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EDUCATION

2021	PhD	Coastal and Marine Systems Science	Texas A&M University-Corpus Christi
2006	MS	Marine Biology	University of Texas at Austin
2002	BSc(Tech)	Marine Science	University of Waikato, New Zealand

RESEARCH EXPERIENCE

Sept 2006 – present	Harte Research Institute for Gulf of Mexico Studies, Texas A&M University-Corpus Christi Associate Research Scientist (Jan 2023 – present) Assistant Research Scientist (Sep 2021 – Dec 2022) Research Specialist III (Oct 2019 – Aug 2021), Research Associate (2010 – Sep 2019), Research Specialist I (2006 – 2009)
Jan – Aug 2001, Jan 2004 - Aug 2006	University of Texas Marine Science Institute Research/Teaching Assistant
Oct 2002 – Dec 2003	Auckland Regional Council, Auckland, New Zealand Hydrology Technician
Nov 1999 – Feb 2000	Environment Bay of Plenty, Whakatane, New Zealand Research Assistant

AWARDS

2021	Outstanding Doctoral Student Award. Texas A&M University-Corpus Christi
2011	Antarctic Service Medal of the United States of America, U.S. Antarctic Program
2010	Best Poster Presentation, XXXI Scientific Committee on Antarctic Research Open Science Conference, Buenos Aires, Argentina

PROFESSIONAL/COMMUNITY SERVICE

2023–present	Coastal & Estuarine Science News Editorial Board - Coastal and Estuarine Research Federation.
2023–present	City of Corpus Christi Island Strategic Action Committee
2021–present	Volunteer Scientific Diver - NOAA/Flower Garden Banks NMS
2017–2022	City of Corpus Christi Watershore Beach Advisory Committee (Chair, 2021–2022)
2017–2018	Co-coordinator, Benthic Ecology Meeting, Corpus Christi, TX
2014–present	TAMUCC Dive Control Board
2009	Co-coordinator, Benthic Ecology Meeting, Corpus Christi, TX
2008–present	American Academy of Underwater Sciences

OTHER QUALIFICATIONS

AAUS Scientific Diver
PADI Dive Master
Texas Boating Safety Certificate
Diving First Aid for Professional Divers certified

