

James C. Gibeaut

Professional Summary

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Academic Background

B.S. Geology and Mineralogy, Math Minor, Ohio State University, 1983
M.S. Geology, University of Rhode Island, 1986
Ph.D. Marine Science, University of South Florida, 1991

Areas of Expertise

- A. Coastal morphodynamics.
- B. Application of remote sensing (lidar, radar, imagery, photography) and GIS.
- C. Modeling effects of sea-level rise on coastal geoenvironments.
- D. Public outreach and geoscience applications for coastal management.
- E. Coastal oil spill damage and cleanup assessment.

Professional Work Experience

- A. Present Position: Endowed Associate Research Professor in Geospatial Sciences, Harte Research Institute for Gulf of Mexico Studies, Texas A&M University – Corpus Christi.
- B. Research Associate, Bureau of Economic Geology, The University of Texas at Austin, Austin, Texas (July 1992 – August 2007).

Head of Coastal Studies Group. Researching coastal processes to develop models of coastal change, including the effects of climate change and relative sea-level rise on coastal governments. Developing and applying new techniques for coastal mapping and change analysis, including Global Positioning System Surveys, airborne synthetic aperture radar, airborne topographic lidar, and GIS.

- C. Visiting Assistant Professor, Department of Geology, University of South Florida, Tampa, Florida (August 1991 - June 1992).

Supervising students, research assistants, and technicians in conducting coastal research including beach-nourishment monitoring and sand-source studies. Teaching advanced graduate course in coastal sedimentology.

- D. Chief of Science and Data Management, Oil Spill Response Center, Alaska Department of Environmental Conservation, Anchorage, Alaska (November 1990 - July 1991).

Supervising employees and contractors responsible for collection and analysis of data concerning the Exxon Valdez oil spill. Representing State of Alaska to Federal Technical Advisory Group (TAG). Advising Federal On-Scene Coordinator on matters concerning survey and cleanup techniques.

- E. Geological Consultant, Exxon Valdez Oil Spill Response Center, Alaska Department of Environmental Conservation, Anchorage, Alaska (July 1990 - October 1990).

Field surveys describing geology and oiling of study sites in spill impact area. Analyzing geologic and oiling data. Creating detailed evaluations of selected sites in Prince William Sound by comparing data sets collected by various groups using different methods including the use of a geographic information system (GIS).

- F. Geological Consultant, National Oceanographic and Atmospheric Administration (NOAA), Seattle, Washington (September 1989 - March 1990).

Field team leader for NOAA's Exxon Valdez Oil Spill Winter Monitoring Program in Prince William Sound, Alaska. In charge of collecting geological, chemical, and biological data at selected sites through winter, under difficult logistical and environmental conditions. Coordinating use of ships and helicopters to complete surveying.

- G. Geological Consultant, Habitat Division, Alaska Department of Fish and Game, Anchorage, Alaska (July 1989 - September 1989).

Assessing habitat damage by Exxon Valdez oil spill in Prince William Sound and Kenai Peninsula—locating, geologically assessing, and surveying study sites for biological sampling. Advisor on study plan.

- H. Research and Teaching Associate, Department of Geology, University of South Florida, Tampa, Florida (August 1986 - December 1989).

Coastal research along Florida's west coast including field, office, and laboratory work. Extensive literature search for data concerning tidal inlets along Florida's west coast. Field surveys of inlets. Developing morphodynamic models of tidal inlets and final report for use of coastal zone planners. Assisting development and implementation of beach surveying and sediment sampling plans for major beach renourishment monitoring projects.

Teaching "Introduction to Oceanography" to 100 science and nonscience majors (2 semesters).

- I. Research and Teaching Associate, Department of Geology, University of Rhode Island, Kingston, Rhode Island (September 1983 - June 1986).

Statistically analyzing and interpreting beach profiles measured over 24 years. Developing beach sedimentation models for south shore of Rhode Island for coastal management. Developing and teaching laboratory courses in introductory geology.

Professional Societies

American Geophysical Union
Sigma Xi, The Scientific Research Society

Professional Registrations

Texas Board of Professional Geoscientists, Professional Geologist, Registration #4851

Awards and Honorary Societies

Third Place GCAGS/GCSSEPM Grover E. Murray Best Published Paper Award, GCAGS Transactions, 2002

Best of Session Poster, "Airborne Laser Swath Mapping of Galveston Island and Bolivar Peninsula, Texas," 5th International Conference on Remote Sensing for Marine and Coastal Environments, 1998

Honorable Mention Poster, "Mapping Barrier Islands Using AIRSAR," 4th International Conference on Remote Sensing for Marine and Coastal Environments, 1997

Graduate Council Fellowship, University of South Florida, 1987 - 1988

Phi Kappa Phi Honor Society, 1987

Eugene J. Tynan Memorial Prize for Graduate Research, University of Rhode Island, 1986

Speiker-Toivonen Scholarship for Summer Field Work, Ohio State University, 1982

Committee Responsibilities and Professional Activities

Host and Co-coordinator, Ecosystem Integration and Assessment Priority Issue Team of the Gulf of Mexico Alliance Meeting, Corpus Christi, Texas, April 15 – 17.

Member (appointed), Nueces County, Texas, Beach Management Advisory Committee, 2008

Chair, Expert Panel on Geohazards of Galveston Island, City of Galveston, 2004

Member, Coastal Texas 2020 Technical Advisory Committee, Texas General Land Office, 2004 - 2005

Member, Technical Program Committee, Coastal Sediments Conference, 2003

Chairman, Poster Session, Gulf Coast Association of Geological Societies Convention, Austin, Texas, 2002

Member, Campus Advisory Committee, Joe Dan Mills, Jr., Elementary School, 2002 - 2004

Co-Chair, Annual Meeting Poster Session, "Techniques for Analyzing Modern Environmental Processes and Change and Impacts", American Association of Petroleum Geologists, 1999

Co-organizer/convener, Lidar Workshop, Bureau of Economic Geology, 1999

Member, Mapping Advisory Committee, Bureau of Economic Geology representative, State of Texas, 1998 - 2002

Member, Coastal Hazards Theme Team formed to help NASA develop research plan, NASA, 1998

Representative of the Bureau of Economic Geology, Geographic Information Council, Texas, 1997 - 2001

Member, Topography and Surface Change Program Investigators Working Group, NASA, 1995 - 1998

Publications

Reports, White Papers, Commentaries, Educational Posters, Guide Books

Gibeaut, J. C., Caudle, H., and Andrews, J. C., 2009, Virtual Barrier Island, Web, <http://coastal.beg.utexas.edu/thscmp/vbi.htm>.

Houser, C., Giardino, R., Gibeaut, J. C., and Sherman, D., 2008, Kirk Bryan Field Trip: coastal geomorphology and change along the upper Texas coast: field trip guide book, 98 p.

Gibeaut, J. C., Tremblay, T. A., and Hepner, T. L., 2008, Geo-Environments of Mustang Island and North Padre Island, Texas: Status Trends, and Environmental Management of a Barrier-Island System, Field Trip Guide Book, 2008 AAPG Annual Convention – San Antonio, Texas, Society for Sedimentary Geology (SEPM) Field Trip Guide Book, April 19, 2008, 43 p.

Gibeaut, J. C., Coastal development: the Galveston case, part II: Commentary published in *Geotimes*, November, 2007.

Gibeaut, J. C., Coastal development: the Galveston case, part I: Commentary published in *Geotimes*, October, 2007.

- Gibeaut, J. C., Anderson, J. B., and Dellapenna, T. M., 2004, Living with geohazards on Galveston Island: a preliminary report with recommendations: The University of Texas at Austin, Bureau of Economic Geology report prepared for the City of Galveston, 12 p.
- Gibeaut, J. C. and White, W. A., 2004, The Texas coastal environment: living with the dynamic forces of nature: educational poster published by the Bureau of Economic Geology, Jackson School of Geosciences, The University of Texas at Austin, publication number EM0010.
- Gibeaut, J. C., and Piper, Ernest, 1998, 1993 Shoreline oiling assessment of the Exxon Valdez oil spill: Alaska Department of Environmental Conservation, Office of Restoration and Damage Assessment, final report for Restoration Project, 93038, 57 p.
- Gibeaut, J. C., Piper, Ernest, and Munson, Dianne, 1996, 1995 Kodiak shoreline oiling assessment of the Exxon Valdez oil spill, Juneau, Alaska: Alaska Department of Environmental Conservation, Office of Restoration and Damage Assessment, final report, Restoration Project, 95027, 15 p.
- Sale, D. M., Gibeaut, J. C., and Short, J. W., 1995, Nearshore transport of hydrocarbons and sediments following the Exxon Valdez oil spill: Exxon Valdez Oil Spill Trustee Council, prepared for Exxon Valdez oil spill State/Federal natural resource damage assessment, Subtidal Study Number, 3B, 64 p. + app.
- Davis, R. A., Jr., and Gibeaut, J. C., 1990, Historical morphodynamics of inlets in Florida, models for coastal zone planning: Florida Sea Grant College Program, Technical Paper, 55, 81 p.

Book Chapter

- Montagna, P. A., Gibeaut, J. C., and Tunnell, J. W., Jr., 2007, South Texas Climate: Coastal Impacts, *in* Norwine, J. and Kuruvilla, J., eds., *The Changing Climate of South Texas 1900-2100*, BookMasters Inc., p. 57-77.

Articles

- Holland, S. D. and Gibeaut, J. C., 2009, Development of ecosystem decision support tools: the role of collaborative GIS in the Gulf of Mexico Alliance, *Proceedings of the Data Integration and Management on the Gulf of Mexico Workshop*, Corpus Christi, Texas, <http://cs.tamucc.edu/dim/index.html>.
- Hepner, T. L. and Gibeaut, J. C., Texas initiatives for increasing public awareness of coastal processes, 2007: *in* *Proceedings of Coastal Zone '07*, Portland, Oregon, July 22-26, 2007, 5 p., Web and CD-ROM.
- Gibeaut, J. C., 2007, Modeling future coastal wetland transition induced by relative sea-level rise: *in* *Coastal Sediments '07*, *Proceedings of the Sixth International Symposium on Coastal Engineering and Science of Coastal Sediment Processes*, New Orleans, Louisiana, May 13-17, 7 p., CD-ROM.
- Paine, J. G., White, W. A., Smyth, R. C., Andrews, J. R., and Gibeaut, J. C., 2005, Combining EM and lidar to map coastal wetlands: an example from Mustang Island, Texas, *in* *Geophysical solutions for today's challenges: 18th Annual Symposium on the Application of Geophysics to Engineering and Environmental Problems*, April 3-7, Atlanta: Environmental and Engineering Geophysical Society, p. 745-756, CD-ROM.
- Tremblay, T. A., White, W. A., Waldinger, R. L., Collins, E. W., Gibeaut, J. C., and Ames, J. T., 2005, Geoenvironmental map of the Christmas Point Quadrangle, Texas Gulf Coast, *in* Sappington, Nancy, ed., *GIS in state government, volume 1: Economic and Social Research Institute (ESRI)*, ISBN 1058948, p. 79.
- Hepner, T. L., and Gibeaut, J. C., 2004, Tracking post-storm beach recovery using data collected by Texas high school students: *Shore & Beach*, v. 72, no. 4, p. 5-9
- Paine, J. G., White, W. A., Smyth, R. C., Andrews, J. R., and Gibeaut, J. C., 2004, Mapping coastal environments with lidar and EM on Mustang Island, Texas, U.S.: *The Leading Edge*, v. 23, no. 9, p. 894-898.

