# VITAE **DAVID W. HICKS, PH.D.**

# ADDRESS:

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# **EDUCATION:**

B.S., Marine Biology, Texas A&M University, Galveston, Texas, 1989.

M.S., Biology, Texas A&M University-Corpus Christi, Corpus Christi, Texas, 1993.

Thesis Title: *Effects of the December 1989 Freeze on Seagrasses and Associated Bivalve Mollusca in Laguna Madre* (J.W. Tunnell, Jr., Thesis Supervisor).

Ph.D., Quantitative Biology, The University of Texas at Arlington, Arlington, Texas, 1999. Dissertation Title: *The Environmental Physiology of the Nonindigenous Marine Mussel*, Perna perna (*Linnaeus*, 1758) in the Western Gulf of Mexico (R.F. McMahon, Dissertation Supervisor).

# AREAS OF RESEARCH EXPERTISE:

Ecology of GOM Natural and Artificial Reefs
Marine Invertebrate Biology and Physiology
Physiological Ecology/Ecology/Environmental Biology
Population Bioenergetics/Life History Strategies
Experimental Design and Statistical Analysis
Biology and Control of Macrofouling Invertebrates
Invasive Species

#### PROFESSIONAL EXPERIENCE:

Director, School of Earth, Environmental, and Marine Sciences (2015-present) and Professor of Marine Biology (2015-present). University of Texas Rio Grande Valley Department Chair (2012-2015) and Associate Professor of Biology (Tenured) (2003-2015), Department of Biological Sciences, University of Texas at Brownsville and Texas Southmost College, Brownsville, Texas.

Research Scientist, 2001-2003. Center for Coastal Studies, Texas A&M University-CC, Corpus Christi, Texas.

- Assistant Professor of Estuarine Ecology and Director, Center for Coastal and Marine Studies, 1999-2001. Department of Biology, Lamar University, Beaumont, Texas.
- Research Assistant, 1998-1999. Center for Biological Macrofouling Research, University of Texas at Arlington.
- Associate Professor, 1997-1999. Division of Math and Natural Sciences, Collin County Community College, Plano, Texas.
- Graduate Teaching Assistant, 1997- 1999. Department of Biology, University of Texas at Arlington, Texas.
- Research Assistant, 1993-97. Center for Coastal Studies, Texas A&M University-Corpus Christi, Corpus Christi, Texas.
- Research Assistant, 1990-93. Coop. Program between the Center for Coastal Studies and the National Biological Survey, Texas A&M University-Corpus Christi, Corpus Christi Texas.

# **AWARDS AND HONORS:**

- Faculty Exceptional Merit Award. University of Texas at Brownsville and Texas Southmost College. 2010.
- Chancellor's Outstanding Teaching Excellence Award. University of Texas at Brownsville and Texas Southmost College. 2007.
- Faculty Exceptional Merit Award. University of Texas at Brownsville and Texas Southmost College. 2005.
- Harold W. Harry Memorial Award. Houston Conchology Society, Inc. Houston, Texas. 1999, 2002.
- Academic Excellence Award. Department of Biology, University of Texas at Arlington. 1999.
- T.E. Kennerly, Jr. Award for teaching excellence. Department of Biology, University of Texas at Arlington. 1999.
- Graduate Research Achievement Award. Department of Biology, University of Texas at Arlington. 1998.
- School of Science Award for Scholarship. Department of Biology, Southwest Texas State University. 1988.
- School of Science Award for Scholarship. Department of Biology, Southwest Texas State University. 1987.

# GRANTS AND RESEARCH SUPPORT: <u>PI / Institutional PI (\$4,254,722)</u>; <u>Consortium: (\$26,000,000)</u>

- A Wave Glider for studies of biofouling and ocean productivity. Department of Defense (DoD) \$452,029. 2016. Co-PI w/PI Chip Breier (UTRGV).
- Developing a predictive ecosystem model for the Lower Laguna Madre. Texas OneGulf Consortium, 2016-2017. \$213,956. Co-PI w/PI Chip Breier (UTRGV).
- Artificial Reef Monitoring and Research Program: FY 2015-2017. Texas Parks and Wildlife Department Artificial Reef Program. \$633,323. PI and Project Manager.

- Rio Grande Valley Reefing Site Pre- and Post- Deployment Monitoring. Texas Parks and Wildlife Department Artificial Reef Program, 2015-2017. \$308,841. PI and Project Manager.
- The South Texas Banks Ecosystem: Oceanography, Biodiversity and Genetics. Texas Sea Grant Program, 2015-2017. \$179,027. Co-PI w/PI Diego Figueroa (UTRGV).
- Texas OneGulf Center of Excellence Consortium. RESTORE-Texas Commission on Environmental Quality. Serve as the Institutional Lead for UTB. Consortium award with Dr. Larry McKinney, Principal Investigator, Harte Research Institute (HRI) for Gulf of Mexico Studies-Texas A&M University-Corpus Christi and eight other academic institutions focused on marine science and human health to promote collaborative, multi-disciplinary research, synthesis and problem solving concentrated on the Gulf of Mexico. David Hicks, UTRGV Consortium Leader. FY 2015-2030. \$11,000,000 (\$733,333.33 per year for 15 years).
- Sea Turtle Inc./University of Texas Brownsville Sea Turtle Biology Internship. FY2014-2016. Sea Turtle Inc. \$10,000/YR (\$20,000 to date). Project Manager. Annual award to support graduate student research related to sea turtle biology.
- Commercial Launch Site Pre- Construction Species Monitoring Survey: Project Manager. SpaceX. \$16,500/survey.
- Artificial Reef Monitoring and Research Program: FY 2013-2015. Texas Parks and Wildlife Department. \$449,986. PI and Project Manager.
- Evaluation of Beach Management Practices: FY 2014-2015. City of South Padre Island. \$50,000. Project Manager. Annual award to support graduate student research related to beach management.
- Ecological Assessment of the Adriatic VII as an Artificial Reef. GlobalSantaFe Drilling Company. 2013-2014. \$145,000. PI and Project Manager.
- Repurposing the UT-Brownsville Research Vessel (M/V Vollert) for Monitoring Artificial Reefs. Texas Parks and Wildlife Department. 2012-2013. \$76,000. PI and Project Manager.
- Environmental Cooperative Science Center (ECSC): A Regional Ecosystem Approach for the Conservation and Sustainable Management of Coastal and Marine Resources. NOAA. 9/2011-8/2016. UTB Co-PI (\$1,088,730). Consortium award with Dr. Michael Abazinge, Principal Investigator (FAMU), \$15,000,000.
- Artificial Reef Monitoring and Research Program: FY 2011-2013. Texas Parks and Wildlife Department. \$297,172. PI and Project Manager.
- An experimental test of the effects of beach raking on macroinvertebrate communities of Texas beaches. Texas Sea Grant Program, 2010-2011. \$88,706. PI.
- Infrastructure and Equipment Improvements for the South Padre Island Field Stations. National Science Foundation, Improvements in Facilities, Communications, and Equipment at Biological Field Stations and Marine Laboratories (FSML). 2008-2010. \$135,185. PI and Project Manager.
- Texas Clipper reef biological monitoring and evaluation program. Texas Parks and Wildlife Department. 2007-2010. \$245,329. PI and Project Manager.
- System-level monitoring of restoration efforts at Bahia Grande. Gulf of Mexico Program (EPA). 2006-2008. \$440,797. PI and Project Manager for this consortium project.
- Bahia Grande restoration and monitoring project. United States Fish & Wildlife Service. 2004-2006. \$50,456. PI.