JOURNAL PUBLICATIONS

46. Lavaud, R., M.K La Peyre, B. Couvillion, J. Beseres Pollack, V. Brown, T.A. Palmer, B. Keim. 2024. Predicting restoration and aquaculture potential of eastern oysters through an eco-physiological mechanistic model. *Ecological Modelling* 489, 110603. DOI: 10.1016/j.ecolmodel.2023.110603
45. Breaux, N.J., A. Avalos, J. Gilmore, T.A. Palmer, and J. Beseres Pollack. 2023. Recruitment dynamics of Serpulid worms in Baffin Bay, Texas: implications for habitat restoration in a hypersaline estuary. *Estuaries and Coasts* 46: 2148–2158. DOI:1007/s12237-023-01233-7
44. Montagna, P.A., T.A. Palmer and J.B. Pollack. 2022. Effect of temporarily opening and closing the marine connection of a river estuary. *Estuaries and Coasts* 46: 2208–2219. DOI:10.1007/s12237-022-01159-6
43. Comba, D., T.A. Palmer, N.J. Breaux and J. Beseres Pollack. 2022. Evaluating biodegradable alternatives to plastic mesh for small-scale oyster reef restoration. *Restoration Ecology* DOI:10.1111/rec.13762
42. Palmer, T.A., A.G. Klein, S.T. Sweet, A.J. Frazier, P.A. Montagna, T.L. Wade, J. Beseres Pollack. 2022. Using epibenthic fauna as biomonitors of local marine contamination adjacent to McMurdo Station, Antarctica. *Marine Pollution Bulletin* 178, 113621. DOI:10.1016/j.marpolbul.2022.113621
41. Martinez, M.J., T.A. Palmer, N.J. Breaux and J. Beseres Pollack. 2022. Dynamics of Restored and Natural Oyster Reefs After a Hurricane. *Frontiers in Ecology and Evolution* 10: 791739 DOI:10.3389/fevo.2022.791739
40. Palmer, T.A., A.G. Klein, S.T. Sweet, P.A. Montagna, L.J. Hyde, J. Beseres Pollack. 2021. Anthropogenic effects on the marine environment adjacent to Palmer Station, Antarctica. *Antarctic Science* 1-18. DOI: 10.1017/S0954102021000535
39. Marshall, D.A., S. Casas, W. Walton, F. Rikard, T.A. Palmer, N. Breaux, M. La Peyre, J. Pollack, M. Kelly and J. La Peyre. 2021. Divergence in salinity tolerance of northern Gulf of Mexico eastern oysters under field and laboratory exposure. *Conservation Physiology* 9(1): coab065 DOI:10.1093/conphys/coab065
38. Palmer, T.A., N. Breaux, B. Lebreton, G. Guillou and J. Beseres Pollack. 2021. Importance of Serpulid Reef to the Functioning of a Hypersaline Estuary. *Estuaries and Coasts*. DOI: 10.1007/s12237-021-00989-0
37. Beseres Pollack, J., T.A. Palmer and A.E. Williams. 2021. Medium-term monitoring reveals effects of El Niño Southern Oscillation climate variability on local salinity and faunal dynamics on a restored oyster reef. *PLoS ONE*. 16(8): e0255931. DOI:10.1371/journal.pone.0255931
36. Marshall, D.A., M.K. La Peyre, T.A. Palmer, G. Guillou, J. Beseres Pollack, B. Lebreton. 2021. Freshwater inflow and responses from estuaries across a climatic gradient: An assessment of northwestern Gulf of Mexico estuaries based on stable isotopes. *Limnology and Oceanography*. 66(9): 3568-3581. DOI: 10.1002/lno.11899
35. Cira, E.K., T.A. Palmer and M.S. Wetz. 2021. Phytoplankton dynamics in a low-inflow estuary (Baffin Bay, Texas) during drought and high-rainfall conditions associated with an El Niño event. *Estuaries and Coasts*. DOI: 10.1007/s12237-021-00904-7
34. Lebreton, B., J. Beseres Pollack, B. Blomberg, T.A. Palmer and P. Montagna. 2021. Oyster growth across a salinity gradient in a shallow, subtropical Gulf of Mexico estuary. *Experimental Results*, 2, E10, 1-12. DOI:10.1017/exp.2020.72
33. Palmer, T.A., A.G. Klein, S. Sweet, P.A. Montagna, J. Sericano, L.J. Hyde, T. Wade, M.C. Kennicutt II, J. Beseres Pollack. 2021. Long-term changes in contamination and macrobenthic communities adjacent to McMurdo Station, Antarctica. *Science of the Total Environment*. 764: 142798 DOI:10.1016/j.scitotenv.2020.142798
32. De Santiago, K., T.A. Palmer, M.S. Wetz, and J. Beseres Pollack. 2020. Response of macrobenthic communities to changes in water quality in a subtropical, microtidal estuary (Oso Bay, Texas). *Experimental Results*. 1, E34. DOI:10.1017/exp.2020.44

