



Table of Contents

Group Officers 1  
Musings from Chair 1  
2017 Awards 2-3  
R.J. Russell Award 4  
Maury nominations 4  
Call for Nominations 5  
2018 Business Mtg 5  
2018 AAG Program 5-6

Specialty Group Officers

Chair

Heidi Lannon  
Santa Fe College

Vice-Chair

Jean Ellis  
Univ. of South Carolina

Secretary/Treasurer

Brian Marks  
Louisiana State University

Board Member

P. Michael Link  
University of Hamburg

Board Member

Brian Bossak  
College of Charleston

Board Member

Philip Schmutz  
University of West Florida

Student Member

Joshua Hodge  
Texas State University

Web Editor

Richard Daniels,  
Washington State DOT

## Musings from the Chair

Heidi J.L. Lannon, Santa Fe College

As we reflect on 2017 and early 2018 we can only conclude it has been another exciting year for coastal and marine issues. I am happy to have the AAG annual meeting back in New Orleans. I recall the 2003 AAG meeting held in New Orleans adjacent to the now infamous Superdome, prior to Hurricane Katrina.

I was fortunate to be teaching Extreme Floods during the fall and was “delighted” (academically only) to be able to include the impacts of Hurricane Harvey in our class discussions. Immediately after we had classes cancelled due to Hurricane Irma’s impacts in Florida. While we were mostly spared in Gainesville, our neighbors directly on the coast saw some extreme impacts. We are having a special session on 2017 hurricanes to commemorate the year.

At this year’s annual meeting we are enjoying being asked to co-sponsor some sessions that stretch our definition of coastal and marine. The Executive Committee feels is a positive sign for our group. We have some wonderful sessions planned, the details of which are included later in the newsletter. We will be hosting two student sessions and will award \$250 to the winner of the Norbert P. Psuty Student Paper Merit Award. The H. Jesse Walker Student Illustrated Paper Merit Award winner will receive \$150. In addition, we are continuing our policy of providing all Psuty competitors \$50. We are pleased to share that one of our specialty group members has been appointed as an AAG Fellow. Doug Sherman, Professor and Chair at the University of Alabama and eminent coastal scientist has been recognized with this AAG honor. We will also be announcing the winner of the R. J. Russell Award to an esteemed individual who is contributing or has contributed significantly to advancing coastal and marine geography. Please attend the Specialty Group meeting to celebrate this individual.

Please plan to join your Coastal and Marine Specialty Group colleagues at our annual meeting which will be held Thursday, 4/12/2018 at 7:10pm in Studio 10, on the 2<sup>nd</sup> floor of the Marriott. We will be holding elections and I will be passing the gavel to Jean Ellis, who takes over as Chair for next year. See you in New Orleans.

**Heidi Lannon**  
Santa Fe College, Gainesville, FL

## COMA Website

Please visit and bookmark the COMA website <http://www.aagcoma.org/>. Thanks again to Richard Daniels, COMA member and Web Editor, for maintaining our site where you can find archived minutes and newsletters, award winners, a full listing of all COMA-sponsored AAG meeting sessions in New Orleans and more.





## 2017 AAG Meeting COMA Awards

### 2017 Norb Psuty Student Paper Merit Awards

**Best doctoral student paper:** **Patrick Barrineau**, Texas A&M University.

**Desertification and Dune Activity in South Texas.**

*Abstract:* Semi-stabilized coastal transgressive dune systems are important indicators of Quaternary drought variability and interactions between coastal and inland morphodynamics. The South Texas sand sheet (STSS) is a large transgressive dune system, the southernmost relict dune system in central North America, and is exposed to higher evapotranspiration and moisture variability than other similar landscapes. Thus, it is particularly vulnerable to climate change in central North America and morphodynamic changes in the Western Gulf of Mexico coast. This study uses optically stimulated luminescence (OSL) dates of core samples, soil distributions, and Palmer Drought Severity Index (PDSI) based drought reconstructions to identify thresholds in dune activation across the STSS. Historical accounts suggest long-term relationships between localized patterns of ecology, hydrology, and desertification. Aeolian activations dated at ca. 75, 230, 2000, 4100, and 6600 yr bp correspond to periods of persistent regional drought and morphological change across South Texas, further suggesting there is a relationship between dune activation and anthropogenic influences, geologic framework, and localized ecological dynamics. From these results it appears that regionalized activation in semi-stabilized dune systems is controlled primarily by climatic variations that reduce the overall moisture available for maintaining vigorous vegetation growth, while localized activation patterns depend more on stresses related to site-specific morphodynamics as well as human activity. These findings have serious implications for the 21st century behavior of large coastal transgressive dune systems, as well as semi-stabilized dune landscapes in central North America, where enhanced aridity is expected as a result of anthropogenic climate change.

