

# Detailed Program Agenda

[All activities are scheduled in Eastern Daylight Time]



## 13th International Symposium on Biogeochemistry of Wetlands

"Wetlands in a Changing Climate"

Virtual Meeting: March 22-25, 2021

[www.conference.ifas.ufl.edu/biogeo2021](http://www.conference.ifas.ufl.edu/biogeo2021)

This international symposium provides a framework for scientists to share technical information on various topics related to coupled biogeochemical cycling of macro-elements and associated organic and inorganic contaminants. The goal is to improve our understanding of the role wetlands perform in regulating and mitigating impacts of global climate change and sea level rise. If your work involves nutrient or contaminant cycling in wetlands and aquatic ecosystems, carbon science, or aquatic restoration and management, you should attend. You will walk away with the most up-to-date information on wetland biogeochemistry research and application in addition to other valuable benefits.

### You'll learn the latest on:

- Biogeochemistry of ecologically relevant elements such as C, N, P, S
- Using biogeochemical processes to restore ecosystem form and function
- Cycling of heavy metals in wetlands and aquatic ecosystems
- Biogeochemical cycling of anthropogenic pollutants in the environment

In today's fast paced research world, BioGeo 2021 provides a valuable opportunity to discuss results of new and innovative research activities, exchange ideas of trends and potential for restoration and management, and promote networking and collaboration among practitioners, scientists, researchers, students and industry professionals.

Take advantage of this opportunity that only occurs once every few years and make plans to join us!

<b>PRE-SYMPOSIUM</b>	<p><b>Be Sure to Prepare Well in Advance to Participate</b></p> <p>Verify Zoom works on your PC and that you have the latest version so you may self-select which breakout you want to attend.</p> <p><b>[PLEASE NOTE: All session times are in the Eastern Daylight Time Zone]</b></p> <p><b><u>For an in-depth checklist on how to prepare for a Zoom meeting, please review this Zoom: Pre-Meeting Checklist.</u></b></p> <p><a href="https://conference.ifas.ufl.edu/zoom-meeting-checklist.html">https://conference.ifas.ufl.edu/zoom-meeting-checklist.html</a></p>
	<p><b>Monday, March 22, 2021</b></p>
10:00AM - 12noon	<p><b>Staff Available at the Symposium Help Desk during Arrival and Check-in</b></p> <p>Attendees can log into this session to ask questions about the symposium, to get help logging into the Virtual Platform or to ask for help using Zoom.</p>
11:30am- 12:30pm	<p><b><u>Opening Plenary Session</u></b> [Eastern Daylight Time]</p> <p><b><u>Welcome &amp; Introductory Remarks</u></b></p> <p><b>John White</b>, Associate Dean of Research, CC&amp;E and John and Catherine Day Professor of Oceanography &amp; Coastal Science, Louisiana State University Dept. of Oceanography and Coastal Sciences, Baton Rouge, Louisiana</p> <p><b>Todd Osborne</b>, Associate Professor, UF/IFAS Soil and Water Sciences Department, Estuarine Ecosystems Laboratory, Wetland Biogeochemistry Laboratory, Whitney Laboratory for Marine Bioscience, St. Augustine, Florida</p> <p><b><u>Keynote Presentation</u></b></p> <p>"Climate Change and Sea Level Rise: A Synthesis of Current Scientific Understanding and Implications for Low-Lying Coastal Systems"</p> <p><b>Virginia Burkett</b>, Chief Scientist for Climate and Land Use Change (CLU) US Geological Survey, Many, Louisiana</p>
12:30PM - 1:15PM	<p><b>Lunch Break and Conversation Lounge Open to Participants</b> [Eastern Daylight Time]</p>

