrowing activities in marine sediments. Led by Kelly Dorgan, PhD, work was conducted at the Dauphin Island Sea Lab in mesocosms and offshore, as well as at the Darling Marine Center in Maine. Project roles included: 1) field and laboratory coordination, 2) data management, 3) data analysis and technical writing.

## Peer-Reviewed Publications

1. Gadeken K, **E Kiskaddon**, JM Moore, K Dorgan. 2022. The weird and wonderful world of worms. Frontiers for Young Minds. Biodiversity. https://doi.org.10.3389/frym.2022.902248.
2. Lee KM, GR Venegas, MS Ballard, KM Dorgan, **E Kiskaddon**, AR McNeese, RS Wilson. 2022. Impacts of infauna, worm tubes, and shell hash on sediment acoustic variability and deviation from the viscous grain shearing model. Journal of the Acoustical Society of America. https://doi.org/10.1121/10.0014907.
3. **Kiskaddon E,** H. Bienn, SA Hemmerling, S Dalyander, A Grismore, J Parfait, MD Miner, C Cameron, TE Hopkins, Y Allen, D Jones-Farrand, M Martin, BE Tirpak, M Green, K Rhinehart, TJB Carruthers. 2022. Supporting habitat restoration in the northern Gulf of Mexico through synthesis of data on multiple and interacting benefits and stressors. Journal of Environmental Management. 318: 115589. https://doi.org/10.1016/j.envman.2022.115589.
4. **Kiskaddon E,** K Gadeken, SK Berke, S Bell, JM Moore, KM Dorgan. 2022. Oil disturbance reduces infaunal family richness but does not affect phylogenetic diversity. Frontiers in Environmental Science. https://doi.org/10.3389/fenvs.2022.950493.
5. Berke SK, K Dorgan, **E Kiskaddon**, SS Bell, KJ Gadeken, WC Clemo, E Keller, T Caffray. 2022. Shallow infaunal responses to the Deepwater Horizon event: implications for studying future oil spills. Frontiers in Environmental Science. https://doi.org/10.3389/fenvs.2022.950458.
6. Carruthers TJB, **E Kiskaddon**, MM Baustian, KM Darnell, LC Moss, CL Perry, C Stagg. 2021. Tradeoffs in habitat value to maximize natural resource benefits from coastal restoration in a rapidly eroding wetland: is monitoring land area sufficient? Restoration Ecology e13564. https://doi.org/10.1111/rec.13564.
7. La Peyre MK, S Sable, C Taylor, KS Watkins, **E Kiskaddon**, M Baustian. 2021. Effects of sample gear on estuarine nekton assemblage assessments and food web model simulations. Ecological Indicators 133: 108404. https://doi.org/10.1016/j.ecolind.2021.108404.
8. Dorgan KM, RP Parker, W Ballentine, SK Berke, **E Kiskaddon**, K Gadeken, E. Weldin, WC Clemo, T Caffray, S Budai, S Bell. 2020. Investigating the sublethal effects of oil exposure on infaunal behavior, bioturbation, and sediment oxygen consumption. Marine Ecology Progress Series 635: 9-24. https://doi.org/10.3354/meps13215.
9. Dorgan KM, W Ballentine, G Lockridge, **E Kiskaddon**, MS Ballard, KM Lee, PS Wilson. 2020. Impacts of simulated infaunal activities on acoustic wave propagation in marine sediments. The Journal of the Acoustical Society of America 147: 812. https://doi.org/10.1121/10.0000558.
10. **Kiskaddon** E, Chernicky K, Bell S. 2019. Resource use by and trophic variability of *Armases cinereum* (Crustacea, Brachyura) across human-impacted mangrove transition zones. PLOS ONE 14(2): e0212448. https://doi.org/10.1371/journal.pone.0212448.

## Recent Presentations

2022 **Kiskaddon E**, M Baustian, IC Zink, J Doerr, J. Leo, C Schupp, S Giordano, C Gothreaux, CN Glaspie. Development of a lower trophic level baseline inventory and monitoring program to support restoration of living resources in Barataria Estuary, LA. Oral Presentation. Benthic Ecology Meeting Society • 29 March-2 April 2022 | American Fisheries Society Louisiana Chapter • 26 May 2022 | Gulf Estuarine Research Society • 27-29 October 2022 | Restore Americas Estuaries Coastal and Estuarine Summit • 4-8 December 2022.

2021 **Kiskaddon E**, H Bienn, S Hemmerling, S Dalyander, A Grismore, J Parfait, M Miner, TE Hopkins, Y Allen, D Jones-Farrand, M Martin, BE Tirpak, TJB Carruthers. A strategic conservation blueprint for natural resource management in the northern Gulf of Mexico. Oral Presentation. Coastal & Estuarine Research Federation meeting (Virtual) • 1-11 November 2021.

## Certifications

2022 Professional in Project Management (PPM) – Accreditation Agency: Global Association for Quality Management (GAQM)

2018 Certified Motorboat Operator (MOCC) – Accreditation Agency: Dauphin Island Sea Lab, DOI

2007 Open Water Dive Certified – Accreditation Agency: NAUI