



Texas Geography Student Research Symposium

# TXGSRS

“Sharing the Excitement of Research”



## Dr. Todd Votteler

Executive Manager

Guadalupe-Blanco River Authority

**“Everything You Always Wanted  
to Know About the Edwards  
Aquifer Dispute, But Were  
Afraid to Ask”**

### April 4<sup>th</sup>

4:00-5:00 pm ELA 116

In 1996, Senior U.S. District Court Judge Lucius Bunton appointed Todd H. Votteler, Ph.D. as the Federal Special Master for the ESA litigation, *Sierra Club v. San Antonio*. Previously, Votteler was the Federal Court Monitor’s assistant during the Endangered Species Act (ESA) litigation over the Edwards Aquifer, *Sierra Club v. Babbitt* from 1994 - 1996. His previous experience includes work as a Research Scientist at the Battelle-Pacific Northwest National Laboratory, in Washington, D.C. Votteler has a Bachelor of Science in Natural Resources from The University of the South, a Master of Science in Natural Resources from The University of Michigan, and a Ph.D. in Environmental Geography from Texas State University. He joined the Guadalupe-Blanco River Authority in 2000 where he is currently the Executive Manager of Intergovernmental Relations and Policy and a member of the five person GBRA Executive Team. Votteler also serves as the Executive Director of the Guadalupe-Blanco River Trust, a 501(c)3 land and water trust with an independent board. He serves on the Board of the Texas Land Trust Council as well. Votteler is a founder and editor of the *Texas Water Journal*, an online journal devoted to Texas water policy issues that will be launched late in 2008. He has written on a range of Texas water issues.

- 2:50 Jenny Ainsworth *Redeveloping the Urban Environment: Perceived Value in Historic Properties*
- 3:10 Xuelian Meng *Morphology-Based Building Detection from Airborne Lidar Data*
- 3:30 Susan Peters *Trend in Extreme Winter Weather Events in Texas*

#### 4:00 – 5:00

#### Acknowledgements

Room 116

Texas Geography Student Research Symposium Committee

- Graduate Chair: Lara Bryant
- Undergraduate Chair: Keya Howard
- Webmaster: Matt Connolly
- Recording Secretary: Marques Green
- Program Chair: Tara Noah
- Food and Door Prizes: Susan Peters, Kristina Tower
- Panel Chairs: Edris Montalvo, Waverly Ray
- Faculty Advisor: Lawrence Estaville

Staff Support: Charles Robinson, Pat Hell-Jones, Angelika Wahl

#### Plenary Session

Room 116

Chair: Lara Bryant

**Dr. Todd Votteler** Executive Manager, Guadalupe-Blanco River Authority

**“Everything You Always Wanted to Know About the Edwards Aquifer Dispute, But Were Afraid to Ask”**

#### 5:15 – 5:30

#### Door Prizes

Room 116

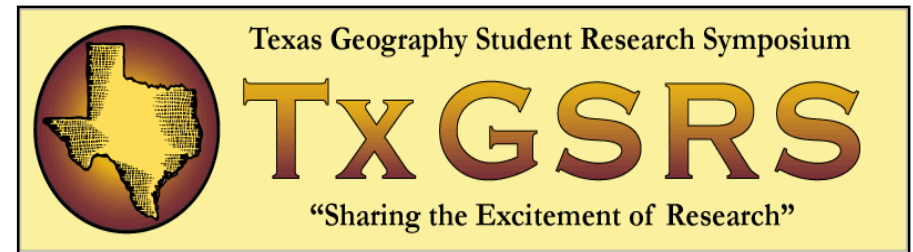
Chairs: Susan Peters and Kristina Tower

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Tantra Coffeehouse

## Thanks to the Geography Department

Especially:  
Dr. Philip Suckling, Chair  
Dr. David Butler, Graduate Coordinator  
Dr. Richard Earl, Undergraduate Coordinator



*Fourth Annual*

# Texas Geography Student Research Symposium

Department of Geography  
Texas State University-San Marcos

4 April 2008



Yongmei Lu Associate Professor of Geography, Texas State  
 Steven De La Cerda College Republicans Representative, Texas State  
 Dan Huebner Texas State Undergraduate Student

**Themes in Water Resources** Room 312  
 Chair: Ben Warden

2:30 Andrew Day *Groundwater Contaminant Concentrations for the Barton Springs Edwards Aquifer, Texas*  
 2:50 Kirk Schoppe *Effectiveness in Reducing Water Demand: Landscape-Oriented Water Conservation for Kyle, Texas*  
 3:10 A. Case Watkins *Through the Lens of Katrina: A Historical Geography of the Social Patterns of Flood Exposure in New Orleans*  
 3:30 Ben Warden *Hydraulic Geometry of the Pedernales River*