<b>Monday, March 22, 2021</b>			
<b>Concurrent Sessions – 1:30pm - 3:45pm [Eastern Daylight Time]</b>			
	<b>Session 1</b>	<b>Session 2</b>	<b>Session 3</b>
	<b>Broadening Blue Carbon Research</b>	<b>Nutrient Biogeochemistry in Coastal Basins of the Mississippi Delta with Special Reference to Denitrification</b>	<b>Part 1: Enhancing Sustainability of Vegetation in the Everglades STAs</b>  <b>Part 2: Innovative Methods in Biogeochemistry</b>
1:30PM	<b><u>MODERATOR</u></b> <b>Gail Chmura</b> McGill University Quebec Canada	<b><u>MODERATOR</u></b> <b>John Day</b> Louisiana State University Baton Rouge, LA, USA	<b><u>MODERATOR</u></b> <b>Manohardeep Josan</b> South Florida Water Management District West Palm Beach, FL USA
	<b><u>CO-MODERATOR</u></b> <b>Anushka Sah</b> McGill University Quebec, Canada	<b><u>CO-MODERATOR</u></b> <b>John White</b> Louisiana State University Baton Rouge, LA, USA	<b><u>CO-MODERATOR</u></b> <b>Jacob Berkowitz</b> US Army Corps of Engineers Vicksburg, MS, USA
	<b>Introductions</b>	<b>Introductions</b>	<b>Introductions</b>
1:35pm	<b>Josh Breithaupt</b> Guidelines and Insights for Using Loss-On-Ignition to Estimate Organic Carbon Content in Mangrove Soils and Sediments	<b>John Day</b> Nutrient Inputs and Uptake in the Barataria Basin, Louisiana	<b>Manohardeep Josan</b> Effect of Marl Sediment on Submerged Aquatic Vegetation Growth
1:50pm	<b>Wendy Ampuero Reyes</b> Aboveground and Belowground Carbon Stocks in Burned Salt Marsh, Peru	<b>Gina Groseclose</b> Belowground Productivity Responses to Nutrient-Enrichment and Sediment Deposition: Predicting Effects of Mississippi River Sediment Diversions	<b>Kevin Grace</b> Sustainability of Phosphorus Removal by Chara-Dominated Wetlands
2:05pm	<b>Anushka Sah</b> Soil Carbon Loss from Conversion of Mangroves to Aquaculture Ponds and Rice Fields	<b>John Nyman</b> Conceptual Models to Help Explain and Predict the Response of Wetland Plant Roots to Nutrients	<b>Mark Clark</b> Buoyancy Components and Dynamics of Floating Wetlands in the Everglades Stormwater Treatment Areas
2:20pm	<b>Gail L. Chmura</b> Changes in Soil Blue Carbon Stocks of China's Tidal Wetlands with Invasion of <i>Spartina Alterniflora</i>	<b>John White</b> Relative Contribution of Denitrification for Nitrogen Reduction: Implications for Mississippi River Diversions	<b>Katie Glodzik</b> Potential Factors Leading to Floating Wetland Formation in Everglades Stormwater Treatment Areas: An Analysis of Available Physical and Chemical Data
2:35pm	<b>Bio Break</b>	<b>Bio Break</b>	<b>Bio Break</b>
2:40pm	<b>Tracy Quirk</b> Factors Influencing Blue Carbon Accumulation Rates in Natural and Created Coastal Marshes	<b>John Day</b> The Use of Salinity Mixing Diagrams to Quantify Nutrient Uptake Dynamics in Louisiana Coastal Systems	<b>Pim de Jager</b> BioPhree: The Next Generation Solution to Remove and Re-Use Dissolved Phosphate in Surface and Effluent Waters Down to PPB-Level
2:55pm	<b>Yadav Sapkota</b> Understanding the Past Organic Matter Depositional Environment in Coastal Louisiana	<b>Gregory Noe</b> Spatially-Explicit, Quantitative Predictions of Sediment and Nutrient Inputs and Biogeochemical Response in Forested Floodplains	<b>Charles Matoka</b> Marine Macro-Algal Pigment Exploration as Alternative Bioimaging and Molecular Biomarkers
3:10pm	<b>Christopher M. Swarzenski</b> Physico-Chemical Characterization of a Salt Marsh Tidal Creek in Coastal Louisiana	<b>Lorna Putnam-Duhon</b> Nitrogen and Phosphorus Assimilation in Wetlands Improves Wetland Condition and Water Quality of Receiving Waterbodies	<b>Clay Tucker</b> Tree Rings Record Hurricane Events of the Past
3:25pm	<b>Hongqing Wang</b> Modeling Carbon Dynamics in Tidal Freshwater Forested Wetlands	<b>Alexandra Carter</b> Introduction to Louisiana's Watershed Initiative	<b>Ashvin Sewsahai</b> Spatio-Temporal Distribution and Biometrical Characteristics of <i>Discapseudes surinamensis</i> and <i>Halmyrapseudes spaansi</i> (Crustacea, Tanaidacea)
3:40pm	<b>Discussion</b>	<b>Discussion</b>	<b>Discussion</b>
4:00pm - 5:00pm	<b>Conversation Lounge Open to Participants [Eastern Daylight Time]</b>		
6:30pm - 7:30pm	<b>Feature Presentation [Eastern Daylight Time]</b>  Join us for a presentation on the "Causes of a Mangrove Dieback in the Galapagos and its Consequences for the Mangrove Finch" by <i>Dr. Ilka "Candy" Feller</i> , Emerita, Smithsonian Environmental Research Center, Edgewater, Maryland. This will be an informal evening session, so bring a snack and feel free to enjoy your favorite beverage and relax at the end of the day as Candy tells the captivating story of what she experienced during a 13-day stint on the remote Galapagos Archipelagos.		

