

Jessica Henkel, MS, Ph.D.
 Director of Research Operations
 Director of RESTORE Act Center of Excellence for Louisiana
 The Water Institute
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EDUCATION

Tulane University	New Orleans, LA	Ecology and Evolutionary Biology	Ph.D., 2015
University of New Orleans	New Orleans, LA	Biological Sciences, Conservation Biology	MS, 2009
Stony Brook University	Stony Brook, NY	English	BA, 2004

RESEARCH INTERESTS

Structured decision making, large-scale restoration and resilience planning, avian ecology.

PROFESSIONAL EXPERIENCE

The Water Institute	Director of Research Operations	2024–Present
	Director of RESTORE Act Center of Excellence for Louisiana	2022–Present
	Deputy Director to the Chief Scientist	2022–2024
Gulf Coast Ecosystem Restoration Council	Science Advisor and Coordinator	2017–2022
	Ecosystem Science Specialist	2016–2017
National Academies of Sciences, Engineering, and Medicine	Science Policy Fellow	2015–2016
Tulane University, Ecology & Evolutionary Biology Dept.	EPA Star Research Fellow	2012–2015
Cambridge University Press	Production Controller	2005-2006
	Editorial Assistant, Ecology and Engineering	2004-2005

PROFESSIONAL SOCIETY MEMBERSHIPS

- American Association for the Advancement of Science, 2017–Present
- Coastal and Estuarine Research Foundation, 2020–Present
- USFWS—Decision Analysis Certification Program, 2018–Present

AWARDS AND HONORS

- RESTORE Council Special Act Award, 2020
- DOI Decision Analysis Certificate Program Cohort, 2018–2024
- NCEAS Open Science for Synthesis Fellow, 2017
- George Henry Penn Award, Tulane University, 2016
- EPA Science to Achieve Results (STAR) Graduate Fellow, 2012–2015
- 1st Place, Graduate Student Presentations, State of the Coast Conference, 2014
- National Wildlife Federation Young Leader, 2011–2014
- James D. Watkins Student Award for Excellence in Research, 2014
- Tulane University Newcomb Fellows Grant, 2011–2012
- 2nd Place, Posters, State of the Coast Conference, 2012
- NSF Grant for Rapid—Response—Population Ecology, 2010–2011
- 2nd Place, Student Presentations, Waterbirds/12th North American Crane Working Group, 2011
- Louisiana Department of Wildlife and Fisheries, Environmental Education Grant, 2010, 2012
- Dee Saunders Dundee Memorial Graduate Student Scholarship, 2010
- LSU—ACRES Cooperative Research Grant, 2008–2010

TEACHING EXPERIENCE

Facilitator, Teaching Assistant, and Ph.D. Researcher at Tulane University’s Department of Ecology and Evolutionary Biology. Facilitator: 2014, An Introduction to Evidence-Based Undergraduate STEM Learning. Graduate Teaching Assistant: 2010–2012, Ecology Lab, Diversity of Life Lab.

Teaching Assistant, MS Researcher at University of New Orleans’ Department of Biological Sciences. Graduate Teaching Assistant: 2007–2009, Form and Function, Biodiversity Lab for both science and non-science majors.

COMMUNITY SERVICE

Volunteer	Girls on the Run	2021–Present
Presenter	Tulane Women in Science	2019–2020
Presenter	Lycée Français Climate Day, New Orleans	2019
Passerine Bird Banding	Woodlands Conservancy	2014–2016
Group Leader	Girls in Science at Tulane	2012–2016

TRAINING COURSES

- [Instructor] USFWS/USGS Course ALC3199 – Collaboration and Conflict Transformation in Multiparty Processes, 2025 (upcoming)
- [Instructor] USFWS/USGS Course ALC3170 – Fundamentals of Structured Decision Making, 2022
- USFWS/USGS Course ALC3190 – Expert Elicitation and Facilitation, 2023
- USFWS/USGS Course ALC3176 – Adaptive Management, 2019
- NCEAS Open Science for Synthesis, 2017
- USFWS/USGS Course ALC3171 – Introduction to Structured Decision Making, 2017
- Certified Diver, Hazmat, 2006

NOTABLE PROJECTS

Principal Investigator/Avian Monitoring Current
Louisiana Department of Wildlife and Fisheries and Louisiana Trustee Implementation Group

The collection and analysis of aerial photographic surveys have been used to monitor shrub- and select ground-nesting waterbird species across the northern Gulf of Mexico since 2010. This project entails the aggregation of >50,000 photos and associated databases through the development of a geospatially enabled online portal that enables users to explore total nests and birds observed over various geographical areas and time scales.