- Gibeaut, J. C., White, W. A., Smyth, R. C., Andrews, J. R., Tremblay, T. A., Gutiérrez, Roberto, Hepner, T. L., and Neuenschwander, Amy, 2003, Topographic variation of barrier island subenvironments and associated habitats, *in* Coastal Sediments '03: Crossing disciplinary boundaries: Proceedings, Fifth International Symposium on Coastal Engineering and Science of Coastal Sediment Processes, Clearwater Beach, Florida, May 18–23, 10 p., CD-ROM.
- Gibeaut, J. C., Hepner, T. L., Waldinger, Rachel, Andrews, J. R., Smyth, R. C., and Gutiérrez, Roberto, 2003, Geotubes for temporary erosion control and storm surge protection along the Gulf of Mexico shoreline of Texas, *in* Proceedings, 13th Biennial Coastal Zone Conference: Coastal Zone 3: Coastal Zone Management through Time: Baltimore, National Oceanic and Atmospheric Administration, 5 p., CD-ROM.
- Gibeaut, J. C., 2003, Lidar: mapping a shoreline by laser light: *Geotimes*, v. 48, no. 11, p. 23–27.
- Warne, A. G., Meade, R. H., White, W. A., Guevara, E. H., Gibeaut, J. C., Smyth, R. C., Aslan, Andres, and Tremblay, T. A., 2002, Regional controls on geomorphology, hydrology, and ecosystem integrity in the Orinoco Delta, Venezuela: *Geomorphology*, v. 44, p. 273–307.
- Gibeaut, J. C., Gutiérrez, Roberto, and Hepner, Tiffany, 2002, Threshold conditions for episodic beach erosion along the southeast Texas coast: *Gulf Coast Association of Geological Societies Transactions*, v. 52, p. 323–335.
- Aslan, Andres, Warne, A. G., White, W. A., Guevara, E. H., Smyth, R. C., Raney, J. A., and Gibeaut, J. C., 2001, Mud volcanoes of the Orinoco delta, eastern Venezuela: *Geomorphology*, v. 41, p. 323–336.
- Gutiérrez, Roberto, Gibeaut, J. C., Smyth, R. C., Hepner, Tiffany, Andrews, J. R., Weed, C., Gutelius, Bill, and Mastin, M., 2001, Precise airborne LIDAR surveying for coastal research and geohazards applications: *International Archives of Photogrammetry and Remote Sensing*, v. 34, part 3/W4, p. 185–192.
- Crawford, M. M., Kumar, S., Ricard, M. R., Gibeaut, J. C., and Neuenschwander, A., 1999, Fusion of airborne polarimetric and interferometric SAR for classification of coastal environments: *IEEE Transactions on Geoscience and Remote Sensing*, v. 37, no. 3, p. 1306–1315.
- Gibeaut, J. C., Gutiérrez, Roberto, and Kyser, J., 1998, Increasing the accuracy and resolution of coastal bathymetric surveys: *Journal of Coastal Research*, v. 14, no. 3, p. 1082–1098.
- Gutelius, Bill, Carter, W. E., Shrestha, R. L., Medvedev, Eugene, Gutiérrez, Roberto, Gibeaut, J. C., Crawford, Melba, and Smith, Solar, 1998, Engineering applications of airborne scanning lasers: reports from the field: *PE & RS (Highlight article)*, v. 64, no. 4, p. 246–253.
- Gutiérrez, Roberto, Gibeaut, J. C., Crawford, Melba, Mahoney, M., Smith, Solar, Gutelius, Bill, Carswell, Donald, and MacPherson, Elise, 1998, Airborne laser swath mapping of Galveston Island and Bolivar Peninsula, Texas, *in* Proceedings, Fifth International Conference: Remote Sensing for Marine and Coastal Environments, San Diego: p. I-236–I-243.
- Slatton, K. C., Crawford, Melba, Gibeaut, J. C., and Gutiérrez, Roberto, 1998, Post-processing techniques to minimize systematic and random height errors in TOPSAR DEMs, *in* Kim, Yunjin, ed., *Summaries of the Seventh Airborne Earth Science Jet Propulsion Laboratory: Publication 97-21*, v. 2, p. 83–98.
- Ricard, M. R., Neuenschwander, A. L., Crawford, Melba, and Gibeaut, J. C., 1997, Multisensor classification of wetland environments using airborne multispectral and SAR data, *in* IGARSS'97: 1997 International Geoscience and Remote Sensing Symposium: Remote sensing—a scientific vision for sustainable development: IEEE Publications, Catalog Number 97CH36042, Library of Congress Number 97-70575, v. 2, p. 667–669.
- Slatton, K. C., Crawford, Melba, Gibeaut, J. C., and Gutiérrez, Roberto, 1997, Removal of residual errors from SAR-derived digital elevation models for improved topographic mapping of low-relief areas, *in* IGARSS'97: 1997 International Geoscience and Remote Sensing Symposium: Remote sensing—a scientific vision for sustainable development: IEEE Publications, Catalog Number 97CH36042, Library of Congress Number 97-70575, v. 1, p. 457–459.
- Short, J. W., Sale, D. M., and Gibeaut, J. C., 1996, Nearshore transport of hydrocarbons and sediments following the Exxon Valdez, *in* Rice, S. D., Spies, R. B., Wolfe, D. A., and Wright, B. A.,

- eds., Proceedings, Exxon Valdez Oil Spill Symposium: American Fisheries Society, Symposium Number 18, p. 40–60.
- Slatton, K. C., Crawford, Melba, Gibeaut, J. C., and Gutiérrez, Roberto, 1996, Modeling wetland vegetation using polarimetric SAR, *in* Stein, T. I., ed., IGARSS '96, International Geoscience and Remote Sensing Symposium: remote sensing for a sustainable future: Institute of Electrical and Electronics Engineers, Inc., IEEE Catalog Number 96CH35875, Library of Congress Number 95-80706, volume 1, p. 263–265.
- Morton, R. A., Gibeaut, J. C., and Paine, J. G., 1995, Meso-scale transfer of sand during and after storms: implications for prediction of shoreline movement: *Marine Geology*, v. 126, p. 161–179.
- Morton, R. A., Paine, J. G., and Gibeaut, J. C., 1994, Stages and durations of post-storm beach recovery, southeastern Texas coast, U.S.A.: *Journal of Coastal Research*, v. 10, no. 4, p. 884–908.
- Davis, R. A., Jr., Inglin, D. C., Gibeaut, J. C., Creaser, G. J., Haney, R. L., and Terry, J. B., 1993, Performance of three adjacent but different beach nourishment projects, Pinellas County, Florida, *in* Coastal Zone '93: Proceedings, 8th Symposium on Coastal and Ocean Management: American Shore and Beach Preservation Association/ASCE, p. 379–389.
- Gibeaut, J. C., and Davis, R. A., Jr., 1993, Statistical geomorphic classification of ebb-tidal deltas along the west-central Florida coast: *Journal of Coastal Research*, Special Issue No. 18, p. 165–184.
- Morton, R. A., Paine, J. G., and Gibeaut, J. C., 1993, Large-scale transfer of sand during storms: implications for modeling and prediction of shoreline movement, *in* List, J. H., ed., Large-scale coastal behavior '93: U.S. Geological Survey, Open-File Report No. 93-381, p. 129–132.
- Gibeaut, J. C., and Davis, R. A., Jr., 1991, Computer simulation modeling of ebb-tidal deltas, *in* ASCE Coastal Sediments 1991: Seattle, Washington: American Society of Civil Engineers, p. 1389–1403.
- Gundlach, E. R., Pavia, E. A., Robinson, C., and Gibeaut, J. C., 1991, Shoreline surveys at the Exxon Valdez oil spill—the State of Alaska response, *in* Proceedings of the 1991 International Oil Spill Conference, San Diego, California: American Petroleum Institute, p. 519–529.
- Michel, J., Hayes, M. O., Sexton, W. J., Gibeaut, J. C., and Henry, C. D., 1991, Trends in natural removal of the Exxon Valdez oil spill in Prince William Sound from September 1989 to May 1990, *in* Proceedings of the 1991 International Oil Spill Conference, San Diego, California: American Petroleum Institute, p. 181–187.
- Davis, R. A., Jr., Gibeaut, J. C., and Andronaco, M., 1990, Formation and development of a tidal inlet from a washover fan, west-central Florida coast: *Sedimentary Geology*, v. 65, p. 87–94.
- Gibeaut, J. C., and Davis, R. A., Jr., 1988, Morphodynamic classification of tidal inlets, *in* Proceedings of the Beach Preservation Technology '88 Conference, Gainesville, Florida: Florida Shore and Beach Preservation Association, p. 221–229.

Abstracts

- Su, L. and Gibeaut, J. C., 2009, Extracting surface features of the Nueces River Delta using LiDAR points, Proceedings of the Texas Bays and Estuaries Meeting, April 28-30, University of Texas Marine Science Institute, Port Aransas, Texas, p. 29.
- Reisinger, A. S., Tissot, P., Hicks, D. W., and Gibeaut, J. C., 2009, Neural network spatial model for salinity in Bahia Grande, Proceedings of the Texas Bays and Estuaries Meeting, April 28-29, University of Texas Marine Science Institute, Port Aransas, Texas, p. 18.
- Gibeaut, J. C., 2009, Projecting impacts of relative sea-level rise, erosion, and storms on Galveston Bay barrier islands: Proceedings of the Ninth Biennial State of the Bay Symposium, Galveston Bay Estuary Program, Texas Commission on Environmental Quality, p. 65.
- Gibeaut, J. C., 2008, Measuring the continuum of geomorphic variability along the Texas coast using lidar: *Geological Society of America Abstracts with Programs*, v. 40, no. 6, p. 91.