- Iron-acquisition system of *Perkinsus marinus*. United States Department of Agriculture: Cooperative State Research, Education, and Extension Service (CSREES). 2004-2006. PI with Co-PI: M. Lehker (UTB). \$99,820.
- Physiological tolerances and nonchemical control strategies for the introduced marine macrofouling Asian green mussel, *Perna viridis*. National Sea Grant Program, Aquatic Nuisance Species. 2001-2003. PI with Co-PI: R.F. McMahon (UTA). \$128.697.
- Identifying high-risk sources for ballast-water borne, species introductions to the Coastal Bend area. Coastal Bend Bays & Estuaries Program, Inc. 2001-2002. PI. \$25,000.
- Jefferson County Beach Watch Program. Texas General Land Office. 2001-2002. \$25,000. This contract stayed at Lamar University after my leaving.
- Is another exotic mussel muscling in on the Gulf of Mexico? Lamar University Research Enhancement Grant Award. 2000-2001. \$5,000.
- Jefferson County Beach Watch Program. Texas General Land Office. 2000-2001. \$20,000, plus an additional \$10,000 for equipment purchases provided by Jefferson County.
- The effects of reduced oxygen levels (hypoxia) on the production and strength of byssal threads in the nonindigenous marine mussel, *Perna perna*. Lamar University Research Enhancement Grant Award. 1999-2000. \$5,000.
- Physiological tolerances and nonchemical control strategies for the recently introduced macrofouling brown mussel, *Perna perna*. Texas A&M University Sea Grant College Program. 1997-1998. Co-authored with J.W. Tunnell, Jr. (TAMUCC). \$23,102.
- Physiological tolerances and nonchemical control strategies for the recently introduced macrofouling brown mussel, *Perna perna*. Texas A&M University Sea Grant College Program. 1995-1997. Co-authored with J.W. Tunnell, Jr. (TAMUCC). \$127,247.
- The invasive biology of the edible brown mussel, *Perna perna* (Linnaeus, 1758), on the south Texas coast. Texas A&M University Sea Grant College Program. 1993-1995. Co-authored with J.W. Tunnell, Jr. (TAMUCC). \$104,046.

# **PUBLICATIONS:**

- Cooksey, M., and D.W. Hicks. *in press*. Characterization of a South Texas mesophotic reef epibenthic community. **Proceedings of the 68<sup>th</sup> Gulf and Caribbean Fisheries Institute**, November 9 13, 2015, Panama City, Panama.
- Jordan, L., D. Hicks, R. Kline, and M. Cooksey. *in press*. Mesophotic reef fish communities of two South Texas relic coral-algal banks: North Hospital and Hospital. **Proceedings of the 68<sup>th</sup> Gulf and Caribbean Fisheries Institute**, November 9 13, 2015, Panama City, Panama.
- Hicks, D., C.E. Cintra-Buenrostro, R. Kline, D. Shively, and B. Shipley. *in press*. Artificial Reef Fish Survey Methods: Counts vs. Log-Categories Yield Different Diversity Estimates. **Proceedings of the 68<sup>th</sup> Gulf and Caribbean Fisheries Institute**, November 9 13, 2015, Panama City, Panama.

- Lerma, L., and D.W. Hicks. 2015. The Effects of a Red Tide, *Karenia brevis* Episode on the Benthic Macroinvertebrate Communities of South Padre Island, Texas. **Shore and Beach** (83) 4: 1-7.
- Hicks, D.W., L. Lerma, J. Le, T.C. Shirley, J.W. Tunnell, R. Rodriguez and A. Garcia. 2014. Assessing fish communities of six remnant coralgal reefs off the South Texas coast. **Proceedings of the 66<sup>th</sup> Gulf and Caribbean Fisheries Institute**, November 4 8, 2013, Corpus Christi, Texas, USA. Pp: 244-254.
- Hicks, D.W. 2010. Molluscan ecology and habitats (Chapter 3). Pages 28-75 in J. W. Tunnell, Jr., J. Andrews, N. Barrera, and F. Moretzsohn, Encyclopedia of Texas Seashells: Identification, Ecology, Distribution, and History. Texas A&M Press, College Station, Texas.
- Hicks, D.W. 2010. Laguna Madre, South Bay, and Bahia Grande (Pp. 78-83) & Sea of Grasses (P. 175) in S. Patterson and L.V. Lof (eds.), El Valle. Gorgas Science Foundation, Brownsville, Texas.
- Gentry, D.K., Sosdian, S., Grossman, E.L., Rosenthal, Y., Hicks, D., and Lear, C.H. 2008. Stable Isotope and Sr/Ca Profiles from the Marine Gastropod *Conus ermineus*: Testing a Multi-proxy Approach for Inferring Paleotemperature and Paleosalinity. **Palaios** 23(4): 195-209.
- Sosdian, S., Gentry, D.K., Lear, C.H., Grossman, E.L., Hicks, D., and Rosenthal, Y. 2006. Strontium to calcium ratios in the marine gastropod *Conus ermineus*: Growth rate effects and temperature calibration. **Geochemistry, Geophysics, and Geosystems** (**G**<sup>3</sup>), 7(11), 17 pp, Q11023, doi:10.1029/2005GC001233.
- Hicks, D.W. and R.F. McMahon. 2005. Effects of temperature on tolerance of chronic hypoxia in the nonindigenous brown mussel, *Perna perna* (Bivalvia: Mytilidae) from the Texas Gulf of Mexico. **Journal of Molluscan Studies** 71(4): 401-408.
- Bates, T.W. and D.W. Hicks. 2005. Locomotory Behavior and Habitat Selection in Littoral Gastropods on Caribbean Limestone Shores. **Journal of Shellfish Research** 24(1): 75-84.
- Amoako-Atta, S. and D.W. Hicks. 2004. GIS decision support system for prevention of ballast water-borne species introductions. **Proceedings, 24th Annual ESRI International User Conference**, August 9-13, 2004, San Diego, California (http://gis.esri.com/library/userconf/proc04/docs/pap1534.pdf), 12 pp.
- Hicks, D.W. and R.F. McMahon. 2003. Temperature and relative humidity effects on water loss and emersion tolerance of *Perna perna* (L.) (Bivalvia: Mytilidae) from the Gulf of Mexico. **Bulletin of Marine Science** 72(1): 135-150.
- Hicks, D.W. and R.F. McMahon. 2002. Respiratory responses to temperature and hypoxia in the nonindigenous brown mussel, *Perna perna* (Bivalvia: Mytilidae), from the Gulf of Mexico. **Journal of Experimental Marine Biology and Ecology** 277(1): 61-78.
- Hicks, D.W. and R.F. McMahon. 2002. Temperature acclimation of upper and lower thermal limits and freeze resistance in the nonindigenous brown mussel, *Perna perna* (L.), from the Gulf of Mexico. **Marine Biology** 140(6): 1167-1179.
- Hicks, D.W., N.C. Barrera, and J.W. Tunnell, Jr. 2001. Ecological distribution of shallow-water mollusks of Alacrán reef, Campeche Bank, Yucatan, Mexico. **Texas Conchologist** 38(1): 7-30.