31. Beseres Pollack, J. and T.A. Palmer. 2020. *Crassostrea virginica* dredge efficiency in Texas estuaries. *Experimental Results* 1, E2. DOI:10.1017/exp.2019.2.
30. Marshall, D.A. B. Lebreton, T. Palmer, K. De Santiago and J.B. Pollack. 2019. Salinity disturbance affects faunal community composition and organic matter on a restored *Crassostrea virginica* oyster reef. *Estuarine, Coastal and Shelf Science* 226. DOI: 10.1016/j.ecss.2019.106267.
29. Breaux, N. B. Lebreton, T.A. Palmer, G. Guillou and J. Pollack. 2019. Ecosystem resilience following salinity change in a hypersaline estuary. *Estuarine, Coastal and Shelf Science* 225: 106258. DOI: 10.1016/j.ecss.2019.106258
28. De Santiago, K., T.A. Palmer, M. Dumesnil, J.B. Pollack. 2019. Rapid development of a restored oyster reef facilitates habitat provision for estuarine fauna. *Restoration Ecology* 27: 870-880 DOI: 10.1111/rec.12921
27. Rezek R. J., B. Lebreton, T.A. Palmer, G.W. Stunz, J.B. Pollack. 2018. Structural and functional similarity of epibenthic communities on standing and reefed platforms in the northwestern Gulf of Mexico. *Progress in Oceanography*, 168: 145–154. DOI: 10.1016/j.pocean.2018.09.020
26. Montagna, P.A., C. Chaloupka, E.A. DelRosario, A.M. Gordon, R.D. Kalke, T.A. Palmer, and E.L. Turner. 2018. Managing environmental flows and water resources. *WIT Transactions on Ecology and the Environment* 215:177-188. DOI: 10.2495/EID180161
25. Montagna, P.A., X. Hu, T.A. Palmer, M. Wetz. 2018. Effect of hydrological variability on the biogeochemistry of estuaries across a regional climatic gradient. *Limnology and Oceanography* 63:2465–2478. DOI: 10.1002/lno.10953.
24. Blomberg, B.N., T.A. Palmer, P.A. Montagna, J.B. Pollack. 2018. Habitat assessment of a restored oyster reef in South Texas. *Ecological Engineering* 122: 48-61.
23. Rubio, K.S. M. Ajemian, G.W. Stunz, T.A. Palmer, B. Lebreton, J. Beseres Pollack. 2018. Dietary composition of black drum *Pogonias cromis* in a hypersaline estuary reflects water quality and prey availability. *Journal of Fish Biology* 93:250-262. DOI: 10.1111/jfb.13654.
22. Blomberg, B.N., B. Lebreton, T.A. Palmer, G. Guillou, J. Beseres Pollack, P.A. Montagna. 2017. Does reef structure affect oyster food resources? A stable isotope assessment. *Marine Environmental Research* 127: 32-40.
21. Montagna, P.A., A.L. Sadovskii, S.A. King, K.K. Nelson, T.A. Palmer, K.H. Dunton. 2017. Modeling the effect of water level on the Nueces Delta marsh community. *Wetlands Ecology and Management* 25:731-742.
20. Wetz, M.S., E. Cira, B. Sterba-Boatwright, P.A. Montagna, T.A. Palmer and K.C. Hayes. 2017. Exceptionally high organic nitrogen concentrations in a semi-arid South Texas estuary susceptible to brown tide blooms. *Estuarine, Coastal and Shelf Science* 188:27-37.
19. Rezek, R.J., B. Lebreton, E.B. Roark, T.A. Palmer, J. Beseres Pollack. 2017. How does a restored oyster reef develop? An assessment based on stable isotopes and community metrics. *Marine Biology* 164. DOI:10.1007/s00227-017-3084-2.
18. Graham, P.M., T.A. Palmer, and J. Beseres Pollack. 2016. Oyster reef restoration: substrate suitability may depend on specific restoration goals. *Restoration Ecology* 25:459-470. DOI: 10.1111/rec.12449.
17. Lebreton, B., J. Beseres Pollack, B. Blomberg, T.A. Palmer, L. Adams, G. Guillou and P.A. Montagna. 2016. Origin, composition and quality of suspended particulate organic matter in relation to freshwater inflow in a South Texas estuary. *Estuarine, Coastal and Shelf Science* 170: 70–82. DOI 10.1016/j.ecss.2015.12.024.
16. Palmer, T.A., P.A. Montagna, R.H. Chamberlain, P.H. Doering, Y. Wan, K.M. Haurert, and D.J. Crean. 2015. Determining the Effects of Freshwater Inflow on Benthic Macrofauna in the Caloosahatchee Estuary, Florida. *Integrated Environmental Assessment and Management* 12:529-539. DOI 10.1002/ieam.1688
15. Rhodes, A.C., N.F. Carvalho, T.A. Palmer, L.J. Hyde, and P.A. Montagna. 2015. Distribution of two species of the genus *Nototanais* spp. (Tanaidacea) in Winter Quarters Bay and waters adjoining McMurdo Station, McMurdo Sound, Antarctica. *Polar Biology* 38: 1623-1629. DOI 10.1007/s00300-015-1727-7