- Andrews, J. R., Wood, Lesli, and Gibeaut, J. C., 2008, A Custom Software Approach to Sharing Multidimensional Geoscience Research Findings (extended abstract): Gulf Coast Association of Geological Societies Transactions, v. 58, p. 47-48.
- Gibeaut, J. C., Tremblay, T. A., Waldinger, R., Collins, E. W., Smyth, R. C., White, W. A., Hepner, T. L., Andrews, J. R., and Gutierrez, R., 2007, Developing a barrier island geohazards map, Galveston Island, Texas, *in* Proceedings of Coastal Zone 07, Portland, Oregon, July 22 to 26, 2007
- Hepner, T., Gibeaut, J. C., and Andrews, J. R., 2007, Visualizing the Texas coast: Proceedings of NOAA Coastal Geotools Conference, Myrtle Beach, South Carolina, March 5 to 8, 2007, p. 41.
- Andrews, J. R., Wood, L. J., and Gibeaut, J. C., 2006, Developing interactive 3-D presentations and publications for multidimensional geoscience research (abs.): Gulf Coast Association of Geological Societies Transactions, v. 56, p. 15.
- Collins, E. W., Raney, J. A., Tremblay, T. A., Gibeaut, J. C., Waldinger, R. L., White, W. A., and Paine, J. G., 2006, Geologic mapping for the Texas STATEMAP program (abs.): Geological Society of America, South-Central Section, Abstracts with Programs, v. 38, no. 1, p. 6.
- Gibeaut, J. C., Gutiérrez, R., Hepner, T. L., and Andrews, J. R., 2006, Effects of Hurricane Rita on Texas beaches (abs.): Eos Transactions AGU, v. 87, no. 36, Ocean Sciences Meeting Supplement, Abstract OS16H-03.
- Gibeaut, J. C., 2006, Texas shoreline change analysis and communicating the results to the public (abs.), *in* Shoreline Change Conference II: a workshop on managing shoreline change, May 3–5, Charleston, South Carolina.
- Paine, J. G., White, W. A., Smyth, R. C., Andrews, J. R., and Gibeaut, J. C., 2005, Mapping coastal wetlands using EM and airborne lidar: a Texas example (abs.): EOS Transactions of the American Geophysical Union, v. 86, no. 52, Fall Meeting Supplement, Abstract Number H43F-0552 INVITED.
- Hepner, T. L., and Gibeaut, J. C., 2005, The Texas High School Coastal Monitoring Program: a program in education, public awareness, and coastal management (ext. abs.), *in* Coastal zone 05: Proceedings of the 14th Biennial Coastal Zone Conference, New Orleans, July 17–21: NOAA Coastal Services Center, CD-ROM.
- Gibeaut, J. C., 2005, Patterns of Gulf of Mexico shoreline change in Texas (abs.), *in* Coastal Texas 2020, Technical Erosion Conference 2005, Houston: Texas General Land Office, CD ROM, 1 p.
- Gibeaut, J. C., 2005, Modeling future changes in barrier-island wetlands on Galveston Island, Texas (abs.): Gulf Coast Association of Geological Societies Transactions, v. 55, p. 249–250.
- Gibeaut, J. C., White, W. A., Gutiérrez, Roberto, Waldinger, Rachel, Andrews, J. R., Hepner, T. L., Smyth, R. C., and Tremblay, T. A., 2004, The Texas Shoreline Change Project: combining lidar, historical photography, and ground surveys to measure shoreline change rates along bay and gulf shorelines (abs.), *in* 5th Biennial Texas Coastal Issues Conference bios and abstracts: Texas General Land Office, Coastal Resources Program, CD-ROM.
- Gibeaut, J. C., White, W. A., Smyth, R. C., Andrews, J. R., Tremblay, T. A., and Hepner, T. L., 2004, Topographic variation of barrier island wetlands: implications for modeling change during rising relative sea level (abs.), *in* 5th Biennial Texas Coastal Issues Conference bios and abstracts: Texas General Land Office, Coastal Resources Program, CD-ROM.
- Guevara, E. H., Aslan, Andres, White, W. A., Raney, J. A., and Gibeaut, J. C., 2004, The Orinoco Delta, Venezuela: sedimentation near an active plate margin (abs.): American Association of Petroleum Geologists Annual Convention Abstracts Volume, v. 13, p. A56.
- Paine, J. G., White, W. A., Gibeaut, J. C., Andrews, J. R., and Waldinger, R. L., 2004, Exploring quantitative wetlands mapping using airborne lidar and electromagnetic induction on Mustang Island, Texas (abs.): Eos Transactions of the American Geophysical Union, v. 85, no. 17, Joint Assembly Supplement, Abstract B41A-24.
- Hovorka, S. D., Andrews, J. R., Clift, S. J., Hepner, T. L., Gibeaut, J. C., Rodgers, S. D., Jennette, D. C., and Raney, J. A., 2004, Update on public and K-12 programs at the Bureau of Economic

- Geology, Texas (abs.): Geological Society of America Abstracts with Programs: v. 36, no. 5, p. 349.
- Gibeaut, J. C., White, W. A., Smyth, R. C., Andrews, J. R., and Tremblay, T. A., 2004, Modeling change in barrier island habitats during rising relative sea level: Texas coast (abs.), *in* ASBPA Conference and Annual Meeting, New Orleans, September 13–15, CD-ROM.
- Guevara, E. H., Aslan, Andres, Raney, J. A., White, W. A., and Gibeaut, J. C., 2004, The Orinoco delta, Venezuela: sedimentary processes and facies of a major Holocene depositional system (abs.), *in* 32nd International Geological Congress, Abstracts, Part 2, Florence, Italy, August 20–28, p. 895–896.
- Guevara, E. H., Aslan, Andres, White, W. A., Raney, J. A., and Gibeaut, J. C., 2003, Depositional processes and facies distribution in the Orinoco Delta, Venezuela: constraints for reservoir models (abs.): American Association of Petroleum Geologists International Conference Official Program, p. A37.
- Gibeaut, J. C., White, W. A., Gutiérrez, Roberto, Waldinger, Rachel, Andrews, J. R., Hepner, T. L., Smyth, R. C., and Tremblay, T. A., 2003, The Texas Shoreline Change Project: combining lidar, historical photography, and ground surveys to measure shoreline change rates along bay and Gulf of Mexico shorelines (abs.), *in* Proceedings, 3rd Biennial Coastal GeoTools Conference, Charleston, South Carolina: NOAA Coastal Services Center, CD-ROM.
- Bellian, J. A., Jennette, David, Kerans, Charles, Gibeaut, J. C., Andrews, J. R., Ysseldyk, B., and Larue, D., 2002, 3-Dimensional digital outcrop data collection and analysis using eye-safe laser (LIDAR) technology (abs.): American Association of Petroleum Geologists Annual Convention Official Program, v. 11, p. A16.
- Gibeaut, J. C., White, W. A., and Gutiérrez, Roberto, 2002, Effect of an artificial tidal inlet on shoreline change (abs.), *in* Proceedings, Shoreline Change Conference: Charleston, South Carolina, NOAA Coastal Services Center, May 7–9, unpaginated.
- Gibeaut, J. C., White, W. A., Gutiérrez, Roberto, Waldinger, R. L., Andrews, J. R., Hepner, Tiffany, Smyth, R. C., and Tremblay, T. A., 2002, Measuring shoreline change along bays and oceans using historical aerial photography and airborne topographic LIDAR surveys (abs.): Gulf Coast Association of Geological Societies Transactions, v. 52, p. 336.
- Gibeaut, J. C., Gutiérrez, Roberto, Hepner, Tiffany, Smyth, R. C., and Andrews, J. R., 2002, Shoreline change analysis using airborne lidar (abs.), *in* Proceedings, Shoreline Change Conference: Charleston, South Carolina, NOAA Coastal Services Center, May 7–9, unpaginated.
- Gibeaut, J. C., Gutiérrez, Roberto, Hepner, Tiffany, Andrews, J. R., and Smyth, R. C., 2001, Shoreline mapping with airborne LIDAR (abs.), *in* Proceedings, 2nd Biennial Coastal GeoTools '01 Conference, Charleston, South Carolina, January 8–11, unpaginated.
- Gibeaut, J. C., and Gutiérrez, Roberto, 2000, Episodic beach erosion hazard analysis and LIDAR surveys (abs.), *in* First International Global Disaster Information Network (GDIN) Information Technology Conference Abstracts: p. 29–30.
- Gibeaut, J. C., Crawford, Melba, Gutiérrez, Roberto, Neuenschwander, A. L., Slatton, K. C., and Smyth, R. C., 1999, Mapping topography and bathymetry of barrier islands using airborne, terrestrial, and marine systems (abs.), *in* AAPG Annual Convention official program: American Association of Petroleum Geologists, p. A46.
- Gutiérrez, Roberto, Gibeaut, J. C., Gutelius, Bill, and MacPherson, Elise, 1999, Characterization of coastal change using airborne LIDAR mapping (abs.): Eos Supplement, v. 80, no. 46, p. F437.
- Warne, A. G., Guevara, E. H., Gibeaut, J. C., White, W. A., Smyth, R. C., Aslan, Andres, and Raney, J. A., 1999, The Orinoco River and delta, Venezuela: a comparison with other major fluvio-deltaic systems (abs.), *in* Proceedings, IAG Yangtze Fluvial Conference, Shanghai, China, October 28–November 6: International Association of Geomorphologists, p. 29.
- Gutiérrez, Roberto, Neuenschwander, A. L., Gibeaut, J. C., Crawford, Melba, Gutelius, Bill, MacPherson, Elise, Kumar, M. M., and Sharma, R., 1998, Multi-sensor analysis of coastal hazards and environments using airborne laser terrain mapping and synthetic aperture radar (abs.): Eos (Supplement), v. 79, no. 45, p. F200.