- Hicks, D.W., R.F. McMahon, and D.A. Ingrao. 2001. Two invasive mussels in the genus *Perna* in the Gulf of Mexico. Pages 159-170 *in*, Palmer, C.L.P., J.L. Klamberg, S.J. Schultz, and S.A. Jones (eds.), **Virtual Proceedings for the State of the Bay Symposium V**. January 31- February 2, 2001, Texas Natural Resource Conservation Commission, Austin, Texas, USA.
- Ingrao, D.A., P. Mikkelsen, and D.W. Hicks. 2001. Another introduced marine mollusk in the Gulf of Mexico: the Indo-Pacific green mussel, *Perna viridis* in Tampa Bay, Florida. **Journal of Shellfish Research** 20(1): 13-19.
- Hicks, D.W., J.W. Tunnell, Jr. and R.F. McMahon. 2001. Population dynamics of the nonindigenous brown mussel, *Perna perna*, in the Gulf of Mexico compared to other world-wide populations. **Marine Ecology Progress Series** 211: 181-192.
- Hicks, D.W., D.L. Hawkins, and R.F. McMahon. 2000. Salinity tolerance of brown mussel *Perna perna* from the Gulf of Mexico: an extension of life table analysis to estimate median survival time in the presence of regressor variables. **Journal of Shellfish Research** 19(1): 203-212.
- Holland, B.S., D.S. Gallagher, D.W. Hicks, and S.K. Davis. 1999. Cytotaxonomic confirmation of an exotic marine mussel in the Gulf of Mexico. **The Veliger** 42: 280-282.
- Hicks, D.W., C.P. Onuf, and J.W. Tunnell, Jr. 1998. Response of shoal grass, *Halodule Wrightii*, to extreme winter conditions in the lower Laguna Madre, Texas. **Aquatic Botany** 62:107-114.
- Hardegree, B., D.W. Hicks, and J.W. Tunnell, Jr. 1996. Evaluation of burning as an oil spill cleanup technique in a high marsh community along the south Texas coast. Pages 195-211 *in*, Proffitt, C.E. and P.F. Roscigno (eds.), **Proceedings: Gulf of Mexico and Caribbean Oil Spills in Coastal Ecosystems: Assessing Effects, Natural Recovery, and Progress in Remediation Research**, OCS Study/MMS 95-0063. U.S. Department of the Interior, Minerals Management Service, Gulf of Mexico OCS Region, New Orleans LA. 245 pp.
- Hicks, D.W. and J.W. Tunnell, Jr. 1995. Ecological notes and patterns of dispersal in the recently introduced mussel, *Perna perna* (Linnaeus, 1758) in the Gulf of Mexico. **American Malacological Bulletin** 11(2):203-206.
- Tunnell, J.W. B. Hardegree, and D.W. Hicks. 1995. Environmental impact and recovery of a high marsh pipeline oil spill and burn site, upper Copano Bay, Texas. **Proceedings of the 1995 Oil Spill Conference**, American Petroleum Institute, Washington, DC, 133-138.
- Hicks, D.W. and J.W. Tunnell. 1993. Invasion of the south Texas coast by the edible brown mussel *Perna perna* (Linnaeus, 1758). **The Veliger** 36(1): 92-94.

#### PUBLICATIONS IN PREPARATION:

- Lê, J.Q., Hicks, D.W., Cintra-Buenrostro, C. and Shively, D. *in prep*. An experimental test of the effects of disturbance frequency on the diversity of artificial reef fouling communities
- McWhorter, T.D. and Hicks, D.W. *in prep*. Assessing the Swash Zone Macrobenthic Community Response to a Beach Renourishment Episode on South Padre Island, Texas. Shore and Beach.
- Rose, P. and Hicks, D.W. *in prep*. Temperature and Relative Humidity Effects on Water Loss and Hemolymph Osmolality of *Littoraria angulifera* (Lamarck, 1822). Journal of Experimental Marine Biology and Ecology.

#### **CONTRIBUTED PAPERS:**

- Cooksey, M., D.W. Hicks, D. Figueroa, E. Hickerson. Modeling mesophotic coral communities of two South Texas Banks in the Northwestern Gulf of Mexico: North Hospital and Hospital Bank. 13<sup>th</sup> International Coral Reef Symposium, 19–24 June 2016, Honolulu, Hawaii (poster).
- Otte, H., M.T. Cooksey, and D.W. Hicks Assessing connectivity of black corals (Antipatharia) and octocorals (Octocorallia) on artificial reefs along the Texas coast. 3rd Annual Texas Artificial Reef Science and Research Consortium, February 11-12, 2016, Corpus Christi, Texas.
- Figueroa-Downing, R. and D.W. Hicks. Investigating the application of multibeam sonar in fish identification and population biomass estimates. 2nd Annual Texas Artificial Reef Science and Research Consortium, February 5-6, 2015, Corpus Christi, Texas.
- Hicks, D.W. and C. Cintra-buenrostro. Methods for surveying artificial reef invertebrate communities. 2nd Annual Texas Artificial Reef Science and Research Consortium, February 5-6, 2015, Corpus Christi, Texas.
- Rodriguez, R.E., Hicks, D.W., Tunnell, J.W., Shirley, T. C., Etnoyer, P.J., and Hickerson, E.L. Mesophotic coral assemblages of relict reefs off the south Texas coast. 7th NOAA Education and Science Forum, October 26-29, 2014, University of Maryland Eastern Shore, Princess Anne, Maryland.
- Rodriguez, R.E., Hicks, D.W., Tunnell, J.W., Shirley, T. C., Etnoyer, P.J., and Hickerson, E.L. Deep-water coral assemblages of relict reefs off the south Texas Coast. Texas Bays and Estuaries Meeting, April 23-24, 2014, Port Aransas, Texas.
- Rodriguez, R.E., Hicks, D.W., Tunnell, J.W., Shirley, T. C., Etnoyer, P.J., Hickerson, E.L. Assessing deep-water coral assemblages inhabiting relict coral banks off the South Texas Coast. The 43rd Annual Benthic Ecology Meeting, March 19-22, 2014, Jacksonville, Florida.
- Tamez, C. and D.W. Hicks. Characterizing the Ecological Status of Southernmost Texas Estuaries Using Benthic-based Metrics. The 43rd Annual Benthic Ecology Meeting, March 19-22, 2014, Jacksonville, Florida.
- Rodriguez, R., D.W. Hicks, J.W. Tunnell, T.C. Shirley, P.J. Etnoyer, and E. Hickerson. Assessing deep-water coral assemblages inhabiting relict coral banks off the Texas

- Coast. 117th Annual Meeting of the Texas Academy of Science. March 7-8, 2014, Galveston, Texas.
- David W. Hicks, Carlos Cintra-Buenrostro, and Richard J. Kline. Spatial and temporal dynamics of south Texas artificial reef fish communities: a review of results and survey methods. 1st Annual Texas Artificial Reef Consortium, January 17, 2014, Corpus Christi, Texas.
- Carlos Cintra-Buenrostro and David W. Hicks. Low intensity + high frequency: a recipe for biodiversity of biofoluing organisms in artificial reefs. 1st Annual Texas Artificial Reef Consortium, January 17, 2014, Corpus Christi, Texas.
- Andres Garcia, Richard J. Kline, David Hicks, and Carlos Cintra-Buenrostro. A Comparison of Site Fidelity and Habitat Use of Red Snapper to Evaluate the Performance of Two Artificial Reefs in South Texas. 1st Annual Texas Artificial Reef Consortium, January 17, 2014, Corpus Christi, Texas.
- Andres Garcia, Richard J. Kline, David W. Hicks, Carlos CintraBuenrostro, and Dale Shively. A comparison of site fidelity and habitat use of red snapper on two South Texas artificial reefs utilizing acoustic telemetry (Poster). 66th Annual Gulf and Caribbean Fisheries Institute Conference, November 4 8, 2013, Corpus Christi, Texas
- Hicks, D.W., L. Lerma, J. Le, T.C. Shirley, J.W. Tunnell, R. Rodriguez and A. Garcia. Assessing fish communities of six remnant coralgal reefs off the South Texas coast. 66th Annual Gulf and Caribbean Fisheries Institute Conference, November 4 8, 2013, Corpus Christi, Texas.
- Hicks, D.W. and C.A. Tamez\*. Status of the Estuarine Community at Bahia Grande: Eight Years Post-Flood. American Shore and Beach Preservation Association 2013 National Coastal Conference: Responding to the Waves of Change, October 22-25, 2013, South Padre Island, Texas.
- Tamez, C.A. and D.W. Hicks. Gauging Rehabilitation Status of the re-flooded Bahia Grande Using Net Ecosystem Metabolism. American Shore and Beach Preservation Association 2013 National Coastal Conference: Responding to the Waves of Change, October 22-25, 2013, South Padre Island, Texas.
- Lerma, L. and D.W. Hicks. The Effects of a Red Tide/Karenia brevis Episode on the Benthic Macroinvertebrate Communities of South Padre Island, Texas. American Shore and Beach Preservation Association 2013 National Coastal Conference: Responding to the Waves of Change, October 22-25, 2013, South Padre Island, Texas.
- McWhorter, T. and D.W. Hicks. Assessing the Swash Zone Macrobenthic Community Response to a Beach Renourishment Episode on South Padre Island, Texas. American Shore and Beach Preservation Association 2013 National Coastal Conference: Responding to the Waves of Change, October 22-25, 2013, South Padre Island, Texas.
- Jonathan Le, David Hicks, Carlos Cintra-Buenrostro, Dale Shively. An experimental test of the effects of disturbance frequency on the diversity of artificial reef fouling communities (Poster). 2013 Texas Bays and Estuaries Meeting, April 25-26, 2013, Port Aransas, Texas.