14. Palmer, T.A., and P.A. Montagna. 2015. Impacts of droughts and low flows on estuarine water quality and benthic fauna. *Hydrobiologia* 753: 111–129. DOI 10.1007/s10750-015-2200-x
13. Palmer, T.A., P. Uehling and J.B. Pollack. 2015. Using oyster tissue toxicity as an indicator of disturbed environments. *International Journal of Environmental Science and Technology* 12: 2111-2116. DOI 10.1007/s13762-014-0745-2
12. George, L.M., K. De Santiago, T.A. Palmer and J.B. Pollack. 2014. Oyster reef restoration: effect of alternative substrates on oyster recruitment and nekton habitat use. *Journal of Coastal Conservation* 19: 13-22 DOI: 10.1007/s11852-014-0351-y
11. Montagna, P.A., T.A. Palmer, and J.B. Pollack. 2013. Hydrological Changes and Estuarine Dynamics. Springer, New York, 94 pp.
10. Palmer, T.A., P.A. Montagna, and R.D. Kalke. 2013. The effects of opening an artificial tidal inlet on hydrography and estuarine macrofauna in Corpus Christi, Texas. *Environmental Monitoring and Assessment*. 185: 5917-5935. DOI 10.1007/s10661-012-2995-0.
9. Pollack, J.B., A. Cleveland, T.A. Palmer, A.S. Reisinger, and P.A. Montagna. 2012. A restoration suitability index model for the eastern oyster (*Crassostrea virginica*) in the Mission-Aransas Estuary, TX, USA. *PLOS ONE* 7: e40839.
8. Pollack, J.B., T.A. Palmer, and P.A. Montagna. 2011. Long-term trends in the response of benthic macrofauna to climate variability in the Lavaca-Colorado Estuary, Texas. *Marine Ecology Progress Series* 436: 67–80.
7. Palmer, T.A., P.A. Montagna, J.B. Pollack, R.D. Kalke and H. DeYoe. 2011. The role of freshwater inflow in lagoons, rivers, and bays. *Hydrobiologia*. 667: 49-67.
6. Kennicutt M.C. II, A. Klein, P. Montagna, S. Sweet, T. Wade, T. Palmer, J. Sericano, and G. Denoux. 2010. Temporal and spatial patterns of anthropogenic disturbance at McMurdo Station, Antarctica. *Environmental Research Letters*. 5: 034010.
5. Montagna, P.A., T.A. Palmer, R.D. Kalke and A. Gossmann. 2008. Suitability of using a limited number of sampling stations to represent benthic habitats in Lavaca-Colorado Estuary, Texas. *Environmental Bioindicators*. 3: 156–171.
4. Palmer, T.A., P.A. Montagna, and R.D. Kalke. 2008. Benthic indicators of the initial effect of opening a channel. *Environmental Bioindicators*. 3: 205-206.
3. Montagna, P.A., E.D. Estevez, T.A. Palmer, and M.S. Flannery. 2008. Meta-analysis of the relationship between salinity and molluscs in tidal river estuaries of southwest Florida, U.S.A. *American Malacological Bulletin*. 24: 101-115.
2. Palmer, T.A., P.A. Montagna, and R.B. Nairn. 2008. The effects of a dredge excavation pit on benthic macrofauna in offshore Louisiana. *Environmental Management*. 41: 573-83.
1. Palmer, T.A., P.A. Montagna, and R.D. Kalke. 2002. Downstream effects of restored freshwater inflow to Rincon Bayou, Nueces Delta, Texas, USA. *Estuaries*. 25: 1448-1456.

BOOK CHAPTERS (REFEREED)

2. Klein, A.G., S.T. Sweet, M.C. Kennicutt II, T.L. Wade, T.A. Palmer, and P. Montagna. 2014. Long-Term Monitoring of Human Impacts to the Terrestrial Environment at McMurdo Station, Chapter 9. In: Tin, T., D. Liggett, P.T. Maher, and M. Lamers (Eds.) “Antarctic Futures: Human Engagement with the Antarctic Environment” pp 213-227. doi: 10.1007/978-94-007-6582-5_9
1. Mattson, R.A., K.W. Cummins, R.W. Merritt, P.A. Montagna, T. Palmer, J. Mace, J. Slater, and C. Jacoby. 2012. Benthic Macroinvertebrates, Chapter 11. In: Lowe, E.F., L.E. Battoe, H. Wilkening, M. Cullum, and T. Bartol, “The St. Johns River Water Supply Impact Study Final report.” St. Johns River Water Management District, Palatka, Florida.
<http://www.sjrwmd.com/watersupplyimpactstudy/>