**Best masters student paper:** **Jory Fleming**, University of South Carolina.

**Employing GIS and Geovisualizations to Explore Socio-Economic Dimensions and Policy Responses to Sea Level Rise.**

*Abstract:* Studies estimate a sea level rise range of 0.5 to greater than 2 meters by the year 2100. A rise of this magnitude will significantly impact the socio-economic dimensions of coastal communities, which contain approximately 40 percent of the U.S. population and account for close to 50 percent of the U.S. gross domestic product. Geovisualizations represent a useful tool for communities preparing for this environmental change. The singular capabilities of GIS for assimilating data allow users to link science to society in a geographic context. The results provide valuable insight for community planning efforts and policy responses. Charleston, South Carolina is uniquely situated for a case study of this approach due to its location at the confluence of environmental change and cultural, historic, and economic influence. Predicted levels of sea level rise will disrupt this community and result in wide ranging impacts to the region's economic, employment, and infrastructure sectors. In this study data

visualizations and 3D mapping are used to get a holistic understanding of the nexus of sea level rise and its effect on Charleston. The lessons learned here are transferable to other coastal cities and to government officials and planners interested in using exploratory visualizations to address sea level rise impacts. The results of this case study indicate that despite limitations in display and analysis, visualizations and 3D mapping are an engaging medium for shaping interdisciplinary spatial planning and revealing important connections between the environment and the community that can inform better policy and management decisions.

## **2017 H. Jesse Walker Illustrated Student Paper Merit Awards**

**Carl Green**, Texas A&M University.

NDVI Greening of Recently Deglaciated Land in Kenai Fjords National Park.

*Abstract:* Poleward vegetation expansion has affected Alaska for decades and due to recently increased rates of global climate change the expansion is expected to accelerate. Glacier recession in the region has exposed that was previously ice covered. Within a few years, primary succession begins to take place over the newly exposed land. Changes in land cover of recently deglaciated areas are affected by surface-air interactions, temperature gradients, and ecosystem development. Using data gathered from the Landsat series of satellites and historical extents of select, retreating glaciers within Kenai Fjords National Park, this research examines the relationship between glaciation rates and primary succession. Measurements of glacial extent in the region extend as far back as the mid-1800s. Using these extents in combination with Landsat imagery gathered from Google's Earth engine platform we were able to identify changes in NDVI for locations that have been deglaciated for 5, 10, 25, 50, 75, and 100 years. The glaciers were separated into categories based on the average melt rate that was measured over the entirety of each. The categories were chosen to be "slow melt", moderate melt", and "rapid melt". All three categories exhibited the fastest succession rates between 25 and 50 years after deglaciation but the rate of vegetation growth varied depending on the glacier's retreat rate. After 50 years, succession rates equalized between the three glacier categories.

**Jesse Miller**, Hunter College.

**Thomas Calella**, LaGuardia Community College, CUNY.

Citizen Science and Enterococci: Investigating the Contributing Factors of Water Quality in New York City.

*Abstract:* New York City's waterways face increasing pressure due to aging infrastructure and growing population. The city's local waterways are heavily affected by the combined sewage system, which can release overflow of industrial wastewater, residential sewage, and rainwater runoff directly into receiving waters during high rain events. The objective of this research was to investigate the relationship between urban land use, Combined Sewage Overflow (CSO), and the abundance of Enterococci in New York City waterways. In collaboration with the Citizen's Water Quality Testing Program, weekly water samples were collected and tested for the presence and abundance of Enterococci bacteria, an indicator of sewage contamination. Geographic Information Systems then were used to characterize a number of variables associated with urban wastewater infrastructure. Variables included: CSO drainage area, lot-level land use for each drainage area, identity of the CSO pipe in closest proximity to each of

the sample sites, direct drainage area, annual CSO discharge volume, and total street area. A multivariate linear regression analysis was performed and an association was found between total annual CSO discharge volume and Enterococcus colony forming units, when controlling for other variables. Results from this research will be important in determining best management practices for New York City waterways.