- Liana Lerma and David W. Hicks. The effects of a red tide, Karenia brevis episode on the benthic macroinvertebrate communities of South Padre Island, Texas. 2013 Texas Bays and Estuaries Meeting, April 25-26, 2013, Port Aransas, Texas.
- Liana Lerma and David Hicks. The Effects of a Red Tide, *Karenia brevis* Episode on the Benthic Macroinvertebrate Communities of South Padre Island, Texas. 116th Annual Meeting of the Texas Academy of Science, February 28 March 2, 2013, Schreiner University, Kerrville, Texas.
- Jonathan Le, David Hicks, Carlos Cintra-Buenrostro, and Dale Shively. An experimental test of the effects of disturbance frequency on the diversity of artificial reef fouling communities. 116th Annual Meeting of the Texas Academy of Science, February 28 March 2, 2013, Schreiner University, Kerrville, Texas.
- Andres Garcia, Richard Kline, David Hicks, Carlos Cintra, and Dale Shively. The use of underwater surgical techniques to reduce mortality in fish studies utilizing acoustic tagging. 116th Annual Meeting of the Texas Academy of Science, February 28 March 2, 2013, Schreiner University, Kerrville, Texas.
- Lerma, L., J. Le, D. Hicks, T. C. Shirley, J. W. Tunnell, R. Rodriguez, and A. Garcia. Assessing fish communities of relic coral banks off the south Texas coast. 38th Annual Meeting of the Texas Chapter of the American Fisheries Society, January 17th 19th, 2013, Conroe, Texas.
- Garcia, A., R. Kline, D. Hicks, C. Cintra, and D. Shively. A comparison of the site fidelity and habitat use of red snapper on two artificial reef types utilizing acoustic telemetry, in south Texas. 38th Annual Meeting of the Texas Chapter of the American Fisheries Society, January 17th 19th, 2013, Conroe, Texas.
- David W. Hicks, C. Cintra-Buenrostro, R. Kline, and D Shively. Moving towards the standardization of artificial reef monitoring efforts. First Conference in Subtropical Biology, January 13, 2012, Edinburg, Texas.
- Hudson R. DeYoe, Andrew McDonald, Robert Edwards, Tim Brush, Frank Judd, Fred Zaidan, Brian L. Fredensborg, and David Hicks. Invasive species of the Rio Grande Valley- An overview. First Conference in Subtropical Biology, January 13, 2012, Edinburg, Texas.
- McWhorter, T., Hicks, D., and Treviño, R. Assessing the Swash Zone Macrobenthic Community Response to a Beach Re-nourishment Episode on South Padre Island, TX. Texas Bays and Estuaries Meeting, April 27-28, 2011, Port Aransas, Texas.
- Walk, E. D.W. Hicks, C. Cintra Buenrostro, and D. Shively. Testing the Intermediate Disturbance Hypothesis for Artificial Reef Fouling Communities. Texas Bays and Estuaries Meeting, April 15-16, 2010, Port Aransas, Texas.
- T. McWhorter, O. Sosa, M. Marquez, E. Cornejo, M. Fuentes and D. Hicks. Colonization Dynamics of Benthic Habitats in Bahia Grande: four years post-flood. Texas Bays and Estuaries Meeting, April 15-16, 2010, Port Aransas, Texas.
- Hicks, D., R. Trevino, and O. Sosa Colonization dynamics of benthic habitats in the recently re-flooded Bahia Grande, Cameron County, Texas. Benthic Ecology Meeting, March 4-7, 2009, Corpus Christi, Texas.
- Reisinger, A.S., P. Tissot, D.W. Hicks, and J.C. Gibeaut. Neural network spatial model for salinity in Bahia Grande. Texas Bays and Estuaries Meeting, April 28-30, 2009, Port Aransas, Texas.

- Trevino, R., E. Cornejo, T. McWhorter, A. Reisinger, N. Matos, O. Sosa, and D. Hicks. Recolonization dynamics in the recently re-flooded Bahia Grande. Texas Bays and Estuaries Meeting, April 16-17, 2008, Port Aransas, Texas.
- Farquhar, F., D. Hicks, and E. Linder. Feeding ecology of the mole crab (*Emerita*) on Texas beaches. 111<sup>th</sup> Annual Meeting of the Texas Academy of Science, March 6–8, 2008, Texas A&M University–Corpus Christi, Corpus Christi, Texas.
- Trevino, R., T. McWhorter, O. Sosa, N. Matos, A. Reisinger, and D. Hicks. Macroinvertebrate recolonization dynamics of benthic habitats in the recently reflooded Bahia Grande. 111<sup>th</sup> Annual Meeting of the Texas Academy of Science, March 6–8, 2008, Texas A&M University–Corpus Christi, Corpus Christi, Texas.
- Cornejo, E., R. Trevino, T. McWhorter, A. Reisinger, and D. Hicks. Fish assemblage dynamics in the recently re-flooded Bahia Grande. 111<sup>th</sup> Annual Meeting of the Texas Academy of Science, March 6–8, 2008, Texas A&M University–Corpus Christi, Corpus Christi, Texas.
- Reisinger, A., Hicks, D., Benavides, J. Biological monitoring and GIS used as a preliminary analysis of freshwater inflow needs in the Bahia Grande. CREST-RESSACA Bi-National Conference on Environmental Sustainability: U.S.-Mexico Issues, Nov. 14-17, 2006, Monterrey, Mexico.
- Reisinger, A., and Hicks, D. Monitoring the redevelopment of the estuarine community at Bahia Grande. Gulf Estuarine Research Society Meeting, November 2-4, 2006, Corpus Christi, Texas.
- Hicks, D., Young, T., and Garcia, J. Benthic community redevelopment following restorations at Bahia Grande. 109<sup>th</sup> Annual Meeting of the Texas Academy of Sciences, March 2-4, 2006, Lamar University, Beaumont, Texas.
- Moreno, E., Lehker, M., and Hicks, D. Resolution of *Perkinsus marinus* chromosomes using pulsed field gradient gel electrophoresis. 109<sup>th</sup> Annual Meeting of the Texas Academy of Sciences, March 2-4, 2006, Lamar University, Beaumont, Texas.
- Reisinger, A., Hicks, D., Blanco, E. and Reisinger, E. The reestablishment of fish populations in the Bahia Grande. 109<sup>th</sup> Annual Meeting of the Texas Academy of Sciences, March 2-4, 2006, Lamar University, Beaumont, Texas.
- Grossman, E.L., C.H. Lear, S. Sosdian, Y. Rosenthal, D.K. Gentry, T. Kobashi, and D.W., Hicks. Cenozoic seasonality and paleochemistry recorded in Sr/Ca ratios of serially-sampled mollusk shells. The Geological Society of America: Earth System Processes 2, August 8-11, 2005, Calgary, Alberta, Canada.
- Moreno, E. and D.W. Hicks. Temperature and relative humidity effects on water loss and emersion tolerance of Asian green mussels. 108<sup>th</sup> Annual Meeting of the Texas Academy of Science, March 3-5, 2005, University of Texas Pan American, Edinburg, Texas.
- Hicks, D.W. Physiological ecology of recently introduced Gulf of Mexico populations of Asian green mussel, *Perna viridis*. Program Abstract, Texas Sea Grant College Program, Third Annual Researcher Conference, Port Aransas, Texas, September 23-24, 2004.
- Hicks, D.W. and R.F. McMahon. Effects of temperature on chronic hypoxia tolerance in the nonindigenous brown mussel (*Perna perna*) from the Texas Gulf of Mexico. 12<sup>th</sup> International Conference on Aquatic Invasive Species, June 9-12, 2003, Windsor, Ontario, Canada.