- Gibeaut, J. C., Gutiérrez, Roberto, and Kirkland, B. L., 1998, The Texas high school coastal monitoring program (abs.): American Association of Petroleum Geologists Annual Convention Extended Abstracts, v. 1, p. A233.
- Gibeaut, J. C., Gutiérrez, Roberto, and Kirkland, B. L., 1998, High School Beach Monitoring Program: a pilot project in education, public awareness, and coastal management (abs.), *in* 1998 Ocean Sciences Meeting: Eos Supplement: v. 79, no. 1, p. 0S38.
- Gutiérrez, Roberto, Gibeaut, J. C., Slatton, K. C., Crawford, Melba, Gutelius, Bill, Carswell, Donald, MacPherson, Elise, Dale, Sarah, and Smith, Solar, 1998, Digital terrain mapping of Bolivar Peninsula, Texas, using airborne laser and radar systems (abs.): Eos (Supplement), April, p. S60.
- Gibeaut, J. C., Kyser, J., Gutiérrez, Roberto, and Morton, R. A., 1996, Accurate and rapid bathymetric surveys for coastal research (abs.): Geological Society of America, South-Central Section, Abstracts with Programs, v. 28, no. 1, p. 14.
- Gibeaut, J. C., Slatton, K. C., Crawford, Melba, and Gutiérrez, Roberto, 1996, Mapping depositional environments on barrier islands using airborne synthetic aperture radar (abs.): Geological Society of America, South-Central Section, Abstracts with Programs, v. 28, no. 1, p. 14.
- Gibeaut, J. C., Crawford, Melba, Gutiérrez, Roberto, Slatton, K. C., and White, W. A., 1996, Geomorphic analysis and depositional environment mapping of barrier island systems using AIRSAR (abs.), *in* 1996 spring meeting program: American Geophysical Union, p. S263.
- Gutiérrez, Roberto, Gibeaut, J. C., and Morton, R. A., 1996, Geoid variations and beach morphology: a regional approach to shoreline surveying using the global positioning system (abs.): Geological Society of America, South-Central Section, Abstracts with Programs, v. 28, no. 1, p. 17.
- Morton, R. A., Paine, J. G., Gibeaut, J. C., and Gutiérrez, Roberto, 1996, Differential kinematic GPS beach surveys: key to improving models of nearshore sediment flux (abs.): Geological Society of America, South-Central Section, Abstracts with Programs, v. 28, no. 1, p. 55.
- Slatton, K. C., Crawford, Melba, Gibeaut, J. C., and Gutiérrez, Roberto, 1996, Modeling wetland vegetation using polarimetric SAR (ext. abs.), *in* Kim, Yunjin, ed., Summaries of the Sixth Annual JPL Airborne Earth Science Workshop: National Aeronautics and Space Administration, Jet Propulsion Laboratory, AIRSAR Workshop, JPL Publication, 96-4, v. 2, p. 95–103.
- Gibeaut, J. C., Kyser, J., Gutiérrez, Roberto, and Morton, R. A., 1995, High-accuracy bathymetric surveys for coastal research (abs.), *in* Linked Earth systems: Congress program and abstracts vol. 1: St. Pete Beach, Florida, SEPM (Society for Sedimentary Geology), p. 58.
- Gibeaut, J. C., and Piper, Ernest, 1995, Shoreline oil from Exxon Valdez: change from 1991 to 1993 (abs.), *in* Proceedings, 1995 International Oil Spill Conference (Achieving and Maintaining Preparedness): U.S. Coast Guard, American Petroleum Institute, U.S. Environmental Protection Agency, International Maritime Organization, and International Petroleum Industry Environmental Conservation Association, p. 972–973.
- Sale, D. M., Gibeaut, J. C., and Short, J. W., 1993, Nearshore subtidal transport of hydrocarbons and sediments following the Exxon Valdez oil spill (ext. abs.), *in* Exxon Valdez Oil Spill Symposium: abstract book: Anchorage, Alaska, Exxon Valdez Oil Spill Trustee Council, University of Alaska Sea Grant College Program, and American Fisheries Society, Alaska Chapter, p. 64–67.
- Gibeaut, J. C., and Davis, R. A., Jr., 1988, Classification of tidal inlets along a mixed energy coast (abs.), *in* SEPM Annual Midyear Meeting Abstracts: Society of Economic Paleontologists and Mineralogists, v. 5, p. 21.
- Gibeaut, J. C., Boothroyd, J. C., and McMaster, R. L., 1987, Beach sedimentation cycles (1962–1985) along a microtidal wave-dominated coast: south shore of Rhode Island (abs.), *in* SEPM Annual Midyear Meeting Abstracts: Society of Economic Paleontologists and Mineralogists, v. 4, p. 30.
- Gibeaut, J. C., McMaster, R. L., and Boothroyd, J. C., 1986, Beach profile variation (1962–1985) along a microtidal wave-dominated coast: south shore of Rhode Island (abs.): Geological Society of America, Northeast Section, Abstracts with Programs, v. 18, no. 1, p. 18.
- Boothroyd, J. C., Gibeaut, J. C., Dacey, M. F., Grant, J. A., Blais, A. G., Pickart, D. S., Gricus, C., and Szak, C., 1986, The geological impact of Hurricane Gloria: south shore of Rhode Island (abs.): Geological Society of America, Northeast Section, Abstracts with Programs, v. 18, no. 1, p. 5.

Contract Reports

- Gibeaut, J. C. and Hepner, T. L., 2007, Town of South Padre Island Sand-Search Desktop Study: Harte Research Institute for Gulf of Mexico Studies, Texas A&M University – Corpus Christi; Bureau of Economic Geology, The University of Texas at Austin: final report prepared for the Texas General Land Office, September 30, 2007, 17 p.
- Collins, E. W., Tremblay, T. A., Gibeaut, J. C., Waldinger, R. L., White, W. A., Raney, J. A., Smyth, R. C., Hepner, T. A., Andrews, J. R., and Gutiérrez, Roberto, 2006, Summary report for the 2005–2006 STATEMAP Project: geologic mapping to support improved database development and understanding of urban corridors, critical aquifers, and special areas of environmental concern in Texas: The University of Texas at Austin, Bureau of Economic Geology, final report prepared for U.S. Geological Survey, under cooperative agreement no. 05HQAG0046, 20 p. + maps.
- Hepner, Tiffany, and Gibeaut, J. C., 2006, Texas High School Coastal Monitoring Program: Ball, Port Aransas, and Port Isabel High Schools, 2005–2006: The University of Texas at Austin, Bureau of Economic Geology, final report prepared for Texas Coastal Coordination Council, pursuant to National Oceanic and Atmospheric Administration Award No. NA04NOS4190058, 43 p.
- Gibeaut, J. C., 2005, Patterns of shoreline change and hurricane washover on barrier islands: The University of Texas at Austin, Bureau of Economic Geology, final report prepared for the National Aeronautics and Space Administration (NASA), Office of Earth Science, under NASA Grant No. NAG 5-7660, variably paginated.
- Raney, J. A., Gibeaut, J. C., Collins, E. W., Tremblay, T. A., Waldinger, Rachel, and White, W. A., 2004, Summary report for the 2003–2004 STATEMAP Project: geological mapping to support improved database development and understanding of urban corridors, critical aquifers, and special areas of environmental concern in Texas: The University of Texas at Austin, Bureau of Economic Geology, final report prepared for U.S. Geological Survey, under Cooperative Agreement No. 03HQAG0053, 13 p + 11 maps.
- Hepner, Tiffany, and Gibeaut, J. C., 2004, Texas High School Coastal Monitoring Program: Ball, Port Aransas, and Port Isabel High Schools, 2002/2003: The University of Texas at Austin, Bureau of Economic Geology, final report of the Texas Coastal Coordination Council pursuant to National Oceanic and Atmospheric Administration Award No. NA17OZ2353, 29 p.
- Smyth, R. C., Gibeaut, J. C., Andrews, John, Hepner, Tiffany, and Gutiérrez, Roberto, 2003, The Texas Shoreline Change Project: coastal mapping of West and East Bays in the Galveston Bay System using airborne lidar: The University of Texas at Austin, final report prepared for the Texas General Land Office, under GLO Contract Number 02-520 C, 41 p.
- Waldinger, R. L., and Gibeaut, J. C., 2003, Historical shoreline, ArcView geographic information system files, 1974, 1982, 1995/96, 2000; Georectified images of aerial photography, North Texas Coast, 1982; Georectified images of aerial photography, North Texas Coast, 1974: The University of Texas at Austin, Bureau of Economic Geology, final report prepared for Galveston County, 3 CD-ROM's.
- Gibeaut, J. C., and Tremblay, T. A., 2003, Texas coastal hazards atlas—volume 3: ArcView geographic information systems files: The University of Texas at Austin, Bureau of Economic Geology, final report of the Texas Coastal Coordination Council pursuant to National Oceanic and Atmospheric Administration Award No. NA07OZ0134, CD-ROM.
- Hepner, T. L., and Gibeaut, J. C., 2003, Texas high school coastal monitoring program: Ball, Port Aransas, and Port Isabel high schools, 2001/2002: The University of Texas at Austin, Bureau of Economic Geology, final report prepared for Texas Coastal Coordination Council pursuant to National Oceanic and Atmospheric Administration Award No. NA17OZ1140, 29 p.
- Gibeaut, J. C., Waldinger, Rachel, Hepner, Tiffany, Tremblay, T. A., and White, W. A., 2003, Changes in bay shoreline position, West Bay system, Texas: The University of Texas at Austin, Bureau of Economic Geology, report of the Texas Coastal Coordination Council pursuant to National Oceanic and Atmospheric Administration Award No. NA07OZ0134, under GLO contract no. 02-225R, 27 p.
- Gibeaut, J. C., Hepner, Tiffany, Waldinger, R. L., Andrews, J. R., Smyth, R. C., and Gutiérrez, Roberto, 2003, Geotextile tubes along the upper Texas Gulf Coast, May 2000 to March 2003: The

- University of Texas at Austin, Bureau of Economic Geology, report of the Texas Coastal Coordination Council pursuant to National Oceanic and Atmospheric Administration Award No. NA07OZ0134, GLO Contract Mp/ 02-493 R, 102 p. + 3 pls.
- Gibeaut, J. C., and Tremblay, T. A., 2003, Coastal hazards atlas of Texas: a tool for hurricane preparedness and coastal management—volume 3: the south coast: The University of Texas at Austin, Bureau of Economic Geology, final report of the Texas Coastal Coordination Council pursuant to National Oceanic and Atmospheric Administration Award No. NA07OZ0134 and GLO Contract Number 02-208 R, 29 p.
- Hepner, Tiffany, and Gibeaut, J. C., 2002, Texas High School Coastal Monitoring Program: Ball, Port Aransas, and Port Isabel High Schools, 2000/2001: The University of Texas at Austin, Bureau of Economic Geology, final report prepared for Texas Coastal Coordination Council pursuant to National Oceanic and Atmospheric Administration Award No. NA07OZ0134, 27 p.
- Gibeaut, J. C., Hepner, Tiffany, Waldinger, R. L., Andrews, J. R., Smyth, R. C., and Gutiérrez, Roberto, 2002, Geotubes along the Gulf shoreline of the upper Texas coast: observations during 2001: The University of Texas at Austin, Bureau of Economic Geology, final report prepared for Texas Coastal Coordination Council pursuant to National Oceanic and Atmospheric Administration Award No. NA97OZ0179, under GLO contract number 01-597 R, 24 p. + apps.
- Gibeaut, J. C., Hepner, Tiffany, Waldinger, R. L., Andrews, J. R., Gutiérrez, Roberto, Tremblay, T. A., and Smyth, R. C., 2001, Changes in Gulf shoreline position, Mustang and North Padre Islands, Texas: The University of Texas at Austin, Bureau of Economic Geology, final report prepared for the Texas Coastal Coordination Council pursuant to National Oceanic and Atmospheric Administration, under Award No. NA97OZ0179 and GLO Contract No. 00-002R, 28 p.
- Gibeaut, J. C., Gutiérrez, Roberto, and Crawford, Melba, 2000, Patterns of shoreline change and hurricane washover on barrier islands: The University of Texas at Austin, Bureau of Economic Geology, annual report prepared for the National Aeronautics and Space Administration (NASA), Office of Earth Science, under NASA Grant No. NAG 5-7660, 31 p.
- Gibeaut, J. C., Tremblay, T. A., and White, W. A., 2000, Coastal hazards atlas of Texas: a tool for hurricane preparedness and coastal management—volume 1, the southeast coast: The University of Texas at Austin, Bureau of Economic Geology, final report prepared for the Texas Coastal Coordination Council, pursuant to National Oceanic and Atmospheric Administration Award No. NA77OZ0202, 69 p.
- Gibeaut, J. C., and Gutiérrez, Roberto, 2000, Texas High School Coastal Monitoring Program: Ball, Port Aransas, and Port Isabel High Schools, 1999/2000: The University of Texas at Austin, Bureau of Economic Geology, final report prepared for Texas Coastal Coordination Council, pursuant to National Oceanic and Atmospheric Administration Award No. NA97OZ0179, 21 p.
- Gibeaut, J. C., White, W. A., Hepner, Tiffany, Gutiérrez, Roberto, Tremblay, T. A., Smyth, R. C., and Andrews, J. R., 2000, Texas Shoreline Change Project: Gulf of Mexico Shoreline change from the Brazos River to Pass Cavallo: The University of Texas at Austin, Bureau of Economic Geology, report prepared for the Texas Coastal Coordination Council pursuant to National Oceanic and Atmospheric Administration Award No. NA87OZ0251, 32 p.
- Aslan, Andres, Crawford, Melba, Gibeaut, J. C., Guevara, E. H., Hovorka, S. D., Neuenschwander, A. L., Raney, J. A., Smith, Solar, Sullivan, E. J., Warne, A. G., and White, W. A., 1999, 1998 Annual report: year one: geo-environmental characterization of the Delta del Orinoco, Venezuela: The University of Texas at Austin, Bureau of Economic Geology and Center for Space Research, final report prepared for Petróleos de Venezuela, S.A., and Coordinación Desarrollo Armónico de Oriente, 190 p.
- Gibeaut, J. C., and Gutiérrez, Roberto, 1999, Dune and beach dynamics in Galveston County, Texas, 1994 to 1998: critical information for coastal management: The University of Texas at Austin, Bureau of Economic Geology, final report prepared for the Texas Coastal Coordination Council, pursuant to National Oceanic and Atmospheric Administration Award No. NA77OZ0202, 34 p. + apps.
- Gibeaut, J. C., Gutiérrez, Roberto, and Agbe, Ade, 1999, High School Coastal Monitoring Program, year 2: a pilot project in education, public awareness, and coastal management: The University of Texas at Austin, Bureau of Economic Geology, final report prepared for the Texas Coastal