Director/Louisiana RESTORE Act Center of Excellence Current
Coastal Protection and Restoration Authority

The mission of the RESTORE Act Center of Excellence for Louisiana (LA-COE) is to provide research directly relevant to implementation of Louisiana’s Coastal Master Plan by administering a competitive grants program and providing the appropriate coordination and oversight support to ensure that success metrics are tracked and achieved. Currently in its third funding cycle, the LA-COE oversees nearly \$4M in research funding.

Technical Advisor/Structured Decision Making to Support Long-Term Strategic Planning Current

Capital Area Ground Water Conservation Commission

The Institute is working with CAGWCC and other stakeholders to identify and evaluate feasible and cost-effective, science-based alternatives to meet long-term water needs through evaluation of the current science available on groundwater use and to identify management alternatives. The aim is to develop a strategic plan for the long-term water supply for users in the district.

Project Manager and SDM Facilitator/ Resilient Jacksonville 2022–2023

City of Jacksonville

Developed a roadmap for adapting to a changing climate, accommodating a growing population, guiding new urban development, and planning for uncertain shocks and stressors. The plan leverages local expertise with science-based assessments to identify specific, implementable actions and prioritize investments that will strengthen the city's resilience.

Science Advisor and Coordinator/Gulf Coast Ecosystem Restoration Council 2016–2022

Gulf Coast Ecosystem Restoration Council

Led the Best Available Science Review Process and technical coordination of the Council's 2017 FPL and the 202021 FPL 3, resulting in the approval of over \$188 million in funding for restoration activities across the Gulf. Facilitated the development of, and updates to, guidelines for restoration project metrics, monitoring data collection and management for RESTORE Council funded activities. This included leading the coordination of the Council's Monitoring and Assessment Workgroup, a technical workgroup with representation from the Council's 11 member agencies.

PUBLISHED WORKS

For a full list of publications, please visit [Jessica's Google Scholar page](#).

Peer-Reviewed Publications

- Windhoffer, E.D., Carruthers, T.J.B., Henkel, J.R., Gleason, J.S., Wiebe, J.J. Leveraging co-production within ecosystem restoration to maximize benefits to coastal birds. (2024) *Journal of Environmental Management*, (360), 121093.
- Henkel, J., & Dausman, A. (2020). A short history of funding and accomplishments post-Deepwater Horizon. *Shore & Beach*, (8), 11.
- Keating, K., Gloekler, M., Kinner, N., Mesick, S., Peccini, M., Shorr, B., Showalter, L., & Henkel, J. (2020). Coordination of long-term data management in the Gulf: Lessons learned and recommendations from two years of cross-agency collaboration. *Shore and Beach*, (88), 17.
- DeAngelis, B., Sutton-Grier, A., Colden, A., Arkema, K., Baillie, C., Bennett, R., Benoit, J., Blicht, S., Chatwin, A., Dausman, A., Gittman, R., Greening, H., Henkel, J., Houge, R., Howard, R., Hughes, A., Lowe, J., Scyphers, S., Sherwood, E., Grabowski, J. (2020). Social factors key to landscape-scale coastal restoration: Lessons learned from three U.S. case studies. *Sustainability*, 12(869).
- Beck, M. W., Sherwood, E. T., Henkel, J. R., Dorans, K., Ireland, K., & Varela, P. (2019). Assessment of the cumulative effects of restoration activities on water quality in Tampa Bay, Florida. *Estuaries and Coasts*, 42(7), 1774–1791.