- Brayfield, M.E. and D.W. Hicks. The Effects of Temperature and Salinity on Byssal Thread Production and Strength in Two Nonindigenous Marine Mussels of the Genus *Perna*. Gulf Estuarine Research Society Spring Meeting, 17-19 April 2003, University of Texas Marine Science Institute, Port Aransas, Texas (M.E. Brayfield won 1<sup>st</sup> place in the graduate student competition).
- Brayfield, M.E. and D.W. Hicks. The effects of temperature and salinity on byssogenesis in two nonindigenous marine mussels of the genus *Perna* from the Gulf of Mexico. 106<sup>th</sup> Annual Meeting of the Texas Academy of Science, February 27-March 1, 2003, Stephen F. Austin University, Nacogdoches, Texas
- Jones, J.A. and D.W. Hicks. Physiological energetics in the fish-hunting cone snail, *Conus ermineus*, from the Gulf of Mexico. 106<sup>th</sup> Annual Meeting of the Texas Academy of Science, February 27-March 1, 2003, Stephen F. Austin University, Nacogdoches, Texas.
- Bates, T.W. and D.W. Hicks. The effects of shore position on microhabitat preference and movement patterns of littoral gastropods on Caribbean iron shores. 106<sup>th</sup> Annual Meeting of the Texas Academy of Science, February 27-March 1, 2003, Stephen F. Austin University, Nacogdoches, Texas.
- Hicks, D.W., J.W. Tunnell, Jr., and R.F. McMahon. Status of introduced marine mussels of the genus *Perna* in the Gulf of Mexico. 104<sup>th</sup> Annual Meeting of the Texas Academy of Science, March 1-3, 2001, Southwest Texas State University, San Marcos, Texas.
- Hicks, D.W., R.F. McMahon, and D.A. Ingrao. Two invasive mussels in the genus *Perna* in the Gulf of Mexico. State of the Bay Symposium V, 31 January 2 February 2001, Galveston, Texas.
- Ingrao, D.A., P. Mikkelsen, and D.W. Hicks. The green mussel, *Perna viridis*, invades Tampa Bay, Florida. 13<sup>th</sup> Annual Meeting of the Florida Association of Benthologists, December 9-10, 1999, Harbor Branch Oceanographic Institution, Ft. Pierce, Florida.
- Hicks, D.W., R.F. McMahon, and J.W. Tunnell, Jr. Biology, Impacts, and Control of the nonindigenous Brown Mussel, *Perna perna*, in North America. 127<sup>th</sup> Annual Meeting of the American Fisheries Society, 24-28 August 1997, Monterey, California.
- Hardegree, B., D. Hicks, and J. Tunnell, Jr. Response of salt marsh vegetation to in situ burning as an oil spill technique, coastal south Texas. The 3<sup>rd</sup> Gulf of Mexico Symposium, 29 March 1 April 1995, Corpus Christi, Texas.
- Hicks, D.W. and J.W. Tunnell, Jr. Mussels muscle in on the Gulf of Mexico. The 3<sup>rd</sup> Gulf of Mexico Symposium, 29 March 1 April 1995, Corpus Christi, Texas.
- Hicks, D.W. and J.W. Tunnell, Jr. Population dynamics in the recently introduced mussel, *Perna perna*, from the Gulf of Mexico. 98<sup>th</sup> Annual Meeting of the Texas Academy of Science, 2-4 March 1995, Waco, Texas.
- Tunnell, J.W. B. Hardegree, and D.W. Hicks. Environmental impact and recovery of a high marsh pipeline oil spill and burn site, upper Copano Bay, Texas. 1995 International Oil Spill Conference, 27 February 2 March 1995, Long Beach, California.

- Hicks, D.W. and J.W. Tunnell, Jr. Population dynamics of the recently introduced brown mussel, *Perna perna* (Linnaeus, 1758), in the western Gulf of Mexico. Aquaculture '95. 1-4 February 1995, San Diego, California.
- Hicks, D.W. Mussels muscle in on the Texas coast. Conchologists of American 22nd Annual Convention, 17- 23 July 1994, Corpus Christi, Texas.
- Hardegree, B., D.W. Hicks, and J.W. Tunnell, Jr. Evaluation of burning as an oil spill cleanup technique in a high marsh community along the south Texas coast. Gulf of Mexico and Caribbean Oil Spills in Coastal Ecosystems: Assessing Effects, Natural Recovery, and Progress in Remediation Research, 14-15 July 1994, New Orleans, Louisiana.
- Hicks, D.W. and J.W. Tunnell, Jr. Aspects of growth and recruitment of the recently introduced brown mussel, *Perna perna* (Linnaeus, 1758), from the south Texas coast. The 60<sup>th</sup> Annual Meeting of the American Malacological Union, 9-14 July 1994, Houston, Texas.
- Hardegree, B., D.W. Hicks and J.W. Tunnell, Jr. Environmental impact and recovery of the Exxon Pipeline oil spill and burn site, upper Copano Bay, Texas. Gulf Estuarine Research Society Spring Meeting, 7-9 April 1994, Beaumont, Texas.
- Hicks, D.W. and J.W. Tunnell, Jr. Aspects of growth and recruitment of the recently introduced brown mussel, *Perna perna*, in the western Gulf of Mexico. Gulf Estuarine Research Society Spring Meeting, 7-9 April 1994, Beaumont, Texas.
- Hicks, D.W. and J.W. Tunnell, Jr. Aspects of growth and recruitment of the recently introduced brown mussel, *Perna perna*, in the western Gulf of Mexico. 6<sup>th</sup> Annual South Texas Bays and Estuaries Meeting, 1 April 1994, Port Aransas, Texas.
- Hicks, D.W. and J.W. Tunnell, Jr. Environmental impact and recovery of the Exxon Pipeline oil spill and burn site, upper Copano Bay, Texas. 5<sup>th</sup> Annual South Texas Bays and Estuaries Meeting, 19 March 1993, Port Aransas, Texas.
- Hicks, D.W., J.W. Tunnell, Jr., and C.P. Onuf. Effects of a severe freeze on seagrasses and associated bivalve mollusca in Laguna Madre. Gulf Estuarine Research Society Spring Meeting, 2-4 April 1992, Port Aransas, Texas.
- Hicks, D.W. and J.W. Tunnell, Jr. Effects of the December 1989 freeze on seagrasses and associated bivalve mollusca in Laguna Madre. 95<sup>th</sup> Annual Meeting of the Texas Academy of Science, 6-7 March 1992, Wichita Falls, Texas.
- Hicks, D.W. and J.W. Tunnell, Jr. Invasion of the south Texas coast by the edible brown mussel, *Perna perna*. 4<sup>th</sup> Annual South Texas Bays and Estuaries Meeting, 28 February 1992. Port Aransas, Texas.