Tuesday, March 23, 2021	
10:00AM - 11:00AM	Conversation Lounge Open to Participants [Eastern Daylight Time]
11:30am - 12:30pm	<p style="text-align: center;"><b>Plenary Session</b> [Eastern Daylight Time]</p> <p style="text-align: center;"><b>Moderator</b></p> <p style="text-align: center;">John White, Associate Dean of Research, CC&amp;E and John and Catherine Day Professor of Oceanography &amp; Coastal Science, Louisiana State University Department of Oceanography and Coastal Sciences, Baton Rouge, Louisiana</p> <p style="text-align: center;"><b>Keynote Presentation</b></p> <p style="text-align: center;">"The Louisiana Coastal Master Plan: Science-Based Long-Term Planning in Coastal Louisiana"</p> <p style="text-align: center;"><b>Stuart Brown</b>, Coastal Resources Scientist Assistant Administrator, Planning and Research Division, Coastal Protection and Restoration Authority (CPRA), Baton Rouge, Louisiana</p>
12:30PM - 1:15PM	Lunch Break and Conversation Lounge Open to Participants [Eastern Daylight Time]

<b>Tuesday, March 23, 2021</b>			
<b>Concurrent Sessions – 1:30pm - 3:45pm [Eastern Daylight Time]</b>			
	<b>Session 4</b>	<b>Session 5</b>	<b>Session 6</b>
	<b>Constructed Wetlands / Wetland Restoration</b>	<b>Advances in Biogeochemistry: Science and Application</b>	<b>Sustainably Solving Legacy Nutrients in Landscapes with Wetlands and Wetlacture</b>
1:30pm	<b><u>MODERATOR</u></b> <b>Nia Hurst</b> US Army Corps of Engineers Vicksburg, MS USA	<b><u>MODERATOR</u></b> <b>Patrick W. Inglett</b> University of Florida WBL Gainesville, FL, USA	<b><u>MODERATOR</u></b> <b>William J. Mitsch</b> Florida Gulf Coast University Fort Myers, FL USA
	<b><u>CO-MODERATOR</u></b> <b>Erol Knaus</b> Louisiana State University Baton Rouge, LA, USA	<b><u>CO-MODERATOR</u></b> <b>K. Ramesh Reddy</b> University of Florida WBL Gainesville, FL, USA	<b><u>CO-MODERATOR</u></b> <b>Gail Chmura</b> McGill University Quebec Canada
	<b>Introductions</b>	<b>Introductions</b>	<b>Introductions</b>
1:35pm	<b>Scott Graham</b> Effects of Marsh Management in Coastal Marsh Impoundments on Marsh Vertical Accretion in the Face of Sea Level Rise	<b>Todd Osborne</b> Coupled Photolytic and Precipitation Reactions for Reduction of Dissolved Organic Phosphorus in a Subtropical Treatment Wetland	<b>Lauren Griffiths</b> Role of Vegetation and Algal Communities on Nutrient Retention and Management in a Created Urban Stormwater Treatment Wetland
1:50pm	<b>Paul Boudreau</b> Surface Flow Constructed Wetland Organic Matter Reduction Via Periodic Water Level Draw-Down	<b>Michael Böttcher</b> Isotope Biogeochemistry of the Carbon-sulfur-metal Cycle in a Temperate Coastal Wetland under Impact by Past and Recent Sea-water Flooding Events	<b>Bhavik Bakshi</b> Approaches Toward a Circular Economy of Phosphorus Fertilizer: Techno-Economic and Environmental Life Cycle Assessment
2:05pm	<b>Nia Hurst</b> Evaluating the Long-Term Success of USACE Wetland Creation Projects: 45 Years in the Making	<b>Jonathan Judy</b> Mineralogy and Elemental Composition of Particulates Entering and within Everglades Stormwater Treatment Areas	<b>William J. Mitsch</b> Sustainably Solving Legacy Nutrients in Landscapes with Wetlacture™—Six Years of Development
2:20pm	<b>Christopher G. Smith</b> Would You Expect Prosperity After 20+ Years of ‘Just Breaking Even’? Marshes Neither, an Example from Grand Bay Marsh Platform (MS/AL, USA)	<b>Patrick Inglett</b> Advances in Enzyme Processes Regulating Macro-Elemental Cycling in Wetlands	<b>Sam Miller</b> The Business of Wetlacture™—Seeking Viable Business Models for Landscape-Scale Nutrient Capture
2:35pm	<b>Bio Break</b>	<b>Bio Break</b>	<b>Bio Break</b>
2:40pm	<b>Erol Knaus</b> Changes in Wetland Soil Processes and Ecosystem Functions Four Years after Marsh Creation in Barataria Bay, Louisiana	<b>Alexandra Hedgpeth</b> Measuring the Radiocarbon Offset Between Respiration Products and Peat to Determine Sources of Carbon Gas Flux From a Neotropical Peatland	<b>Andrew Wilson</b> Examining Hydrologic Variables and External Factors Responsible for Nutrient Retention in Urban Runoff Wetlacture™ Mesocosms in Southwest Florida
2:55pm	<b>Olajuwon Jimoh</b> Linking Variation in Belowground Biomass to Soil Shear Strength and Carbon Sequestration in Louisiana Wetlands	<b>Andre Rovai</b> Carbon Storage and Sequestration in the World’s Deltas	<b>Kyle Boutin</b> Evaluating the Impact of Wetlacture™ on Soil Fertility at Buckeye Lake, Ohio: Were Three Years of Nutrient Sequestration Adequate to Grow Commercially Viable Corn without Additional Fertilizers?
3:10pm	<b>Xiaoyu Xu</b> Metal-sulfide Dynamics in a Constructed Wetland in the Southeastern United States	<b>Curtis Richardson</b> Organic Carbon Storage Pools In Wetlands: Estimates, Uncertainties and Application of Airborne Electromagnetics (AEM) to Improve Global Quantification of Peat Thickness and Carbon Content	<b>Bingbing Jiang</b> Finding Potential Wetlacture™ Sites in the Great Black Swamp and the Western Lake Erie Basin for Mitigating Harmful Algal Blooms
3:25pm	<b>Mike Jerauld</b> Sulfate Additions did not Induce Phosphorus Release from Soil (“Internal Eutrophication”) within a Central Everglades Marsh (FL, USA)	<b>Stefan Gerber</b> Microbial Explicit Carbon Decomposition Models – The Fine Print and Other Disclaimers	<b>Discussion</b>
3:40pm	<b>Discussion</b>	<b>Discussion</b>	

