**Anna R. Armitage, Ph.D.**
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## EXPERTISE

Dr. Anna Armitage is a broadly trained community ecologist with over 20 years of experience working in coastal wetlands. Her research utilizes multivariate, interdisciplinary field studies to study trophic interactions and anthropogenic impacts in coastal wetland habitats, including marshes, mangroves, and seagrasses. Her current research projects include studies about the effects of nutrient enrichment on ecological interactions and processes in the mangrove-marsh ecotone and other coastal wetland habitats.

## PROFESSIONAL PREPARATION

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| University of California Los Angeles | Los Angeles, CA | Marine Biol | B.S., 1995 |
| University of California Los Angeles | Los Angeles, CA | Biology | Ph.D., 2003 |
| Florida International University | Miami, FL | Biology | Postdoc, 2003-2006 |

## APPOINTMENTS

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| 2019-Present | Professor, Department of Marine Biology, TAMUG |
| 2015-2019 | Chair, Marine Biol. Interdisciplinary Graduate Program, TAMU-TAMUG-TAMU-CC |
| 2012-2019 | Associate Professor, Department of Marine Biology, TAMUG |
| 2006-2012 | Assistant Professor, Department of Marine Biology, TAMUG |
| 2007-Present | Adjunct Faculty, Dept. of Biol. and Biochem., University of Houston |
| 2007-Present | Graduate Faculty<br>• Marine Biology Graduate Program, TAMUG<br>• Dept. of Marine Sciences, Marine Resources Mgmt Program, TAMUG<br>• Ecology and Evolutionary Biology Interdisciplinary Grad Program, TAMU |

## SELECTED PUBLICATIONS

**Armitage, A.R**. 2021. Perspectives on maximizing coastal wetland restoration outcomes in anthropogenically altered landscapes. *Estuaries and Coasts* https://doi.org/10.1007/s12237-021-00907-4

Pennings, S.C., R.M. Glazner, Z.J. Hughes, J.S. Kominoski, **A.R. Armitage**. 2021. Effects of mangrove cover on coastal erosion during a hurricane in Texas, USA. *Ecology.* https://doi.org/10.1002/ecy.3309

**Armitage, A.R**., C.A. Weaver, J.S. Kominoski, and S.C. Pennings. 2020. Resistance to hurricane effects varies among wetland vegetation types in the marsh-mangrove ecotone. *Estuaries and Coasts*, 43 (5): 960-970, https://doi.org/10.1007/s12237-019-00577-3

**Armitage, A.R.,** C.A. Weaver, A.A. Whitt, S.C. Pennings. 2020. Effects of mangrove encroachment on tidal wetland plant, nekton, and bird communities in the Western Gulf of Mexico. *Estuarine, Coastal and Shelf Science,* doi: 10.1016/j.ecss.2020.106767

Charles, S.P., J.S. Kominoski, **A.R. Armitage**, H. Guo, C.A. Weaver, and S.C. Pennings. 2020. Quantifying how changing mangrove cover affects ecosystem carbon storage in coastal wetlands. *Ecology* 101(2): e02916, DOI:10.1002/ecy.2916.

Osland, M.J., R.H. Day, C.T. Hall, L.C. Feher, **A.R. Armitage**, J. Cebrian, K.H. Dunton, A.R. Hughes, D.A. Kaplan, A.K. Langston, A. Macy, C.A. Weaver, G.H. Anderson, K. Cummins, I.C. Feller, C.M. Snyder. 2020. Temperature thresholds for black mangrove (*Avicennia germinans*) freeze damage, mortality, and recovery in North America: refining tipping points for range expansion in a warming climate. *Journal of Ecology* 108: 654-665, doi:10.1111/1365-2745.13285.

Sigren, J.M., J. Figlus, W. Highfield, R.A. Feagin, and **A.R. Armitage**. 2018. The effects of coastal dune volume and vegetation on storm-induced property damage: A Hurricane Ike case study. *Journal of Coastal Research* 34: 164-173, doi: 10.2112/JCOASTRES-D-16-00169.1

**Armitage, A.R.,** W.E. Highfield, S.D. Brody, P. Louchouarn. 2015. The contribution of mangrove expansion to salt marsh loss on the Texas Gulf coast. *PLOS ONE* 10(5): e0125404.

**Armitage, A.R**., C.-K. Ho, E.N. Madrid, M.T. Bell, and A. Quigg. 2014. The influence of habitat construction technique on the ecological characteristics of a restored brackish marsh. *Ecological Engineering* 62: 33-42.

Madrid, E.N., A. Quigg, and **A.R. Armitage**. 2012. Marsh construction techniques influence carbon capture by emergent and submerged vegetation in a brackish marsh in the northwestern Gulf of Mexico. Ecological Engineering 42: 54-63.

## SYNERGISTIC ACTIVITIES

- Active in diversity initiatives, such as TAMUG NSF Research Experience for Undergraduates programs (2009-2012; 2017-2019), and the Coastal and Estuarine Research Federation Rising Tides Conference Program (2017-2019). These programs train students from underrepresented groups in science and first-generation college students; past REU interns have performed and published field and laboratory experiments on wetland plant ecology and participated in salt marsh restoration activities.
- Spearhead the integration of distance technology, interactive tools, and current technology-based activities (e.g., geocaching, cloud-based collaboration) into the traditional classroom; include applied, practical field experiences in laboratory courses.
- Integrate community scientists into mangrove research: recruited volunteers to report bird species and abundance at survey sites and report observations through a dedicated, secure website, supplemented with bird observations from the citizen science database eBird.
- Provide advice about wetland management and restoration policies to local and national non-profit agencies, including the Galveston Bay Foundation (Board of Directors 2007-2016, Emeritus Director 2016-present), Galveston Bay Estuary Program (subcommittee member 2015-present), Houston Wilderness (Advisory Board member 2017-present), Coastal and Estuarine Research Society (Governing Board member 2016-2019), Gulf Estuarine Research Society (2015-2021).
- Research fellow active with numerous interdisciplinary institutes and programs, including Institute for Sustainable Coastal Communities (TAMUG), Center for Texas Beaches and Shores (TAMUG), Marine Biology Interdisciplinary Graduate Program (TAMUG); Ecology and Evolutionary Biology Interdisciplinary Graduate Program (TAMU); Florida Coastal Everglades LTER.