# TECHNICAL REPORTS:

- Hicks, D.W. 2014. Evaluation of a Concrete Rip-rap Enforced Retaining Wall as Habitat at the Puerto del Sol Marina, Port Isabel, Texas. Report prepared for Raybec Investment Co., LTD, 7855 Gross Point Road #F, Skokie Illinois, 60077. 6 pp.
- Hicks, D.W. 2012. Evaluation and Site Description of the Spanish Dagger Mitigation Site, Cameron County, Texas. Report prepared for Raybec Investment Co., LTD, 7855 Gross Point Road #F, Skokie Illinois, 60077. 5 pp.

- Hicks, D.W. 2012. Preliminary Jurisdictional Delineation & Habitat Characterization Report. Report prepared for Raybec Investment Co., LTD, 7855 Gross Point Road #F, Skokie Illinois, 60077. 16 pp.
- Hicks, D.W. 2012. Preliminary Jurisdictional Delineation & Habitat Characterization Report. Report prepared for D. Grant Seabolt, Jr., President, P.I. (Squared), Inc. 2101 Cedar Springs Rd., Suite 1050, Dallas, TX 75201. 14 pp.
- White, J.D., and Hicks, D.W. 2012. Submerged Aquatic Vegetation Survey Report. Report prepared for John Haywood, 300 South Garcia Street, Port Isabel, Texas 78578. 9 pp.
- White, J.D. and Hicks, D.W. 2012A. Port Isabel Area Queen Isabella Inn: Haywood Seagrass Survey: Addendum to the report dated August 19, 2010. Report prepared for John Haywood, 300 South Garcia Street, Port Isabel, Texas 78578. 5 pp.
- White, J.D., and Hicks, D.W. 2010A. Port Isabel Area Queen Isabella Inn: Haywood Seagrass Survey: 19 August 2010. Report prepared for John Haywood, 300 South Garcia Street, Port Isabel, Texas 78578. 11 pp.
- Hicks, D.W., H. DeYoe, T. Whelan, J. Benavides1, M.J. Shands, and E. Heise. 2010. Bahia Grande restoration monitoring: Final report. EPA-GOMP Contract Number: MX-96448706, Gulf of Mexico Program, Environmental Protection Agency 68 pp.
- Hicks, D.W. and C. Cintra-Buenrostro. 2009. Annual Progress Report for Texas Clipper Reef
   Biological Monitoring and Evaluation Program Year 2: November 1, 2008 October 31, 2009, Contract No. 183089. Report Prepared for Texas Parks and
   Wildlife Department, Artificial Reef Program.
- Hicks, D.W. and J.D. White. 2008. Submerged Aquatic Vegetation Survey Report, 5909 Laguna Circle North (Lot 6), South Padre Island, Texas. Report prepared for Troy Giles Reality and Management, 5813 Padre Boulevard, South Padre Island, Texas 78597. 11 pp.
- Hicks, D.W. 2008. Hull Biofouling Assessment of *Del Valle*. Report prepared for Southern Scrap Material Company, LLC, 4801 Florida Avenue, New Orleans, LA 70186. 17 pp.
- Hicks, D.W. and C. Cintra-Buenrostro. 2008. Annual Progress Report for Texas Clipper Reef
   Biological Monitoring and Evaluation Program Year 1: October 15, 2007 October
   31, 2008, Contract No. 183089. Report Prepared for Texas Parks and Wildlife Department, Artificial Reef Program.
- Hicks, D.W. and J.D. White. 2007. Submerged Aquatic Vegetation Survey Report, Lot1 Block 45 City of Port Isabel. Report prepared for Broaddus & Associates, 1301 S. Capital of Texas Highway, Suite A-302, Austin, TX 78746. 10 pp.
- Smith, E., J. Adams, J. Rizzo, T. Whelan, H. DeYoe, D. Hicks, L. Gustafson, L. Smith, X.
   Wu, F. Smeins, H. Perotto-Baldivieso, F. Liu, and J. Campbell. 2006. Bahia Grande
   Restoration Project Year One, Final Report, EPA-GOMP Contract Number: DW-14-94594701-0, Gulf of Mexico Program, Environmental Protection Agency 93 pp.
- Hicks, D.W. and J.D. White. 2006. Submerged Aquatic Vegetation Survey Report, Lot1 Block 45 City of Port Isabel. Report prepared for Broaddus & Associates, 1301 S. Capital of Texas Highway, Suite A-302, Austin, TX 78746. 18 pp.
- Hicks, D.W., S. Amoako-Atta, and D. Bierling. 2004. A GIS Approach to Assessing the Potential for Introductions of Invasive Species into the Port of Corpus Christi, Texas.

- Coastal Bend Bay and Estuary Program. TAMU-CC-0401-CCS. Texas A&M University Corpus Christi 39 pp.
- Hicks, D.W. 1996. Species of Concern: Edible brown mussel, *Perna perna*. Pages 474-480 *in*, Tunnell, J.W. and Q.R. Dokken (eds.), Current status and historical trends of the estuarine living resources within the Corpus Christi Bay National Estuary program study area. CCBNEP-06C.
- Tunnell, J.W., B. Hardegree, K. Withers, and D.W. Hicks. 1995. Environmental impact and recovery of the Exxon Pipeline oil spill and burn site, upper Copano Bay, Texas: year two. Center for Coastal Studies Report TAMU-CC-9501-CCS. Texas A&M University Corpus Christi. 42 pp.
- Hicks, D.W. and J.W. Tunnell. 1994. Invasive biology of the recently introduced brown mussel, *Perna perna*, in the western Gulf of Mexico: year one. Center for Coastal Studies Report No. TAMU-CC-9403-CCS, Texas A&M University - Corpus Christi. 31pp.
- Tunnell, J.W., D.W. Hicks, B. Hardegree. 1994. Environmental impact and recovery of the Exxon Pipeline oil spill and burn site, upper Copano Bay, Texas: year one. Center for Coastal Studies Report TAMU-CC-9402-CCS. Texas A&M University Corpus Christi 75pp.

#### SUPERVISED THESES

- Maria Cooksey. Characterizing benthic invertebrate communities at five South Texas Banks (M.S. thesis, UTRGV, 2016).
- Rebekah Rodriguez. Assessing Coral Communities Inhabiting Relict Reefs off the South Texas Coast (M.S. thesis, UTB, 2015).
- Phillip Rose. Temperature and relative humidity effects on water loss and hemolymph osmolality of *Littoraria angulifera* (Lamarck, 1822) (M.S. thesis, UTB, 2014).
- Claudia Tamez. Gauging wetland restoration status using benthic-based structural and functional metrics (M.S. thesis, UTB, 2014).
- Liana Lerma. The effects of a red tide, *Karenia brevis* episode on the benthic macroinvertebrate communities of South Padre Island, TX (M.S. thesis, UTB, 2013).
- Jonathan Lê. An experimental test of the effects of disturbance frequency on the diversity of artificial reef fouling communities (M.S. thesis, UTB, 2013).
- Reuben Trevino. Respiratory responses to temperature and progressive emersion in the mangrove periwinkle, *Littorina angulifera* (Lamarck, 1822), from the southwestern coast of the Gulf of Mexico (M.S. thesis, UTB, 2012).
- Troy D. McWhorter. Assessing the swash zone macrobenthic community response to a beach renourishment episode on South Padre Island, Texas (M.S. thesis, UTB, 2012).
- Edward Walk. Testing the Intermediate Disturbance Hypothesis for artificial reef fouling communities (M.S. thesis, UTB, 2010).
- Erika M. Cornejo. Fish Assemblage Dynamics in the Re-flooded Bahia Grande (M.S. thesis, UTB, 2009).