## 2018 R.J. Russell Awardee to be named at COMA Business Meeting, 4/12 @ 7:10pm

**The 2018 R.J. Russell Award** will be announced at this year's Coastal and Marine Geography Specialty Group Business Meeting, on Thursday 4/12 at 7:10pm in Studio 10 of the New Orleans Marriott on the 2<sup>nd</sup> floor.

**R.J. Russell** (1895-1971) was a renowned coastal scientist who was a president of both the Association of American Geographers (AAG) and the Geological Society of America (GSA). He was also a member of the National Academy of Sciences. A more complete biography of R.J. Russell is found at <http://www.aagcoma.org/files/russell.html>.

### **Matthew Fontaine Maury Paper of the Year Award nominations**

The Maury Award is given to recognize a published, peer-reviewed paper that has made a significant contribution to advancing coastal or marine geography during the award year. The Maury Award is open to all papers on which a dues-paying member of the COMA specialty group is the sole or first author and which has been published in the peer-reviewed literature (not including books or book chapters) during the 2018 calendar year. Papers appearing in early-release online format in 2018 are eligible. Nominations for the 2016 award may be made by any dues-paying COMA member until January 31 2019, by submitting a nomination in writing (e-mail is acceptable) to the Chair of the COMA Specialty Group. The nomination must include a copy of the paper or URL link to the paper for evaluation. The nominated author, if attending the AAG Meeting in 2019, must indicate their willingness to present a brief summary of their work at the COMA Business Meeting, prior to presentation of the award. The winner of the Maury Award will receive a commemorative plaque and letter of citation. Any co-authors will also receive a letter of citation. The paper and authors will be listed on the COMA web page and in the COMA newsletter.



## Elected Officer & Board Member nominations

At the 2018 COMA Business Meeting there will be elections for the following positions:

- Secretary-Treasurer (3-yr term)
- Board Member (2-yr term; two positions open)
- Student Board Member (1-yr term; must be a doctoral student)

Please submit nominations to chair Heidi Lannon ( [heidi.lannon@sfcollge.edu](mailto:heidi.lannon@sfcollge.edu) ) or any other current COMA officer. Elected officers must be regular members of the Coastal and Marine Geography Specialty Group.

Members may self-nominate. Nominations will close during the 2018 Business meeting in New Orleans on April 12<sup>th</sup>.

## 2018 Annual Business Meeting

Please consider attending the **2018 COMA business meeting on Thursday April 12<sup>th</sup> at 7:10pm** in Room Studio 10, on the 2<sup>nd</sup> Floor of the Marriott. The winner(s) of the Norb Psuty and 'Jess' Walker student paper merit competitions will be announced, plus the Russell awardee will be unveiled. There are elections for four board positions as well. So while New Orleans is always a party (for tourists, at least), our Coastal Geography Business Meeting will be extra-cheerful for being in a city *below sea level* for perhaps the first time in 15 years.

So please attend the business meeting and applaud the R.J. Russell winner, our Psuty and Walker paper awardees and enjoy the COMA Business Meeting refreshments.

## 2018 AAG Meeting – COMA Sessions

Your handy, hyperlinked list of [COMA Sponsored Sessions](#) at the 2018 AAG Annual Meeting is now available.

- [Hazards and GIScience – Session I](#)  
Tuesday, 4/10/2018, from 8:00AM – 9:40AM in Napoleon D1, Sheraton Hotel, 3<sup>rd</sup> Floor
- [Hazards and GIScience – Session II](#)  
Tuesday, 4/10/2018, from 10:00AM – 11:40AM in Napoleon D1, Sheraton Hotel, 3<sup>rd</sup> Floor
- [Coastal and Aeolian Geomorphology I: Coastal Geomorphology](#)  
Tuesday, 4/10/2018, from 12:40PM – 2:20PM in Oakley, Sheraton Hotel, 4<sup>th</sup> Floor
- [Coastal and Aeolian Geomorphology II: Aeolian Processes and Landforms](#)  
Tuesday, 4/10/2018, from 2:40PM – 4:20PM, Oakley, Sheraton Hotel, 4<sup>th</sup> Floor
- [Floodplains and riparian zones: patterns, dynamics, and management](#)  
Tuesday, 4/10/2018, 2:40PM – 4:20PM, Napoleon D1, Sheraton Hotel, 3<sup>rd</sup> Floor
- [Coastal and Aeolian Geomorphology III: Managing Coastal Landscapes through Applied Research](#)  
Tuesday, 4/10/2018, from 4:40PM – 6:20PM in Oakley, Sheraton Hotel, 4<sup>th</sup> Floor
- [Sensitivity and vulnerability of ecosystems to climate change](#)  
Wednesday, 4/11/2018, from 8:00AM – 9:40AM in Jackson, Marriott, 5<sup>th</sup> Floor