- Gittman, R., Baillie, C., Arkema, K., Bennett, R., Benoit, J., Blitch, S., Brun, J., Chatwin, A., Colden, A., Dausman, A., DeAngelis, B., Herold, N., Henkel, J., Houge, R., Howard, R., Hughes, A. R., Scyphers, S., Shostik, T., Sutton-Grier, A., & Grabowski, J. (2019). Voluntary restoration: Mitigation's silent partner in the quest to reverse coastal wetland loss in the USA. *Frontiers in Marine Science*, 6.
- Kolker, A., Dausman, A., Allison, M., Brown, G., Chu, P., de Mutsert, K., Fitzpatrick, C., Henkel, J. R., Justic, D., Kleis, B., McCoy, E., Meselhe, E., & Parsons Richards, C. (2018). Rethinking the River: Research informed approaches to managing the river-dominated coastal zone. *Eos*, 99.
- Henkel, J., & Taylor, C. (2015). Migration strategy predicts stopover behavior in migrating shorebirds on the northern Gulf of Mexico. *Animal Migration*, 2(1).
- Henkel, J. (2015). *Migration ecology of shorebirds on the northern Gulf of Mexico and effects of the Deepwater Horizon oil spill* [Ph.D.]. Tulane University.
- Coblentz, K., Henkel, J., Sigel, B., & Taylor, C. (2015). The structure of infaunal invertebrate communities in intertidal habitats in the northern Gulf of Mexico. *PeerJ*, 3.
- Coblentz, K., Henkel, J., Sigel, B., & Taylor, C. (2015). The use of laser diffraction particle size analyzers for inference on infauna-sediment relationships. *Estuaries and Coasts*, 38, 699–702.
- Henkel, J., Sigel, B., & Taylor, C. (2014). Oiling rates and condition indices of shorebirds in the northern Gulf of Mexico following the Deepwater Horizon oil spill. *Journal of Field Ornithology*, 85, 408–420.
- Henkel, J. R., Sigel, B. J., & Taylor, C. M. (2012). Large-scale impacts of the Deepwater Horizon oil spill: Can local disturbance affect distant ecosystems through migratory shorebirds? *BioScience*, 62(7), 676–685.
- Henkel, J., Jones, K., Howard, J., Hereford, S., Savoie, M., & Leibo, S. (2011). Integrating microsatellite and pedigree analyses to facilitate the captive management of the endangered Mississippi sandhill crane (*Grus canadensis pulla*). *Zoo Biology*, 30, 1–14.
- Jones, K., Henkel, J., Howard, J., Lance, S., Hagen, C., & Glenn, T. (2010). Isolation and characterization of polymorphic microsatellite loci for the endangered Whooping crane (*Grus americana*) and their applicability to other crane species. *Conservation Genetics Resources*, 2, 251–254.
- Henkel, J. (2010). Pedigree analyses of the Mississippi Sandhill crane, *Grus canadensis pulla*. *Proceedings of the 11th North American Crane Workshop*, 11, 66–71.
- Henkel, J. (2009). *Evaluation of the Genetic Management of the Mississippi Sandhill Crane, Grus canadensis pulla* [Master of Science]. University of New Orleans.

Technical Reports

- Dalyander, P.S., Tebyanian, N., Henkel, J. (2023). *Resilient Jacksonville: Analysis of Spatial Planning Alternate Future Scenarios*. The Water Institute. Funded by the City of Jacksonville. Baton Rouge, LA, 15 pp.
- Deepwater Horizon Louisiana Trustee Implementation Group. 2023. *Guidance for Coastal Ecosystem Restoration and Monitoring to Create or Improve Bird-Nesting Habitat*. Baton Rouge, LA, 152pp.

Published Plans – Contributing Author

- City of Jacksonville (2023). *Resilient Jacksonville*. Jacksonville, FL, (p. 148).
- Gulf Coast Ecosystem Restoration Council. (2022). *2022 Comprehensive plan update: Restoring the Gulf Coast's ecosystem and economy* (p. 58). Gulf Coast Ecosystem Restoration Council.
- Gulf Coast Ecosystem Restoration Council. (2020). *Gulf Coast Ecosystem Restoration Council funded priorities list 3a* (p. 26).
- Gulf Coast Ecosystem Restoration Council. (2021). *Gulf Coast Ecosystem Restoration Council funded priorities list 3b* (p. 26).
- Gulf Coast Ecosystem Restoration Council. (2019). *Planning framework* (p. 90).