- Coordination Council, pursuant to National Oceanic and Atmospheric Administration Award No. NA770Z0202, 11 p. + apps.
- Gibeaut, J. C., Gutiérrez, Roberto, and Kirkland, B. L., 1999, High School Beach Monitoring Program: a pilot project in education, public awareness, and coastal management: The University of Texas at Austin, Bureau of Economic Geology, final report prepared for the Texas Coastal Coordination Council, pursuant to National Oceanic and Atmospheric Administration Award No. NA770Z0202, 11 p. + appendices.
- Gibeaut, J. C., and White, W. A., 1999, Coastal hazards atlas of Texas: a tool for hurricane preparedness and coastal management—volume 1: Brazoria, Galveston, and Harris Counties: The University of Texas at Austin, Bureau of Economic Geology, final report prepared for the Texas Coastal Coordination Council, pursuant to National Oceanic and Atmospheric Administration Award No. N770Z0202, 81 p.
- Sullivan, Jeri, Blum, M. D., Choi, Wan-Joo, Dutton, A. R., Gibeaut, J. C., Mahoney, M., and Nava, Robin, 1999, Site investigation and evaluation of remediation alternatives for the Post Oak site, Lee County, Texas (RRC Site No. 03-50217): The University of Texas at Austin, Bureau of Economic Geology, final technical report prepared for the Railroad Commission of Texas, under Interagency Contract No. 95-0050, 72 p. + apps.
- Sullivan, Jeri, Blum, M. D., Choi, Wan-Joo, Dutton, A. R., Gibeaut, J. C., and Nava, Robin, 1999, Site investigation and evaluation of remediation alternatives for the Roeling Vacuum Site, Liberty County, Texas: The University of Texas at Austin, Bureau of Economic Geology, final technical report prepared for the Railroad Commission of Texas, under Interagency Contract No. 95-0050, 87 p. + apps. (2 vols.).
- Warne, A. G., Aslan, Andres, White, W. A., Gibeaut, J. C., Tremblay, T. A., Smyth, R. C., Guevara, E. H., Gutiérrez, Roberto, Hovorka, S. D., Raney, J. A., Crawford, Melba, Smith, Solar, and Neuenschwander, A. L., 1999, 1999 final report year two: geo-environmental characterization of the Delta del Orinoco, Venezuela: The University of Texas at Austin, Bureau of Economic Geology, final report prepared for Petróleos de Venezuela, S.A., and Coordinación Desarrollo Armónico de Oriente, 99 p. + figures, tables, and appendices.
- Smyth, R. C., Blum, M. D., Dutton, A. R., Gibeaut, J. C., and Nava, Robin, 1998, Site investigation and evaluation of remedial alternatives for the Vinson site, Jones County, Texas: The University of Texas at Austin, Bureau of Economic Geology, final report prepared for the Railroad Commission of Texas, 87 p. + apps.
- Gibeaut, J. C., Slatton, K. C., Crawford, Melba, and Gutiérrez, Roberto, 1997, Detecting small-scale topographic changes and relict geomorphic features on barrier islands using SAR: Year 2: The University of Texas at Austin, Bureau of Economic Geology, annual report prepared for National Atmospheric and Space Administration, Office of Mission to Planet Earth, Topography and Surface Change Program, under NASA grant no. NAG 5-2954, 12 p. + apps.
- Gibeaut, J. C., Gutiérrez, Roberto, Kyser, J., and Morton, R. A., 1996, Shallow-water, high-accuracy, high-resolution bathymetric surveying system: The University of Texas at Austin, Bureau of Economic Geology, final report prepared for the Advanced Technology Program, under contract no. 003658-105, 4 p. + attachments.
- Gibeaut, J. C., Crawford, Melba, Gutiérrez, Roberto, and Slatton, K. C., 1996, Detecting small-scale topographic changes and relict geomorphic features on barrier islands using SAR: Year 1: The University of Texas at Austin, Bureau of Economic Geology, annual report prepared for National Atmospheric and Space Administration, Office of Mission to Planet Earth, Topography and Surface Change Program, under NASA grant no. NAG 5-2954, 8 p. + apps.
- Morton, R. A., White, W. A., and Gibeaut, J. C., 1996, East Texas and western Louisiana coastal erosion study: The University of Texas at Austin, Bureau of Economic Geology, final report prepared for U.S. Department of the Interior, U.S. Geological Survey, under cooperative agreement no. 14-08-0001-A0912, variously paginated.
- Morton, R. A., and Gibeaut, J. C., 1995, Physical and environmental assessment of sand resources, Sabine and Heald Banks: second phase 1994–1995: The University of Texas at Austin, Bureau of Economic Geology, final report prepared for U.S. Department of the Interior, Minerals

- Management Service, Office of International Activities and Marine Minerals, under cooperative agreement no. 14-35-0001-30635, variously paginated. [246 p.].
- Morton, R. A., Gibeaut, J. C., and Gutiérrez, Roberto, 1995, Pre-project surveys of beach and nearshore conditions, Galveston Island beach nourishment project: The University of Texas at Austin, Bureau of Economic Geology, contract report prepared for the City of Galveston, 23 p. + app.
- Morton, R. A., Gutiérrez, Roberto, and Gibeaut, J. C., 1995, Field identification and classification of coastal dunes, Galveston County, Texas: The University of Texas at Austin, Bureau of Economic Geology, contract report prepared for the Texas General Land Office, Texas Natural Resources Inventory, under interagency contract no. 95-026, 101 p.
- Morton, R. A., White, W. A., Gibeaut, J. C., Gutiérrez, Roberto, and Paine, J. G., 1995, East Texas and western Louisiana coastal erosion study: year 4: The University of Texas at Austin, Bureau of Economic Geology, annual report prepared for U.S. Department of the Interior, U.S. Geological Survey, under cooperative agreement no. 14-08-0001-A0912, unpaginated [474 p.].
- Morton, R. A., Gibeaut, J. C., and White, W. A., 1994, East Texas and western Louisiana coastal erosion study, year 3: The University of Texas at Austin, Bureau of Economic Geology, annual report prepared for the U.S. Geological Survey, under cooperative agreement no. 14-08-0001-A0912, variously paginated [201 p.].
- Morton, R. A., and Gibeaut, J. C., 1993, Physical and environmental assessment of sand resources—Texas continental shelf: The University of Texas at Austin, Bureau of Economic Geology, final report prepared for the U.S. Department of the Interior, Minerals Management Service, Office of International Activities and Marine Minerals, under cooperative agreement no. 14-35-0001-30635, 66 p.
- Morton, R. A., Gibeaut, J. C., White, W. A., and Gutiérrez, Roberto, 1993, East Texas and western Louisiana coastal erosion study, year 2: The University of Texas at Austin, Bureau of Economic Geology, annual report prepared for the U.S. Department of the Interior, U.S. Geological Survey, under cooperative agreement no. 14-08-0001-A0912, variously paginated [71 p.].
- Gibeaut, J. C., and Inglin, D. C., 1992, Honeymoon Island phase three: sand source investigation of Hurricane Pass ebb-tidal delta: Coastal Research Laboratory, Department of Geology, University of South Florida, report, 86 p.
- Inglin, D. C., and Gibeaut, J. C., 1992, Indian Rocks Beach nourishment monitoring, first year summary, December 1990 through December 1991: Coastal Research Laboratory, Department of Geology, University of South Florida, report, 30 p.
- Gibeaut, J. C., and Gundlach, E. R., 1990, Review of coastal habitat study sites in terms of oiling and habitat type: State of Alaska, Anchorage, Alaska, report prepared for the Coastal Habitat Study, Exxon Valdez Oil Spill Natural Resource Damage Assessment and Department of Law, 171 p.
- Gibeaut, J. C., 1989, Coastal habitat injury assessment, Cook Inlet—Kenai area: Anchorage, Alaska, Department of Fish and Game, final report prepared for Alaska Department of Fish and Game, Anchorage, Alaska, 64 p.
- Gibeaut, J. C., 1989, Coastal habitat injury assessment, Cook Inlet—Prince William Sound area: Anchorage, Alaska, Department of Fish and Game, final report prepared for Alaska Department of Fish and Game, Anchorage, Alaska, 84 p.
- Boothroyd, J. C., Gibeaut, J. C., Dacey, M. F., and Rosenberg, M. J., 1986, Geological aspects of shoreline management: a summary for southern Rhode Island, I. Regional depositional systems and a long-term profiling network, Vol. 1: University of Rhode Island, Sea Grant Final Report, under Technical Report No. 6-SRG, Contract No. NA85AA-D-SG094, Project No. R/CS-1, 104 p.
- Gibeaut, J. C., 1986, Geological aspects of shoreline management: a summary for southern Rhode Island, I. Regional depositional systems and a long-term profiling network, Vol. 1A and 1B—plotted profiles: University of Rhode Island, Sea Grant Final Report, under Technical Report No. 6-SRG, Contract No. NA85AA-D-SG094, Project No. R/CS-1, 104 p.