**Education Issues in Geography** Room 315  
 Chair: Lara Bryant

2:30 Anthony Warzecha *Student Teaching in the Social Studies Classroom*  
 2:50 Dorothy Ibes *Post Disaster Parks*  
 3:10 Chris Murr *Impact of a Scholarship Workshop Outreach Program on Underrepresented Populations in Texas*  
 3:30 Lara Bryant *Measuring Changes in Student Environmental Affect*

**Themes in Geography** Room 314  
 Chair: Susan Peters

2:30 Matt Townley *Who is Fit in America*

**11:00 – 12:20**

**The Rule of Capture: Wise or Wasteful** Room 311  
 Chair: Keya Howard

Panelists:  
 Rick Illgner Edwards Aquifer Authority, Adjunct Faculty in Groundwater Management  
 Russell Johnson Adjunct Faculty in Water Policy, Water Law Attorney  
 Ben Warden Texas State Master's Student  
 Laura Gunnells Texas State Undergraduate Student

**Technology in Geography** Room 312  
 Chair: Bill Collins

11:00 Jose Silvan-Cardenas *Retrieval of Sub-Pixel Tamarix Canopy Cover from Landsat Data along the Forgotten River: Assessing the Influence of Multiple Scattering*  
 11:20 Jiao Wang *Detecting Land Use and Land Cover Change in the Texas-Mexico Border Twin Cities with Remote Sensing Data Beginning in 1980s*  
 11:40 Nancy Tian *Regional Cluster Analysis of Female Breast Cancer at the County Level of United States*  
 12:00 Bill Collins *Evacuation Microsimulation of Diurnal Population Distributions*

**Geographic Education in the University Setting** Room 315  
 Chair: Waverly Ray

11:00 Audrey Mohan *Survey Development and Measurement of Geography Teacher Self-Efficacy*  
 11:20 Edris Montalvo *Recruiting, Retaining, and Graduating Latinos and African Americans in American Higher Education: A Geographic Analysis*

- 11:40 Waverly Ray *Crossing the Digital Divide: An Undergraduate Geography Interaction Between Papua New Guinea and the United States*
- 12:00 Angela Wranic *Learning Oriented Object: Global Warming*

**12:20 – 1:00**

**Lunch** Room 313

**Poster Session** ELA 3rd floor hallway

- Beau Barela *Potential Marketing Areas for New Membership for the Capitol Area Council Boy Scouts*
- Keith Bremer *Socio-Economic Characteristics of Different Land Use Areas in Austin, Texas 2000*
- Daniel Elder *The Business Geography of HEB*
- Tianfang Fang *An Analysis of the Driving Factors for Land Use Change in Hulin County, China*
- Charles Good *The Business Geography of Buc-ee's*
- Tara Noah *Possible Habitat for the Large-Fruited Sand Verbena*
- Johanna Ostling *Warning Behavior Response: An Investigation of Public Response During the Palm Beach County Tornado of 7 August 2003*
- Peter Van Zandt *Environmental Impact of Segment 6 of State Department Highway 130*
- Christen Eckhoff

**1:00 – 2:20**

**Is Your Dream Job in Environmental Education?: Students Meet Professionals** Room 311  
Chair: Lara Bryant

- Panelists:
- Beth Banks Lower Colorado River Authority
- Steven Friedlein Lower Colorado River Authority
- Cinde Jimenez Guadalupe-Blanco River Authority
- Ashley Matthews Texas Parks and Wildlife Department
- Greg Wukasch San Antonio Water System

- Christine Coats Texas State PhD Student
- Dorothy Ibes Texas State Master's Student
- Barbara Graham Texas State Undergraduate Student

**Biogeography: Impacts and Techniques** Room 312  
Chair: Jacob Maas

- 1:00 Shelia Henk *Comparing Press Responses to Wild Boars/Feral Pigs (*Sus scrofa*) in Great Britain and the United States*
- 1:20 Suzi Wiseman *The Shrinking Range of Rhinoceri*
- 1:40 James Dietrich *A New Technique Combining Remote Sensing and GIS Tools to Analyze Repeat Photography from Glacier National Park*
- 2:00 Jacob Maas *Traumatic Resin as Indicators of Geomorphic Processes in Douglas Fir (*Pseudotsuga menziesii*) and Subalpine Fir*

**Real-World Applications in GIS** Room 315  
Chair: Charles Yorke

- 1:00 Christopher Faulkner *Implementation of GIS for Woodcreek, Texas*
- 1:20 James Thomas
- 1:20 Billy Shamburg *Creating Spatial Solutions for a Local Cemetery Using GIS*
- 1:50 Jan Schneider *Interactive GIS emphasizing Hydrologic Data and Current land-use in the Texas Hill Country*
- Wes Poehlmann
- Alyssa Murphy

**2:30 – 3:50**

**No Entrada: The Texas-Mexico Border Fence** Room 311  
Chair: Edris Montalvo

- Panelists:
- Byron Augustin Professor of Geography, Texas State
- Brock Brown Associate Professor of Geography, Texas State
- Don Huebner Senior Lecturer in Geography, Texas State