Selected Conference Proceedings and Presentations

- Henkel, J., Lindquist, D., Langlois, S., Windhoffer, E., Jensen, B., Johnson, D., Dausman, A. (2024). *Funding collaborative science to support the Louisiana Coastal Master Plan*. 2024 Gulf of Mexico Conference, Tampa FL.

- Saeed, M., Henkel, J. (2024) *Empowering Tomorrow's Problem Solvers – The Gulf Research Program's Science Policy Fellowship Experience*. 2024 Gulf of Mexico Conference, Tampa FL.
- Henkel, J., Dalyander, S., Tebyanian, N., McHugh, C., Fishbach, J., Patel, A. (2023) *Resilient Jacksonville: Vulnerability Assessment & Alternatives Analysis*. 2023 JEPB-UNF Environmental Symposium, Jacksonville, FL.
- Henkel, J., Windhoffer, E., Carruthers, T., Bienn, H., Wiebe, J. (2023) *Gulf of Mexico Colonial Waterbird Data Monitoring Portal*. State of the Coast, New Orleans, LA.
- Henkel, J. (2020). *A vision for the future: Integrating Gulf of Mexico research* [Opening plenary panelist]. 2020 Gulf of Mexico Oil Spill and Ecosystem Science Conference, Tampa, FL.
- Henkel, J. (2019). *New insights in the Gulf of Mexico nine years after the Deepwater Horizon oil spill* [Panelist]. CERF 2019, Mobile, AL.
- Henkel, J., Beck, M., Sherwood, E. (2019). *Use of open data science to inform restoration projects in estuaries: A Tampa Bay example* [Oral]. 2019 Gulf of Mexico Oil Spill and Ecosystem Science Conference, New Orleans, LA.
- Henkel, J., Bernik, B., Cowan, J. (2018). *RESTORE Council Monitoring and Assessment Program: Developing a shared monitoring and adaptive management vision through coordination and collaboration* [Oral]. Gulf of Mexico Oil Spill and Ecosystem Science Conference, New Orleans, LA.
- Henkel, J., Dausman, A., Cowan, J. (2017). *Quantifying the "so what?" of restoration: A framework for evaluating the ecological and socio-economic outcomes of restoration activities in the Gulf of Mexico* [Oral]. American Geophysical Union fall meeting, New Orleans, LA.
- Henkel, J., Dausman, A., Ettinger, J., Sutter, B. (2016). *Gulf Coast Ecosystem Restoration Council: Holistic restoration approached watershed by watershed* [Oral]. 2016 National Conference on Ecosystem Restoration, Coral Springs, FL.
- Henkel, J., Dausman, A., Sutter, B. (2016). *Gulf Coast Ecosystem Restoration Council, Initial funding priorities list* [Poster]. 2016 Gulf of Mexico Oil Spill and Ecosystem Science Conference, Tampa, FL.
- Henkel, J., Taylor, C.Z. (2015). *A boon, not a barrier: The importance of northern Gulf of Mexico barrier islands to migratory shorebirds* [Oral]. 2015 Waterbirds Meeting, Bar Harbor, ME.
- Henkel, J., Taylor, C.Z. (2015). *Migration ecology of shorebirds on the northern Gulf of Mexico and effects of the Deepwater Horizon oil spill* [Dissertation defense].
- Henkel, J., Taylor, C.Z. (2014). *Oiling rates and condition indices of shorebird communities in the northern Gulf of Mexico following the Deepwater Horizon oil spill* [Oral]. 2014 American Ornithological Conference, Estes Park, CO.
- Henkel, J., Taylor, C.Z. (2014). *Stopover ecology of shorebirds on the northern Gulf of Mexico: How different migration strategies affect habitat use* [Oral]. 2014 Ecological Society of America Meeting, Sacramento, CA.
- Henkel, J., Taylor, C.Z. (2014). *Potential impacts of sea-level rise on the migration ecology of shorebirds on the northern Gulf of Mexico* [Oral]. 2014 State of the Coast Conference, New Orleans, LA.
- Henkel, J., Taylor, C.Z. (2014). *Impacts of the Deepwater Horizon oil spill on shorebird communities in the northern Gulf of Mexico* [Oral]. 2014 Gulf of Mexico Oil Spill and Ecosystem Science Conference, Mobile, AL.
- Henkel, J. (2013). *Impact of the Deepwater Horizon oil spill on migratory shorebirds: The Gulf and beyond* [Presentation and workshop for students]. Bard Early College Program, New Orleans, LA.
- Henkel, J., Taylor, C.Z. (2013). *Variation in the migration ecology of shorebirds on the northern Gulf of Mexico* [Oral]. 5th Western Hemisphere Shorebird Group Meeting, Santa Marta, Colombia.
- Henkel, J., Sigel, B., Taylor, C.Z. (2013). *Effects of the Deepwater Horizon oil spill on migratory shorebirds* [Oral]. 2013 Gulf of Mexico Oil Spill & Ecosystem Science Conference, New Orleans, LA.
- Henkel, J. (2012). *Migration ecology of shorebirds on the northern Gulf of Mexico* [Oral]. North American Ornithological Conference, Vancouver, BC.
- Henkel, J. (2012). *Effects of the Deepwater Horizon oil spill on migratory shorebirds* [Poster]. State of the Coast Conference, New Orleans, LA.
- Henkel, J. (2012). *Effects of the Deepwater Horizon oil spill on migratory shorebirds* [Poster]. 2012 Annual Research Day, School of Science and Engineering, Tulane University, New Orleans, LA.
- Henkel, J. (2012). *Mechanisms and effects of oil contamination on migratory shorebirds in the northern Gulf of Mexico* [Oral]. Effects of Oil on Wildlife, 11th International Conference, New Orleans, LA.
- Henkel, J. (2011). *Mechanisms and effects of oil contamination on migratory shorebirds in the northern Gulf of Mexico* [Oral]. Western Hemisphere Shorebird Group Meeting, Vancouver, BC.