- Felicia Farquhar. Feeding ecology of the intertidal mole crab, *Emerita talpoida*: response to algal biomass concentration, nutritional quality, and particle size (M.S. thesis, UTB, 2008).
- Maria E. Brayfield. Effects of temperature and salinity on byssogenesis in two non-indigenous marine mussels of the genus *Perna* from the Gulf of Mexico (M.S. thesis, TAMUCC, 2004).
- Thomas W. Bates. Locomotor behavior and habitat selection in intertidal gastropods from varying shore heights (M.S. thesis, TAMUCC, 2003).

#### FUNDED RESEARCH EXPEDITIONS:

- South Texas Banks 2014 Research Cruise. This research cruise was funded by NOAA to conduct faunal surveys of the South Texas Banks. September 7-11, 2014.
- Flower Garden Banks National Marine Fisheries Sanctuary, Gulf of Mexico. Participated 2014 Coral Spawning Cruise over August 15-19, 2014. Sponsored by the Harte Research Institute for Gulf of Mexico Studies, Texas A&M Corpus Christi.
- Flower Garden Banks National Marine Fisheries Sanctuary, Gulf of Mexico. Participated with graduate students Maria Cooksey and Ricky Alexander (UTB Biology) in the Gulf of Mexico Foundation's annual Industry/Government Cruise over July 27-30, 2014. Sponsored by the Gulf of Mexico Foundation.
- Adriatic VII Biological Survey. The purpose of the project was to conduct a biological survey of a drilling platform for possible adoption into the Louisiana artificial reef program. The structure was approximately 150 miles off shore in 260 ft. of water that was toppled in 2007 as a result of Hurricane Rita. September 2-6, 2013.
- Flower Garden Banks National Marine Fisheries Sanctuary, Gulf of Mexico. Participated with graduate student Rebekah Rodriguez (UTB Biology) in the Gulf of Mexico Foundation's annual Industry/Government Cruise over July 29-31, 2013. Sponsored by the Gulf of Mexico Foundation.
- Flower Garden Banks National Marine Fisheries Sanctuary, Gulf of Mexico. Participated with graduate student Andres Garcia (UTB Biology) in the Gulf of Mexico Foundation's annual Industry/Government Cruise over October 23-25, 2012. Sponsored by the Gulf of Mexico Foundation.
- Gulf of Mexico. Participated with former UTB graduate student, Edward Walk (Brownsville Veterans Memorial High School Teacher) in making a documentary (Towers of Life) which will highlight the importance of artificial reefs to the ecology of the Gulf of Mexico. Sponsored by the Gulf of Mexico Foundation. October 15-19, 2012.
- Mapping the South Texas Banks aboard the R/V Falkor of the Schmidt Ocean Institute. September 17-29, 2012. Participated with graduate students Liana Lerma and Jonathan Le (UTB Biology). Conducted high resolution multi-beam mapping and ROV faunal surveys of a series of mid-shelf banks in the Gulf of Mexico. Sponsored by the the Schmidt Ocean Institute and the Harte Research Institute for Gulf of Mexico Studies, Texas A&M Corpus Christi.
- Bioko Island, Equatorial Guinea. September 11-17, 2010. Assist Marathon Oil in the design, construction, and placement of the artificial reef structures on the northern coast of Bioko Island, Equatorial Guinea.
- Flower Garden Banks National Marine Fisheries Sanctuary, Gulf of Mexico. September 17-20, 2001. Reef monitoring project funded by NOAA.
- Flower Garden Banks National Marine Sanctuary, Gulf of Mexico. July 9-11, 2001. Teachers Cruise no. 1, DUOY. Funded by NOAA.
- Stetson Bank National Marine Fisheries Sanctuary, Gulf of Mexico. May 12-15, 1997. Reef Monitoring cruise no. 6. Funded by NOAA and the Gulf Reef Environmental Action Team (G.R.E.A.T.).

- Stetson Bank National Marine Fisheries Sanctuary and Sonnier banks, Gulf of Mexico. June, 1996. Reef Monitoring cruise no. 5. Funded by NOAA and the Gulf Reef Environmental Action Team (G.R.E.A.T.).
- Stetson Bank National Marine Fisheries Sanctuary, Gulf of Mexico. October 9-10, 1995. Reef Monitoring cruise no. 4. Funded by NOAA and the Gulf Reef Environmental Action Team (G.R.E.A.T.).
- Flower Garden Banks National Marine Fisheries Sanctuary, Gulf of Mexico. August 6-10, 1994. Reef monitoring project funded by NOAA.
- Petroleum platform at Lease Block HI-389A, Gulf of Mexico. June 11-15, 1993. Artificial reef survey. Funded by Mobil Oil Company and the Center for Coastal Studies, Texas A&M University-Corpus Christi.
- Petroleum platform at Lease Block SPI-1048, Gulf of Mexico. April 28-29, 1993. Evaluation of rock-rubble derrick pads as habitat to enhance fisheries. Funded by Mobil Oil Company.
- Artificial Reef Complex at Lease Block HI-A298, Gulf of Mexico. October 19-23, 1992. Fisheries survey funded by Texas Parks and Wildlife Department's Artificial Reef Program and the Center for Coastal Studies, Texas A&M University-Corpus Christi.
- Petroleum platform at Lease Block HI-389A, Gulf of Mexico. October 2-6, 1992. Development of fisheries survey techniques. Funded by Texas Parks and Wildlife Department's Artificial Reef Program and Mobil Oil Company.
- Flower Garden Banks National Marine Fisheries Sanctuary, Gulf of Mexico. August 19-22, 1992. Reef monitoring projected funded by NOAA.
- Quintana Roo, Mexico. May 11-22, 1992. An ecological characterization of the southern Quinatana Roo coral reef system, funded by the Texas A&M University Sea Grant College Program and the Center for Coastal Studies, Texas A&M University-Corpus Christi.

# **COMMUNITY SERVICE:**

# Outreach Activities:

- U.S. Navy SeaPerch underwater robotics competition at HESTEC. Area high school SeaPerch competitors were given the opportunity to pilot UTRGV's VideoRay ROV. UTRGV in Edinburg, October 9. 2015.
- Oceanarium, Outreach Activity, "3D Undersea Adventure" featuring 3D underwater video of relic coral reef banks in the southern Gulf of Mexico taken from a Remotely Operated Vehicle (ROV) deployed from the R/V Falkor of the Schmidt Ocean. In addition, we used one of the UTB ROVs as a demonstration. More than 1,200 in attendance, mostly children. Gladys Porter Zoo, Brownsville, Texas, September 12, 2015.
- Lee H. Means Elementary's 1st Annual Science Night (Harlingen CISD). Exhibit, "3D Marine Biology" featuring 3D underwater video of relic coral reef banks in the

