



# **SWAAG 2018 Annual Meeting Abstracts**

*Bridging the Trans- &  
Cis-Mississippi Regions*



## **Baton Rouge, Louisiana**

Afrin, Tanzina, Louisiana State University

*Investigation of morphological changes in small coastal rivers during flood event*

**Abstract**

The delivery of fluvial sediment to coastal margins is one of the major concerns for river and coastal morphodynamics. Relevant research has primarily focused on large rivers that transport substantial sediment load and thus are responsible for building deltaic landscapes. However, less research is concentrated on small coastal rivers. A need exists to better understand the sediment dynamics in small coastal rivers that have different backwater regimes than their larger counterparts. The main objective of this research was to examine the influence of backwater on the morphodynamics of a small coastal meandering river during a large flood event. The investigation focuses on gaining a better understanding of sediment transport dynamics and channel bed adjustments over a ~9 km reach of the Lower Amite River in southern Louisiana. A two-dimensional morphological model was developed for the Amite River to simulate the hydrodynamic and morphologic adjustments to elucidate the backwater variability on sediment transport. The two-dimensional model was developed with high-resolution bathymetric data obtained from a multibeam echo sounder. Velocity measurements acquired using a boat-mounted acoustic Doppler current profiler and water stage data from the United States Geological Survey were used to calibrate the model parameters. The backwater impact on river morphology adjustment was assessed by considering the predicted sea level rise after 50 years from present condition.

Albert, Donald, Sam Houston State University

*Visual Complement to “Did or Could Seabirds “Halo” Pitcairn Island for Fletcher Christian?”*

**Abstract**

This poster is a visual complement to an article published in *Terrae Incognitae* 50(2) titled “Did or Could Seabirds “Halo” Pitcairn Island for Fletcher Christian?”. This study suggests that seabirds might have acted as navigational beacons for the HMS Bounty in its 1789-1790 search for the remote and uninhabited Pitcairn Island. This South Pacific island was difficult to find because its latitude and longitude coordinates were incorrectly recorded by Captain Philip Carteret’s on its initial sighting on 2 July 1767, and transposing errors by John Hawkesworth, editor of an onboard volume titled “An Account of the Voyages....” published in 1773, added further confusion. Therefore, Fletcher Christian, leader of the mutineers, was initially looking for this island 342 km west of its actual location. Now, fast forward some 250 years and the availability of the Global Positioning System (GPS). Studies are available from biologists employing tracking devices and the GPS to record the foraging ranges of seabird species, including those endemic to the Pitcairn Islands and the South Pacific.\* With these data, foraging range buffers were drawn around Pitcairn Island and its far-flung neighbors (Oeno, Henderson, and Ducie) to illustrate that seabirds might have alerted Fletcher Christian and the HMS Bounty to the island’s whereabouts. \* The

photographs of seabirds in this poster have been used with permission from Visual Resources for Ornithology (<http://vireo.ansp.org/>).

Allen, Ashley, Louisiana State University

*IMPACTS OF TORNADOES ON REGIONAL IDENTITY AND A SENSE OF  
"OKLAHOMANESS"*

**Abstract**

Listening to, engaging with, and sharing tornado stories can help people to establish and engage with a regional identity or sense of "Oklahomaness" as originally outlined by Howard F. Stein and Gary L. Thompson (2009). In this definition, Oklahomaness encompasses what it feels like to be Oklahoman, within and without experience. Tornado stories are meaningful to many individuals and communities within Oklahoma, and the social connections of talking about tornadoes, recent or not, are quite important to regional identity. In this paper, I assert that tornado stories and their meanings are impactful to the regional identities of many Oklahomans. Multiple qualitative methods, including interview, archival research, and photograph analysis were used in order to identify the importance of tornado stories to Oklahomans as a social group, whether they have physically experienced a tornado or not. To many, tornadoes are more than just extreme weather events or risky rare occurrences, they are an integral part of who they are and where they come from. Much importance is also placed on connecting the present to the past, and many Oklahomans have adopted tornadoes as a symbol of strength. What should be a terrifying loss becomes an example of how Oklahomans identify as community builders, helpers, and always "OK."

Astorga, Javier, University of New Mexico

*Disentangling Guyannia from Colonial Mapping and Imperial Diplomacy: Cartographic Legibility of a Territorial Dispute in the 19th century.*

**Abstract**

This project examines the dynamics between geopolitical configurations and geographical discourses behind the cartographic formation of the 'Guayana Esequiba,' a long disputed border territory between Venezuela and British Guyana. Rooted in an ongoing international quarrel as recently set by the Guyanese government to the International Court—in March 19th, 2018—this investigation focuses on a critical revision of contemporary theories and debates within the field of critical cartography and, more broadly, in cultural/historical geography around the actual capacity of colonial map designs to serve as sufficient and legitimate evidence for setting border/territorial disputes at historically challenged sovereignties. In order to historically draw the spatial and political formation of 'The Guyana Esequiba,' this project examines and attempts to provide an analytical framework for discussing the category of 'cartographic legibility' of colonial map designs at the heath of diplomatic bargaining that took place at the end of the 1890s, by using