- Henkel, J. (2011). *Evaluation of the genetic management of the Mississippi sandhill crane, grus canadensis pulla* [Oral]. Waterbirds/12th North American Crane Working Group, Grand Island, NE.
- Henkel, J. (2011). *Effects of the Deepwater Horizon oil spill on migratory shorebirds* [Poster]. Waterbirds/12th North American Crane Working Group, Grand Island, NE.
- Henkel, J. (2010). *Importance of bird conservation* [Oral presentation for students]. International Language School in cooperation with the New Orleans Society for Conservation Biology, New Orleans, LA.
- Henkel, J. (2010). *Evaluation of the genetic management of the endangered Mississippi sandhill crane* [Poster]. 2010 Annual Research Day, School of Science and Engineering, Tulane University, New Orleans, LA.
- Henkel, J. (2010). *The evolution of camouflage: Science workshop for girls 9–14* [Oral]. Sallie Ride Science Festival, New Orleans, LA.
- Henkel, J. (2010). *Evaluation of the genetic management and continued conservation of the Mississippi sandhill crane* [Oral]. Mississippi Sandhill Crane Recovery Team Meeting, USFWS, Gautier, MS.
- Henkel, J. (2010). *Evaluation of the genetic management of the endangered Mississippi sandhill crane* [Oral]. 6th Gulf Coast Conservation Biology Symposium, New Orleans, LA.
- Henkel, J. (2009). *Conservation of the endangered Mississippi sandhill crane* [Oral]. Ben Franklin High school: presentation to A.P. Biology Students in cooperation with the New Orleans Society for Conservation Biology, New Orleans, LA.
- Henkel, J. (2009). *Conservation of the endangered populations* [Oral]. International Language School: presentation for students ages 10-12 in cooperation with the New Orleans Society for Conservation Biology, New Orleans, LA.
- Henkel, J. (2008). *Pedigree analyses of the Mississippi sandhill crane (Grus canadensis pulla)* [Oral]. 5th Gulf Coast Conservation Biology Symposium, New Orleans, LA.
- Henkel, J. (2008). *Pedigree analyses of the Mississippi sandhill crane (Grus canadensis pulla)* [Oral]. 11th North American Crane Workshop, Wisconsin-Dells, WI.