- [Norb Psuty Student Paper Merit Award](#)  
Wednesday, 4/11/2018, from 10:00AM – 11:40AM in Grand Ballroom C, Astor Hotel, 2<sup>nd</sup> Floor
- [Disaster Culture: Earthquake, Tsunami, and Fukushima Nuclear Issues](#)  
Wednesday, 4/11/2018, from 1:20PM – 3:00PM in Napoleon B3, Sheraton Hotel, 3<sup>rd</sup> Floor
- [From Unnatural Metropolis to Coastal Crisis: Hazards as a Way of Life in Louisiana](#)  
Wednesday, 4/11/2018, from 3:20PM – 5:00PM in Napoleon D3, Sheraton Hotel, 3<sup>rd</sup> Floor
- [Hurricanes I: Climatology/meteorology](#)  
Thursday, 4/12/2018, from 8:00AM – 9:40AM in Napoleon D1, Sheraton Hotel, 3<sup>rd</sup> Floor
- [Hurricanes II: Risk, Vulnerability, Resilience](#)  
Thursday, 4/12/2018, from 10:00AM – 11:40AM in Napoleon D1, Sheraton Hotel, 3<sup>rd</sup> Floor
- [Hurricanes III: coastal geomorphology and paleotempestology](#)  
Thursday, 4/12/2018, from 1:20PM – 3:00PM in Napoleon D1, Sheraton Hotel, 3<sup>rd</sup> Floor
- [Hurricanes IV: the 2017 hurricane season](#)  
Thursday, 4/12/2018, from 3:20PM – 5:00PM in Napoleon D1, Sheraton Hotel, 3<sup>rd</sup> Floor
- [Hurricanes V: Economic and land-cover-change Impacts](#)  
Thursday, 4/12/2018, from 5:20PM – 7:00PM in Napoleon D1, Sheraton Hotel, 3<sup>rd</sup> Floor
- [H. Jesse Walker Student Illustrated Paper Merit Award](#)  
Thursday, 4/12/2018, from 5:20PM – 7:00PM in Canal Street Corridor, Sheraton Hotel, 3<sup>rd</sup> Floor
- [Coastal and Marine Specialty Group Business Meeting](#)  
Thursday, 4/12/2018, from 7:10PM – 8:10PM in Studio 10, Marriott Hotel, 2<sup>nd</sup> Floor
- [Re-envisioning “sustainable” deltas through critical physical geography 1](#)  
Friday, 4/13/2018, from 8:00AM – 9:40AM in Studio 5, Marriott Hotel, 2<sup>nd</sup> Floor
- [Re-envisioning “sustainable” deltas through critical physical geography 2](#)  
Friday, 4/13/2018, from 10:00AM – 11:40AM in Studio 5, Marriott Hotel, 2<sup>nd</sup> Floor
- [Invisible Borders in a Very Bordered World II: Oceans and Rivers as Territory](#)  
Friday, 4/13/2018, from 10:00AM – 11:40AM in Studio 6, Marriott Hotel, 2<sup>nd</sup> Floor
- [Coastal and Marine Geography – special emphasis 2017 Hurricanes](#)  
Saturday, 4/14/2018, from 8:00AM – 9:40AM in Napoleon Foyer / Common Street Corridor, Sheraton Hotel, 3<sup>rd</sup> Floor
- [Troubling Soils: Unruly Matter and Subterranean Politics](#)  
Saturday, 4/14/2018, from 10:00AM – 11:40AM in Nottoway Room, Sheraton Hotel, 4<sup>th</sup> Floor