ARCHIVED DATASETS

13. Lavaud, R., M.K. La Peyre, B. Couvillion, V. Brown, J.B. Pollack, T. Palmer, and B. Keim. 2023. Eastern oyster Dynamic Energy Budget model outputs under current (2014-2020) and projected

- (2041-2050) temperature and salinity conditions in Texas and Louisiana estuaries and along northern Gulf of Mexico coast: U.S. Geological Survey data release. DOI:10.5066/P9YS78DY.
12. Montagna, P. A., X. Hu, T.A. Palmer, and M. Wetz. 2023. Effect of hydrological variability on the biogeochemistry of estuaries across a regional climatic gradient. Distributed by: Gulf of Mexico Research Initiative Information and Data Cooperative (GRIIDC), Harte Research Institute, Texas A&M University–Corpus Christi. DOI: 10.7266/e5zsz0sh
 11. Pollack, J. B., T. Palmer, N. Breaux, M. Kelly, and J. La Peyre 2023. Salinity tolerance of oysters without acclimation in lab conditions: mortality. Biological and Chemical Oceanography Data Management Office (BCO-DMO). DOI:10.26008/1912/bco-dmo.870210.1
 10. Pollack, J. B., T. Palmer, N. Breaux, M. Kelly, and J. La Peyre 2023. Salinity tolerance of oysters without acclimation in lab conditions: shell heights. Biological and Chemical Oceanography Data Management Office (BCO-DMO). DOI:10.26008/1912/bco-dmo.870248.1
 9. Pollack, J. B., T. Palmer, N. Breaux, M. Kelly, and J. La Peyre 2023. Salinity tolerance of oysters without acclimation in lab conditions: Water Quality. Biological and Chemical Oceanography Data Management Office (BCO-DMO). DOI: 10.26008/1912/bco-dmo.870316.1
 8. Beseres Pollack, J., N. Breaux, T.A. Palmer, K.B. Savage, K. De Santiago, and D. Downey. 2022. Monitoring of *Perkinsus marinus* (Dermo disease) infection intensity in the Crassostrea virginica, and water quality in the Mission-Aransas Estuary, 2014-2021. Distributed by: Gulf of Mexico Research Initiative Information and Data Cooperative (GRIIDC), Harte Research Institute, Texas A&M University-Corpus Christi. DOI: 10.7266/JJZYJ9AT
 7. Martinez, M.J., J. Beseres Pollack, T.A. Palmer, and N. Breaux. 2021. Monitoring of oyster and epifauna populations at a constructed oyster reef (Big Tree Reef), St Charles Bay, Texas from 2017 to 2019. Distributed by: Gulf of Mexico Research Initiative Information and Data Cooperative (GRIIDC), Harte Research Institute, Texas A&M University-Corpus Christi. DOI: 10.7266/4M7E26BH
 6. Beseres Pollack, J., T.A. Palmer, K. De Santiago, D. Marshall, A. Williams, and N. Breaux. 2021. Monitoring of oyster and epifauna populations at a constructed oyster reef (Half Moon Reef), Matagorda Bay, Texas from 2014 to 2019. Distributed by: Gulf of Mexico Research Initiative Information and Data Cooperative (GRIIDC), Harte Research Institute, Texas A&M University-Corpus Christi. DOI: 10.7266/BQ5QBXJ0
 5. Lebreton, B., J. Beseres Pollack, B. Blomberg, T.A. Palmer and P.A. Montagna. 2020. Oyster growth in a shallow subtropical estuary (Mission-Aransas Estuary, Texas, USA). Distributed by: Gulf of Mexico Research Initiative Information and Data Cooperative (GRIIDC), Harte Research Institute, Texas A&M University-Corpus Christi. DOI:10.7266/AC120KMV
 4. De Santiago, K., T.A. Palmer and J. Beseres Pollack. 2020. Benthic macrofauna and water quality of Oso Bay Texas, 2013-2014. Distributed by: Gulf of Mexico Research Initiative Information and Data Cooperative (GRIIDC), Harte Research Institute, Texas A&M University-Corpus Christi. DOI: 10.7266/D3PCKJSF.
 3. Beseres Pollack, J., T. Palmer and N. Breaux. 2019. Comparison of oyster populations sampled by dredge and quadrat. Distributed by: Gulf of Mexico Research Initiative Information and Data Cooperative (GRIIDC), Harte Research Institute, Texas A&M University-Corpus Christi. DOI:10.7266/DRCEDRM3
 2. Beseres Pollack J., T. Palmer, N. Breaux and K. Rubio. 2019. Benthic macrofauna abundance and biomass data collected in Baffin Bay and Laguna Madre, Texas from 2014-03-20 to 2017-07-11. Distributed by: Gulf of Mexico Research Initiative Information and Data Cooperative (GRIIDC), Harte Research Institute, Texas A&M University-Corpus Christi. doi:10.7266/ZNMDE1P0
 1. Beseres Pollack, J., T. Palmer, B. Lebreton, N. Breaux and K. Rubio. 2019. Stable isotope composition of organic matter, benthic macrofauna, and fish in Baffin Bay and Laguna Madre, Texas, from 2015-04-21 to 2017-08-11. Distributed by: Gulf of Mexico Research Initiative Information and Data Cooperative (GRIIDC), Harte Research Institute, Texas A&M University-Corpus Christi. DOI:10.7266/PJ139ZRD