Atlases/Maps/Cross Sections

- Tremblay, T. A., Gibeaut, J. C., White, W. A., Waldinger, R. L., and Collins, E. W., 2006, Geoenvironmental map of northeast Galveston Island, Galveston, Texas Gulf of Mexico Coast: The University of Texas at Austin, Bureau of Economic Geology, Open-File Geologic Map prepared for U.S. Geological Survey under Cooperative Agreement No. 05HQAG0046, scale 1:24,000.
- Tremblay, T. A., Gibeaut, J. C., White, W. A., Waldinger, R. L., and Collins, E. W., 2006, Geoenvironmental map of central Galveston Island, Lake Como Quadrangle, Texas Gulf Coast: The University of Texas at Austin, Bureau of Economic Geology, Open-File Geologic Map prepared for U.S. Geological Survey under Cooperative Agreement No. 05HQAG0046, scale 1:24,000.
- Tremblay, T. A., Gibeaut, J. C., White, W. A., Waldinger, R. L., and Collins, E. W., 2006, Geoenvironmental map of southwest Galveston Island, Sea Isle and San Luis Pass Quadrangle, Texas Gulf Coast: The University of Texas at Austin, Bureau of Economic Geology, Open-File Geologic Map prepared for U.S. Geological Survey under Cooperative Agreement No. 05HQAG0046, scale 1:24,000.
- Gibeaut, J. C., Hopkinson, Christopher, Gutiérrez, R. C., Smyth, R. C., Andrews, J. R., and Stephens, D. M., 2001, Digital elevation model, Austin, Texas (oversize, color lidar poster (2.5 x 5.25 ft): The University of Texas at Austin, Bureau of Economic Geology, including 1-p text.

Thesis

Beach sedimentation cycles (1962–1985) along a microtidal wave-dominated coast: south shore of Rhode Island: Kingston, Rhode Island, University of Rhode Island, M.S. thesis, 153 p., 1986.

Dissertation

Morphodynamic classification, evolution, and modeling of unstructured inlets in west-central Florida: Tampa, Florida, University of South Florida, Ph.D. dissertation, 192 p., 1991.

Research Support

Principal Investigator: Shoreline Type Mapping of the Upper Texas Coast: Texas General Land Office, Oil Spill Response Division, (2009-2011, \$513,684.30).

Principal Investigator: Hurricane Ike Shoreline Change Analysis: Texas General Land Office through a subcontract with HDR Inc., (2008-2009, \$9,000).

Post-Hurricane Ike Topographic Lidar Survey and Analysis on the Upper Texas Coast: Texas General Land Office, subaward through The University of Texas at Austin, (2008-2009, \$28,000).

Principal Investigator: Evaluation of Ecosystem Services of Coastal Habitats: U. S. Environmental Protection Agency, (2008-2011, \$199,762).

Principal Investigator: Geohazards Mapping of South Padre Island: Texas General Land Office, Coastal Management Program, (2008-2010, \$177,837).

Principal Investigator: Storm Impacts and Morphodynamics of the Beach-Dune System: Texas A&M University – Corpus Christi, Texas Research Development Fund, (2008-2009, \$40,005).

Principal Investigator: Gulf of Mexico Alliance: Identification and Characterization of Gulf Habitats Priority Issues Team: NOAA Coastal Services Center, (2008-2011, year 1: \$670,663; year 2: \$543,237; year 3: \$884,063 (pending)).

Principal Investigator: Mustang and North Padre Island Geo-Hazard Analysis I: Coastal Bend Bays & Estuary Program, (2008-2009, \$45,000).

Principal Investigator: Digital Elevation Model of the Nueces Delta: Coastal Bend Bays & Estuary Program, (2007-2008, \$143,000).

Principal Investigator: Virtual Model for Exploring How Sea-Level Changes Have and Will Affect Coastal Environments, State Energy Conservation Office (2006-2008, \$105,800).

Principal Investigator: Status and Trends of Dune Volume, Texas General Land Office: Morphology, and Vegetation Cover along the Texas Gulf Shoreline (2006-2008, \$91,908).

Principal Investigator: Classroom at the Coast, Meadows Foundation (2005-2007, \$60,000).

Principal Investigator: Texas High School Coastal Monitoring Program, Texas Coastal Management Program/NOAA (2006-2007, \$62,000).

Principal Investigator: The Texas Shoreline Change Project: Gulf of Mexico Shoreline Sabine Pass to the Brazos River, Pass Cavallo to Aransas Pass, and the Padre Island National Seashore, Texas General Land Office (2001-2007, \$357,000).

Principal Investigator: Mapping of Padre Island National Seashore and NPS Mapping Support in Texas, National Park Service (2003-2007, \$120,000).

Principal Investigator: Geohazards Map of Galveston Island, City of Galveston (2005-2006, \$50,000).

Principal Investigator: Airborne Lidar Survey of Mustang Island, Texas, City of Corpus Christi (2005, \$80,000).

Principal Investigator: Airborne Lidar Survey of Landslide Prone Area in Ventura County, California, U.S. Geological Survey (2005-2006, \$56,000).

Principal Investigator: Wetland Habitat Transition Induced by Relative Sea-Level Rise, Galveston Bay Estuary Program (2004-2005, \$40,000).

Principal Investigator: Patterns of Shoreline Change and Hurricane Washover on Barrier Islands, NASA (1998–2003, \$600,000).

Principal Investigator: High School Beach Monitoring Program, Year 2: A Pilot Project in Education, Public Awareness, and Coastal Management, Texas Coastal Management Program (1998–1999, \$40,424).

Principal Investigator: Coastal Hazards Atlas of Texas, v. 2: A Tool for Hurricane Preparedness and Coastal Management, Texas Coastal Management Program (1998–1999, \$59,184).

Principal Investigator: Coastal Hazards Atlas of Texas: A Tool for Hurricane Preparedness and Coastal Management, Texas Coastal Management Program (1997–1998, \$64,277).

Principal Investigator: Dune and Beach Dynamics in Galveston County: Critical Information for Coastal Management, Texas Coastal Management Program (1997–1998, \$49,846).

Principal Investigator: High School Beach Monitoring Program: A Pilot Project in Education, Public Awareness, and Coastal Management, Texas Coastal Management Program (1997–1998, \$45,643).

Principal Investigator: Laser Altimeter Survey of the Upper Texas Coast, NASA Topography and Surface Change Program (1997–1998, \$43,000).

Principal Investigator: Detecting Small-Scale Topographic Changes and Relict Geomorphic Features on Barrier Islands Using SAR, NASA (1995–1998, \$254,710).

Principal Investigator: Texas Regional Change Program, Texas Space Grant Consortium (1998, \$40,000).

Principal Investigator: High-Accuracy Bathymetric Surveying and Real-Time GPS Positioning System, Texas Higher Education Coordinating Board; Advanced Technology Program (1996–1997, \$191,560).

Principal Investigator: Shallow-Water, High-Accuracy, High-Resolution Bathymetric Surveying System, Texas Higher Education Coordinating Board; Advanced Technology Program (1994–1995, \$187,820).

Principal Investigator: The Texas Shoreline Change Project: Coastal Mapping of West and East Bays in the Galveston Bay System Using Airborne Lidar, Texas General Land Office (2002-2003, \$234,434).

Principal Investigator: Recent Shoreline Change along the Southeastern Texas Coast, Galveston County, Texas (2002-2003, \$34,349).

Principal Investigator: Texas High School Coastal Monitoring Program: Ball, Port Aransas, and Port Isabel High Schools, Texas Coastal Management Program (2002-2003, \$33,070).

Principal Investigator: Shoreline Change in West and Christmas Bays, Texas Coastal Management Program (2000-2002, \$34,430).

Principal Investigator: Recent Changes in Gulf Shoreline Position, Mustang and North Padre Island, TX, Texas Coastal Management Program (1999-2000, \$74,014).

Principal Investigator: Coastal Hazards Atlas of Texas V. 3: A Tool for Hurricane Preparedness and Coastal Management, Texas Coastal Management Program (1999-2000, \$97,894).

Principal Investigator: Texas High School Coastal Monitoring Program: Port Isabel High School, Year 1, Texas Coastal Management Program (1999-2000, \$19,003).

Principal Investigator: Texas High School Coastal Monitoring Program: Port Aransas High School, Year 1, Texas Coastal Management Program (1999-2000, \$19,003).

Principal Investigator: Texas High School Coastal Monitoring Program: Ball High School, Galveston, Year 3, Texas Coastal Management Program (1999-2000, \$25,809).

Principal Investigator: Investigation of shoreline change in the vicinity of Rollover Pass, Texas Parks and Wildlife Department (1999-2000, \$39,314).

Principal Investigator: Texas Shoreline Change Project: Gulf of Mexico Shoreline from the Brazos River to Pass Cavallo, Texas General Land Office (2000, \$117,750).

Principal Investigator: Texas Shoreline Change Project: Gulf of Mexico Shoreline from Mansfield Channel to Rio Grande and Shorelines in Matagorda, Copano/Aransas, and Corpus Christi Bays, Texas General Land Office (2000-2003, \$401,985).

Principal Investigator: Texas Shoreline Change Project: Gulf of Mexico Shoreline from Port Aransas to Padre Island National Seashore and Baffin Bay, Texas General Land Office (2000-2001, \$118,000).

Principal Investigator: Texas Tidal Inlets Project; Depositional Environments and Morphodynamics of San Luis Pass, Texas General Land Office (2002-2003, \$206,990).

Principal Investigator: LIDAR Surveys of Downtown Austin and Port Ingleside, Texas for Raytheon demonstration project #2, Raytheon for NASA (2000-2001, \$80,000).

Principal Investigator: Monitoring and evaluation of geotubes during 2002/2003, Texas Coastal Management Program (2002-2003, \$80,000).

Principal Investigator: Texas High School Coastal Monitoring Program: Ball, Port Aransas, and Port Isabel High Schools, Texas Coastal Management Program (2000-2001, \$33,070).

Principal Investigator: Texas High School Coastal Monitoring Program: Ball, Port Aransas, and Port Isabel High Schools, Texas Coastal Management Program (2000-2002, \$60,736).

Principal Investigator: Geographic Information System for Sand Resources of Sabine and Heald Banks and the State of Beach Erosion in Southeast Texas, U.S. DOI, Minerals Management Service (2001, \$49,814).

Principal Investigator: Monitoring and evaluation of geotubes, Texas Coastal Management Program (2001, \$78,989).

Principal Investigator: Field Training and Consultation for the 2001 Exxon Valdez Oil Spill Shoreline Survey, National Marine Fisheries Service (2001, \$24,594).

Principal Investigator: Transect Surveys and Analysis for the 2001 Exxon Valdez Oil Spill Shoreline Survey, NOAA (2001, \$24,783).

Co-Principal Investigator: Characterization of the Beach Zone via Airborne LIDAR and Hyperspectral Remotely Sensed Data, U.S. Army Research Office (2002, \$200,000).

Principal Investigator: Cooperative Continuation (Year 2): Sand Resources of the Texas Continental Shelf and Regional Shoreline Change, U.S. DOI, Minerals Management Service (2002, \$50,000).