- southern Gulf of Mexico taken from a Remotely Operated Vehicle (ROV) deployed from the R/V Falkor of the Schmidt Ocean. January 27, 2015.
- Classic Upward Bound Program. Texas Coral Reefs featuring 3D underwater video of relic coral reef banks in the southern Gulf of Mexico. Approximately 30-40 ninth grade students and 30-40 tenth grade students in attendance in two sessions. University of Texas at Brownsville, January 24, 2015.
- UTB Rio Grande Science and Arts Festival (RiSA). THE ABYSS featuring 3D underwater video of relic coral reef banks in the southern Gulf of Mexico. Approximately 200 high school students in attendance, Salon Cassia, University of Texas at Brownsville, November 7, 2014.
- Classic Upward Bound Program. Texas Coral Reefs featuring 3D underwater video of relic coral reef banks in the southern Gulf of Mexico. Approximately 30-40 ninth grade students and 30-40 tenth grade students in attendance in two sessions. University of Texas at Brownsville, November 1, 2014.
- Oceanarium, Outreach Activity, "3D Undersea Adventure" featuring 3D underwater video of relic coral reef banks in the southern Gulf of Mexico taken from a Remotely Operated Vehicle (ROV) deployed from the R/V Falkor of the Schmidt Ocean. In addition, we used one of the UTB ROVs as a demonstration. More than 1,200 in attendance, mostly children. Gladys Porter Zoo, Brownsville, Texas, September 6, 2014.
- Texas Master Naturalist, Lecture, "Shore Ecology of South Padre Island," Harlingen, Texas, March 5, 2014.
- Career Pathways Event for BISD students in grades 3-8 that have been identified as at-risk and are part of the 21st Century grant program, funded by TEA. Biological Sciences' event included a live sea life touch tank, plankton observing, a live submersible ROV demonstration, and viewing of 3D ROV video taken from a dives on the south Texas relic coral banks, January 26, 2013.
- Oceanarium, Outreach Activity, "3D Undersea Adventure" featuring 3D underwater video of relic coral reef banks in the southern Gulf of Mexico taken from a Remotely Operated Vehicle (ROV) deployed from the R/V Falkor of the Schmidt Ocean. In addition, we used one of the UTB ROVs as a demonstration. More than 1,200 in attendance, mostly children. Gladys Porter Zoo, Brownsville, Texas, September 7, 2013.
- Lee H. Means Elementary's 1st Annual Fall Festival (Harlingen CISD), Exhibit, "3D Undersea Adventure" featuring 3D underwater video of relic coral reef banks in the southern Gulf of Mexico taken from a Remotely Operated Vehicle (ROV) deployed from the R/V Falkor of the Schmidt Ocean. November 17, 2012
- Oceanarium, Outreach Activity, "Role of Plankton in Marine Food Chains." This year's exhibit included a 'touch tank' which was a great success. More than 700 children in attendance. Gladys Porter Zoo, Brownsville, Texas, September 8, 2012.
- Texas Master Naturalist, combined presentation and South Padre Island field excursion regarding shoreline ecology of SPI beaches. South Padre Island, Texas, March 3, 2012.
- Oceanarium, Outreach Activity, "Role of Plankton in Marine Food Chains," Gladys Porter Zoo, Brownsville, Texas, September, 2011.

- Harlingen Consolidated Independent School District, Early College High School District, Career Fair, January 14, 2011.
- Texas Master Naturalist, combined presentation and South Padre Island field excursion regarding shoreline ecology of SPI beaches. South Padre Island, Texas, April 10, 2010.
- 2010 Winter Outdoor and Wildlife EXPO, Lecture, "Texas Clipper Reef," South Padre Island, Texas, February 6, 2010.
- Career Day at Lee H. Means Elementary, presentation to 4<sup>th</sup> and 5<sup>th</sup> graders regarding "Careers in the Marine Sciences," Harlingen, Texas, February 4, 2010.
- Oceanarium, Outreach Activity, "Role of Plankton in Marine Food Chains," Gladys Porter Zoo, Brownsville, Texas, September 12, 2009.
- Texas Commission on Environmental Quality, combined presentation and South Padre Island field excursion regarding shoreline ecology of SPI beaches. South Padre Island, Texas, July 24, 2009.
- Career Day at Lee H. Means Elementary, presentation to 4<sup>th</sup> and 5<sup>th</sup> graders regarding "Careers in the Marine Sciences," Harlingen, Texas, February 4, 2009.
- Brownsville Navigation District, lecture to the 'restoration partners' regarding the status of the Biological Monitoring Program at Bahia Grande, Brownsville, Texas, January 30, 2009.
- Upward Bound, Outreach activities including presentations by UTB/TSC graduate students, and bay and beach sampling on South Padre Island, Texas, November 8, 2008.
- Oceanarium, Outreach Activity, "Role of Plankton in Marine Food Chains," Gladys Porter Zoo, Brownsville, Texas, September 20, 2008.
- Texas Master Naturalist, Lecture, "Shore Ecology of South Padre Island," Harlingen, Texas, March 19, 2008.
- 2008 Winter Outdoor and Wildlife EXPO, Lecture, "Shoreline ecology of SPI beaches," South Padre Island, Texas, February 2, 2008.
- Partnership for Environmental Technology Education (PETE), Lecture, "Impact of invasive species in Texas," South Padre Island, Texas, January 11, 2008.
- Gorgas Science Society Distinguished Lecturer Series, Lecture, "Ecology of fish-hunting cone snails in the Gulf of Mexico and update on the reefing of the Texas Clipper," UTB/TSC, December 7, 2007.
- San Antonio Shell Club, Lecture, "Ecology of Fish-hunting Cone Snails in the Gulf of Mexico," San Antonio, Texas, October 15, 2007.
- Oceanarium, Lecture, "Texas Coastal Ecology," Texas State Aquarium, Corpus Christi, Texas, June 8, 2007.
- 2<sup>nd</sup> Annual South Padre Island Ecotourism Summit, Lecture, "Coastal Ecology and Issues in South Texas," South Padre Island, Texas, April 19, 2007.
- South Padre Island Distinguished Lecturer Series, Lecture, "Padre Island Shore Ecology," South Padre Island, Texas, March 29, 2007.
- Texas Master Naturalist, Lecture, "Shore Ecology of South Padre Island," Harlingen, Texas, July 11, 2006.
- Texas Master Naturalist, Lecture, "Restoration of Bahia Grande," Harlingen, Texas, April 12, 2005.

- Texas Master Naturalist, Lecture, "An Introduction to the Phylum Mollusca," Harlingen, Texas, February 16, 2005.
- San Antonio Shell Club, "Physiological Ecology of the Fish-hunting Cone Snail, *Conus ermineus*, from the Gulf of Mexico," San Antonio, Texas, September 20, 2004.
- Fifth Annual Texas Shell Jamboree, "Physiological Ecology of the Fish-hunting Cone Snail, *Conus ermineus*, from the Gulf of Mexico," Houston, Texas, May 3, 2003.
- Coastal Bend Shell Club, "Ecology of Fish-hunting Cone snails in the Gulf of Mexico," Corpus Christi, Texas, October 23, 2002.
- Adventures in Marine Science, Port Arthur, Texas, June 25-29, 2001. Initiated a week-long marine science camp for kids ages 9-11.
- Career Day Participation, "Discussion of a Career in Marine Biology" to middle school students of the Nederland Independent School District, Montagne Center, Beaumont, Texas, February 13, 2001.
- Career Day Participation, "Discussion of a Career in Marine Biology" to high school students, Clifton J. Ozen high school, Beaumont, Texas, April, 2001.
- Science Fair Judge, Paul Laurence Dunbar High School, Fort Worth, Texas, February 19, 1999.
- Career Day Participation, "Discussion of a Career in Marine Biology" to middle school students, Grapevine Middle School, Grapevine, Texas, March 12, 1997.
- Career Day Participation, "Discussion of a Career in Marine Biology" to middle school students, Chisom Trail Intermediate School, Fort Worth, Texas, November 15, 1995.
- Sea Shell Searchers of Brazoria County, "Discussion of the Brown Mussel Introduction," Lake Jackson, Texas, May 2, 1995.
- Coastal Bend Shell Club, "Discussion of the Brown Mussel introduction," Corpus Christi, Texas, January 20, 1992.
- La Retama's, "Discussions of Seagrasses and Waterfowl in Laguna Madre," Corpus Christi, Texas, November 10, 1991.

# Community committee service:

Board Member, Friends of the Laguna Atascosa National Wildlife Refuge (FLANWR). (2013 to present)

Board Member, Cameron County Coastal Task Force (2013 to present)