JOURNALS REVIEWED

African J. of Environmental Sci. & Techn.
Aquatic Conservation
Ecology and Evolution
Estuarine, Coastal and Shelf Science
Global Change Biology
Journal of Marine Systems
Marine Ecology Progress Series
Marine Pollution Bulletin
PlosONE
Restoration Ecology
Thalassas

Antarctic Science
Bulletin of Marine Science
Estuaries and Coasts
Environmental Management
Journal of Experimental Marine Biology and Ecology
Limnology and Oceanography
Marine Environmental Research
Polar Biology
Regional Studies in Marine Science
Science of the Total Environment
Wetlands Ecology and Management

RESEARCH GRANTS

2022. Nueces Bay Demonstration/Restoration Oyster Reef Project. J. Beseres Pollack (PI), T. Palmer (Co-PI). **Coastal Bend Bays and Estuaries Program** - \$30,000 (1 year).
2022. Oyster Reef Restoration Assessment and Monitoring. J. Beseres Pollack (PI), T. Palmer (Co-PI). Oyster Reef Restoration Assessment and Monitoring. Palacios Marine Agricultural Research, Inc. -\$119,779 (1 year).
2022. Nueces Bay Oyster Survey. J. Beseres Pollack (PI), T. Palmer (Co-PI). **Coastal Bend Bays and Estuaries Program** - \$30,000 (1 year).
2022. Tidal Index of Biotic Integrity (IBI) for the Texas Coast. J. Beseres Pollack (PI), T. Palmer (Co-PI). **Texas Commission on Environmental Quality** - \$104,697 (1 year).
2021. Closing the loop: Recycling shells and restoring reefs for resilience and recovery. J. Beseres Pollack (PI), T. Palmer (Co-PI). **Texas General Land Office Coastal Management Program** - \$355,289 (2 years).
2021. Supporting conservation of Mesquite Bay reefs. J. Beseres Pollack (PI), T. Palmer (Co-PI). **Coastal Bend Bays and Estuaries Program** - \$60,000 (1 year).
2020. Coupled restoration of intertidal and subtidal oyster reef to rebuild habitat and fisheries. J. Beseres Pollack (PI), T. Palmer (Co-PI). **NOAA Community Restoration Program** - \$353,456 (3 years).
2020. Shell Bank: Enhancing coastal resiliency via shell recycling, restoration and community partnerships. J. Beseres Pollack (PI), T. Palmer (Co-PI). **Texas General Land Office Coastal Management Program** - \$125,000 (1.5 years).
2019. Living shoreline restoration in the Mission-Aransas Estuary. J. Beseres Pollack. **Texas Parks and Wildlife Department** - \$300,000 (3 years).
2019. Tidal Index of Biotic Integrity (IBI) for the Texas Coast. J. Beseres Pollack (PI), T. Palmer (Co-PI). **Texas Commission on Environmental Quality** - \$299,977 (2 years).
2019. Greening oyster reef restoration in the Gulf: evaluating biodegradable alternatives to traditional plastic mesh bagging methods. J. Beseres Pollack (PI), T. Palmer (Co-PI). **Environmental Protection Agency Gulf of Mexico Program** - \$235,662 (2 years).