Principal Investigator: Texas High School Coastal Monitoring Program: Ball, Port Aransas, and Port Isabel High Schools, Texas Coastal Management Program (200102002, \$33,070).

Principal Investigator: LIDAR-derived digital elevation model for Lakewood Area, California, Optech Inc. (1998-1999, #31,034).

Principal Investigator: High Resolution Elevation Data Capture and Analysis for Honduras, U.S. Geological Survey (2000-2001, \$370,000).

Lecturing

BEG Colloquia

Coastal geology: presented to the Bureau of Economic Geology staff, Austin, Texas, August 2000.

High-accuracy nearshore surveys for coastal research: presented to the Bureau of Economic Geology staff, April 1997.

Beach and nearshore pollution from the Exxon Valdez oil spill—two and three years after: presented to Bureau of Economic Geology research staff, December 1992.

Morphodynamic Classification, Evolution, and Modeling of Unstructured Inlets in West-Central Florida: presented to Bureau of Economic Geology research staff, March 1992.

Corporate Schools, Research Seminars

Shoreline Change along the Upper Texas Coast, Mapping and Patterns: Ocean Engineering Seminar: presented at Texas A&M, College Station, Texas, October 18, 2001.

Sand Resources of Sabine and Heald Banks, Texas: presented at MMS OCS Sand Management Planning Workshop, Houston, Texas, May 1, 2001.

Lidar Surveys for Flood Hazard Mapping in Honduras: presented at USGS/USAID Workshop for Hurricane Mitch recovery/mitigation projects, Tegucigalpa, Honduras, April 26, 2001.

Airborne LIDAR survey operations at The University of Texas: presented to the Department of Aerospace Engineering, The University of Texas at Austin, Austin, Texas, April 2000.

Applying Airborne LIDAR to Beach Studies: presented at the LIDAR Workshop convened by the Bureau of Economic Geology, Austin, Texas, May 1999.

Post-processing techniques to minimize systematic and random height errors to TOPSAR DEMs: presented at the 7th annual Jet Propulsion Laboratory workshop for airborne geosciences, January 1998.

Research Conference, Morphodynamics of Sandy Tidal Inlets: West-Central Florida: SEPM (Society for Sedimentary Geology), May 1990.

Workshop on Coastal and Shelf Sedimentation, Eigenvector Analysis of Beach Profiles: University of Southern California, May 1989.

Lectures and Addresses

Gibeaut, J. C., Projecting impacts of relative sea-level rise, erosion, and storms on barrier-island habitats, presented at Climate Change: The Western Gulf Coast and Southern Plains Workshop, U. S. Fish and Wildlife Service, August 12, 2009, Austin, Texas.

Gibeaut, J. C., Gulf of Mexico Alliance – multi-state data requirements, presented at the 86th Meeting of the Coastal Engineering Research Board, U. S. Army Corps of Engineers, San Diego, California, June 3, 2009.

Gibeaut, J. C., Texas climate and coastal resource issues, panelist and presentation at the Texas Climate Trends and Wildlife Conservation Conference, National Wildlife Federation, College Station, Texas, April 21, 2009.

Gibeaut, J. C., Projecting impacts of relative sea-level rise, erosion, and storms on Galveston Bay barrier islands: presented at Ninth Biennial State of the Bay Symposium, Galveston Bay Estuary Program, Galveston, Texas, January 24, 2009.

Gibeaut, J. C., Hurricane Rita, Hurricane Ike, and the Next Storm, presented to the Board of Directors, Gulf of Mexico Foundation, Woodlands, Texas, December 8, 2008.

Gibeaut, J. C., Impacts of Hurricane Rita on shoreline habitats in Texas, presented at the Gulf Coast Hurricane Conference, PIANC USA, November 13, 2008, Mobile, Alabama.

Gibeaut, J. C., Hurricane Ike and the Next Storm, presented to the Harte Research Institute Advisory Council, Corpus Christi, Texas, October 31, 2008.

Gibeaut, J. C., Projecting impacts of relative sea-level rise and erosion on Texas barrier-island environments, presented at the SSPEED Conference, Severe Storm Prediction and Global Climate Impact on the Gulf Coast, Rice University, Houston, Texas, October 31, 2008

Gibeaut, J. C., Tracking coastal change with topographic lidar, presented at Texas GIS Forum, Austin, Texas, October 29, 2008.

Gibeaut, J. C., Coastal hazards, presented at Texas Coastal Conference, Corpus Christi, Texas, October 16, 2008.

Gibeaut, J. C., Nueces Delta digital elevation model, presented at Workshop of the Nueces Feasibility Study, U. S. Army Corps of Engineers, June 10, 2008, San Antonio, Texas.

Gibeaut, J. C., Managing barrier-island development in the face of sea-level rise, storm impacts, and erosion, presented to Corpus Christi Sunrise Rotary Club, May 5, 2008.

Gibeaut, J. C., Managing barrier-island development in the face of sea-level rise, storm impacts, and erosion, presented to Corpus Christi South Rotary Club, April 30, 2008.

Gibeaut, J. C., Nueces Delta digital elevation model progress, presented at the City of Corpus Christi Rincon Bayou, Nueces Delta Studies Coordination Meeting, February 15, 2008.

Geohazards mapping: a tool for managing growth, presented to the Coastal Resiliency Priority Issues Team of the Gulf of Mexico Alliance, Corpus Christi, Texas, December 12, 2007, INVITED.

Barrier-Island Geohazards, presented to the Harte Research Institute Advisory Council and guests, Corpus Christi, Texas, December 6, 2007.

Geohazards mapping: a tool for barrier-island management: presented to the public at the Harte Research Institute, Texas A&M University – Corpus Christi, November 13, 2007

Geohazards mapping: a tool for managing growth: presented at the 10th Annual Southern and Caribbean Regional Meeting, Lafayette, Louisiana, Sponsored by NOAA, November 5-8, 2007, INVITED.

Galveston Island geohazards map: presented at public meeting of the City of Galveston Planning Commission, Galveston, Texas, September 18, 2007.

Sea-level rise and coastal wetland change: presented at the Gulf of Mexico Alliance Regional Restoration Coordination Team Workshop, Galveston, Texas, May 22, 2007.

Modeling future coastal wetland transition induced by relative sea-level rise: presented at Coastal Sediments 2007 Conference, New Orleans, Louisiana, May 16, 2007.

Measuring the continuum of coastal environmental variability with remote sensing: invited speaker, XIII Brazil Symposium on Remote Sensing, Florianopolis, Brazil, April 25, 2007, INVITED.

Using lidar-derived digital elevation models to project future barrier-island change caused by relative sea-level rise: invited speaker, XIII Brazil Symposium on Remote Sensing, Florianopolis, Brazil, April 25, 2007, INVITED.

Sea-level rise and the transition of barrier-island geoenvironments: presented to the Harte Research Institute for Gulf of Mexico Studies, Texas A&M University – Corpus Christi, Corpus Christi, Texas, April 4, 2007

Galveston Island geohazards map: presented at public meeting of the Galveston City Counsel, Galveston, Texas, March 8, 2007.

Past and future wetland change on the barrier islands of the upper Texas coast: presented at the Texas Chapter of the American Fisheries Society workshop on Challenges to Conserving Texas Coastal Wetlands, Lake Jackson, Texas, March 2, 2007, INVITED.

Impacts of sea-level rise, erosion, and development on the barrier islands of the upper Texas coast: invited presentation at Texas A&M University, College Station, Texas, February 15, 2007.

Impacts of sea-level rise, erosion, storms, and development on the barrier islands of the upper Texas coast: presented to the Coastal Bend Bays Foundation, Corpus Christi, Texas, February 12, 2007, INVITED.

Impact of relative sea-level rise, erosion, and development on natural buffers: Galveston Island, Texas: presented at Eighth Biennial State of the Bay Symposium, Galveston Bay Estuary Program, Galveston, Texas, January 24, 2007, INVITED.

Sand resources of Sabine and Heald Banks, Texas: presented to the Texas General Land Office CT2020 Coastal Sand Sources Workshop, Austin, Texas, November 2, 3, 2006.

Virtual reality model for visualizing coastal environments and sea-level change: presented to the Middle and High School Science Teachers' Workshop organized by the Texas State Energy Conservation Office, Dallas, Texas, November 1, 2006.

Past and future wetland change on the barrier islands of the upper Texas coast: presented to the Texas Commission on Environmental Quality, Austin, Texas, October 23, 2006, INVITED.

Texas coast susceptibility to storms and sea-level rise: poster presented as prelecture activity as part of The University of Texas at Austin, Environmental Science Institute, Outreach Lecture Series, Austin, Texas, October 5, 2006.

The Texas Gulf Coast: presented to Clint Small Middle School, Austin, Texas, August 24, 2006.

Mapping geohazards on Galveston Island: presented at public meeting of the Galveston City Council, Galveston, Texas, July 27, 2006.

Wetland habitat transition induced by relative sea-level rise: presented to Galveston Bay Council, Clear Lake, Texas, July 19, 2006.

Geological survey of the Gulf shoreline following Hurricane Rita: presented at Texas Coastal Law Conference, CLE, Galveston, Texas, May 18, 2006.

Texas shoreline change analysis and communicating the results to the public: presented at Shoreline Change Conference II: a workshop on managing shoreline change, Charleston, South Carolina, May 3-5, 2006.

Changes in barrier island environments during sea-level rise: presented to Sigma Xi Research Society, Texas A&M Chapter, College Station, Texas, March 30, 2006.

Beaches and dunes: presented to Surfrider Foundation Central Texas Chapter, Austin, Texas, February 1, 2006.

Exploring and living with the dynamic Texas coast: presented at Clint Small Middle School, Austin, Texas, January 6, 2006.

Lidar applications in coastal research: presented to Coastal Geography Graduate Class, Texas State University, San Marcos, Texas, November 3, 2005.

Wetland habitat transition induced by relative sea-level rise: presented to Monitoring and Research Subcommittee of the Galveston Bay Council, Galveston Bay Estuary Program, Webster, Texas, May 27, 2005.

Status, historical trends, and modeling future change of barrier island estuarine marshes: presented at State of the Bay Symposium, Galveston Bay Estuary Program, Houston, Texas, January 25, 2005.

Patterns of Gulf of Mexico shoreline change in Texas: presented at Technical Erosion Conference, Houston, Texas, 2005.

Using airborne lidar to assess coastal environments: presented at Texas Coastal Erosion Technical Conference, Galveston, Texas, September 24-26, 2004.

Modeling change in barrier island habitats during rising relative sea level: presented at ASBPA Conference and Annual Meeting, New Orleans, Louisiana, September 13-15, 2004.

The Texas Shoreline Change Project: combining lidar, historical photography, and ground surveys to measure shoreline change rates along the bay and gulf shorelines: presented at 14th Annual Texas GIS Forum & Training Conference, Austin, Texas, April 1, 2004.

Topographic variation of barrier island wetlands: implications for modeling change during rising relative sea level: presented at 5th Biennial Texas Coastal Issues Conference, 2004.

Coastal geological studies in support of coastal management: presented to Coastal Geography Graduate Class, Texas State University, San Marcos, Texas, October 23, 2003.

Geotubes for temporary erosion control and storm surge protection along the Gulf of Mexico shoreline of Texas: poster presented at Coastal Zone 03: Coastal Zone Management through Time, Baltimore, Maryland, July 2003.

The Texas Shoreline Change Project: combining lidar, historical photography, and ground surveys to measure shoreline change rates along bay and Gulf of Mexico shorelines: presented at 3rd Biennial Coastal GeoTools Conference, Charleston, South Carolina, 2003.

Mapping barrier island environments with lidar: presented at Army Research Office/Topographic Engineering Center, Alexandria, Virginia, May 6, 2002.

Shoreline change analysis using airborne lidar: presented at Shoreline Change Conference, Charleston, South Carolina, May 7-9, 2002.

Effect of an artificial tidal inlet on shoreline change: presented at Shoreline Change Conference, Charleston, South Carolina, May 7-9, 2002.

Lidar coastal applications: presented to Texas Water Development Board, Austin, Texas, February 27, 2002.

The Texas Shoreline Change Project: mapping techniques and patterns of change along the upper Texas Gulf of Mexico shoreline: presented to Texas Parks and Wildlife Department, Austin, Texas, February 5, 2002.

Measuring shoreline change along bays and oceans using historical aerial photography and airborne topographic lidar surveys: presented at Gulf Coast Association of Geological Societies Annual Conference, 2002.

GIS Applications and Research at the Bureau of Economic Geology: presented at Texas Geographic Information Council Quarterly Meeting, Austin, Texas, August 16, 2001.

Airborne LIDAR at The University of Texas: presented at Texas Geographic Information Systems Forum, Austin, Texas, January 17, 2001.

Shoreline mapping with airborne lidar: presented at 2nd Biennial Coastal GeoTools '01 Conference, Charleston, South Carolina, January 8-11, 2001.

Mapping shoreline change in Texas: presented to the Texas General Land Office, Austin, Texas, February 2000.

High school science education through fieldwork, collaboration using the Internet, and virtual reality models of the coastal zone: poster presented to the Austin Geological Society, Austin, Texas, February 2000.

Episodic beach erosion hazard analysis and lidar surveys: presented at First International Global Disaster Information Network (GDIN) Information Technology Conference, 2000.

Mapping Shoreline Change in Texas: presented at 13 public meetings convened by the Texas General Land Office along the Texas coast, July 1999.

Topographic Mapping of Coastal Zones Using Airborne Laser and Radar Systems: presented at the United States Geological Survey, Center for Coastal Geology, St. Petersburg, Florida, May 1999.

Mapping topography and bathymetry of barrier islands using airborne, terrestrial, and marine systems: presented at AAPG Annual Convention, 1999.

The Texas high school coastal monitoring program: presented at AAPG Annual Convention, 1998.

High School Beach Monitoring Program: a pilot project in education, public awareness, and coastal management: presented at Ocean Sciences Meeting, 1998.

Mapping barrier islands using AIRSAR, poster session: Fourth International Conference on Remote Sensing for Marine and Coastal Environments [Honorable Mention], March 1997.

Mapping depositional environments on barrier islands using airborne synthetic aperture radar: presented at Geological Society of America, South-Central Section, Annual Meeting, 1996.

Accurate and rapid bathymetric surveys for coastal research: presented at Geological Society of America, South-Central Section, Annual Meeting, 1996.

Geomorphic analysis and depositional environment mapping of barrier island systems using AIRSAR: presented at American Geophysical Union Spring Meeting, 1996.

Shallow-water, high-accuracy, high-resolution bathymetric surveying system: Water for Texas Conference, January 1995.

Shoreline oil from Exxon Valdez: change from 1991 to 1993: presented at International Oil Spill Conference (achieving and maintaining preparedness), 1995.

High-accuracy bathymetric surveys for coastal research: presented at SEPM (Society for Sedimentary Geology) Congress, St. Pete Beach, Florida, 1995.

Classification of tidal inlets along a mixed energy coast: presented at SEPM Annual Midyear Meeting, 1988.

Beach sedimentation cycles (1962-1985) along a microtidal wave-dominated coast: south shore of Rhode Island: presented at SEPM Annual Midyear Meeting, 1987.

Beach profile variation (1962-1985) along a microtidal wave-dominated coast: south shore of Rhode Island: presented at Geological Society of America, Northeast Section, Annual Meeting, 1986.

Short Courses and Workshops

Dune Protection and Beach Management, Short Course, American Society of Civil Engineers Texas Section Meeting (with Fred J. McCutcheon), Corpus Christi, Texas, April 24, 2008.

Tracking Past and Projecting Future Geoenvironmental Changes on Barrier Islands: Gulf Coast Association of Geological Sciences Annual Meeting (with Tom Tremblay), Corpus Christi, Texas, October 20, 2007.

Galveston geohazards map: workshop/fieldtrip presented to City of Galveston Planning and Engineering Staff, Galveston, Texas, December 7, 2006.

Lidar surveys for coastal hazards and resource mapping: presented at Coastal Zone 2003 Conference (with Rebecca Smyth), Baltimore, Maryland, July 14, 2003.

Residual Shoreline Oil in Prince William Sound and Kodiak: presented at the Exxon Valdez Residual Oiling Workshop, November 1995.

Natural and Unnatural Evolution of Tidal Inlets: presented to the U.S. Army Corps of Engineers, 1992.

Spring 1991 Oiling Conditions, May Shoreline Assessment Program Workshop: Exxon Valdez Oil Spill, Exxon Corporation, April 1991.

coordinator and lecturer: Hillsborough County Schools Summer Institute for the Earth Sciences, June 1989.

Long-Term Beach Monitoring Programs: Southwest Florida Coastal Research Center, Mote Marine Laboratory, January 1989.

Coordinator and lecturer: Hillsborough County Schools Summer Institute for the Earth Sciences, June 1988.

Field Trips

Leader, Geo-Environments of Mustang Island and North Padre Island, Texas: Status Trends, and Environmental Management of a Barrier-Island System, meeting of the Ecosystem Integration and Assessment Priority Issue Team of the Gulf of Mexico Alliance, April 15, 2009.

Leader, Geo-Environments of Mustang Island and North Padre Island, Texas: Status Trends, and Environmental Management of a Barrier-Island System, 2008 AAPG Annual Convention – San Antonio, Texas, Society for Sedimentary Geology (SEPM) Field Trip, April 19, 2008.

Co-Leader, Hazards and Natural Resources of the Texas Gulf Coast: Building the Bridge between Science and Policy: Decision Maker's Field Conference, Galveston Island, Texas, September 2006.

Co-Leader, CEPR Coastal Erosion Project sites in Galveston and Brazoria Counties: Texas General Land Office, Austin, Texas, September 2005.

Leader, Coastal Monitoring Technology: Third Annual Texas Coastal Issues Conference, October 1999.

Geology Emerging Scholars Class, Leader, Coastal Processes along the Upper Texas Coast: The University of Texas at Austin, Galveston County, Texas, October 1996.

Summer Institute for the Earth Sciences, Leader, Geology of Caladesi Island, Florida: Hillsborough County Schools, Tampa, Florida, June 1988.

Congressional, Legislative, and Special Committee Testimony

July 14, 2007

Congressional Testimony at Vanishing Beaches: Coastal Erosion and its Impact on Coastal Communities, U.S. House of Representatives Subcommittee on Fisheries, Wildlife and Oceans Oversight Field Hearing, South Padre Island, Texas

2002 - 2007

Expert witness for the State of Texas in support of various coastal property litigation.

March 5, 2002

Texas Coastal Coordination Council, David Dewhurst, Chairman, presented "Geotubes along the Upper Coast," included a three-dimensional, virtual reality presentation of lidar topographic models.

July 23, 2002

Executive Committee of the Texas Coastal Coordination Council, John Barrett, Chairman, presented and discussed shoreline mapping technology and geologic factors pertinent to enforcing the Texas Open Beaches Act.

January 29, 2002

Texas Coastal Coordination Council Executive Committee Special Meeting, Jeb Boyt, Chairman, presented "Geotubes along the Upper Coast: Initial Analysis".

2004

City Council, Galveston, Texas, Mayor Lyda Ann Thomas, discussed geohazards on Galveston Island.

November 12, 2001

Texas Coastal Coordination Council Executive Committee Special Meeting, Jeb Boyt, Chairman, presented "Geotubes along the Upper Coast: Preliminary Observations".

1998

Committee on Land and Resource Management, Texas House of Representatives, Fred Bosse Chairman, discussed coastal erosion in Texas.

Miscellaneous Activities of a Professional Nature

Federal Security Clearance

Certified NAUI and PADI Open-Water Diver

Moderator, Texas Shoreline Change Session, Texas Coastal Issues Conference

Panelist, Sand Sources for Beach Nourishment in Texas, Texas Shore and Beach Association Meeting

Review Panelist, National Aeronautics and Space Administration Earth Science Enterprise Program, Solid Earth and Natural Hazards Panel,

Panel member, Texas Erosion Plan, Third Annual Texas Coastal Issues Conference

Panel member, Texas Elevation Program, 2007 Texas GIS Forum

Military Service

U.S. Coast Guard, Petty Officer First Class (E-6), 1975 - 1979; Kodiak, Alaska; Long Beach, California, Honorable discharge.

Graduate Student Committee Participation

Co-Chair, Ph.D. Committee, John Wood, Remote Sensing of Sea Grass Systems in Texas Coastal Waters: Texas A&M University – Corpus Christi, expected 2010

Chair, Ph.D. Committee, Eleonor Barraza, Urban Carrying Capacity of a Resilient Barrier Island: Texas A&M University – Corpus Christi, expected 2012

Chair, Ph.D. Committee, Anthony Reisinger, Modeling Impacts of Sea-Level Rise in Microtidal Estuary: Texas A&M University – Corpus Christi, expected, 2013.

Chair, M.S. Committee, Diana Del Angel, Cumulative Impacts of Beach Nourishment on South Padre Island, Texas: Texas A&M University – Corpus Christ, expected 2010

Chair, M. S. Committee, Boris Radosavljevic, Vertical Accretion Rates of Barrier Island Geoenvironments: Texas A&M University – Corpus Christ, expected 2010

Member, M.S. Committee, Rosaleen Baluyot, Response of Neotropical Migrant Community Structure to Sea-level Rise and Habitat Fragmentation in the Texas Coastal Bend: Texas A&M University – Corpus Christi, expected 2010

Member, M.S. Thesis Committee, Daniel Shane Valentine, Formation and Organization of Aeolian Bedforms: The University of Texas at Austin, 2004

Member, M.S. Thesis Committee, Haiyan Yang, Influence of the National Flood Insurance Program on Coastal Development in Texas: The University of Texas at Austin, Austin, Texas, 2002

Member, Thesis Committee, Kenneth Clinton Slatton, Simulating Synthetic Aperture Radar Backscatter from Wetland Environments: The University of Texas, College of Engineering, Austin, Texas, 1997