Tuesday, March 23, 2021 (continued)	
3:45pm - 4:30pm	<p style="text-align: center;"><b><u>STUDENT CAREER PANEL</u></b> [Eastern Daylight Time]</p> <p>Once afternoon breakouts conclude, attendees will reconvene in the General Session Room for a Student Career Panel. A diverse group of representatives from industry, government, NGO's and academia, will be available to answer employment questions by students who will soon be entering the job market.</p> <p style="text-align: center;">Moderators:</p> <p style="text-align: center;"><b>Dr. Jacob F. Berkowitz</b>, CPSS, PWS, US Army Corps of Engineers, Engineer Research and Development Center, Baton Rouge, LA <b>Dr. John White</b>, Associate Dean of Research, CC&amp;E and John and Catherine Day Professor of Oceanography &amp; Coastal Science, Louisiana State University, Department of Oceanography and Coastal Science, Baton Rouge, LA</p> <p style="text-align: center;">Panelists:</p> <p style="text-align: center;"><b>Ms. Lenore Vasilas</b>, USDA-NRCS <b>Dr. Christine VanZomeren</b>, USACE- ERDC <b>Dr. Richard Griffin</b>, Prairie View A&amp;M University <b>Dr. Nate Hough-Snee</b>, Four Peaks Environmental <b>Dr. Tracy Quirk</b>, LSU</p> <p style="text-align: center;"><i>Students are encouraged to participate and take advantage of this opportunity!</i></p>
4:30pm - 5:00pm	<p><b>Conversation Lounge Open to Participants</b> [Eastern Daylight Time]</p>
Wednesday, March 24, 2021	
10:00AM - 11:00AM	<p><b>Conversation Lounge Open to Participants</b> [Eastern Daylight Time]</p>
11:30AM - 12:30PM	<p style="text-align: center;"><b><u>Plenary Session</u></b> [Eastern Daylight Time]</p> <p style="text-align: center;"><b><u>Moderator</u></b></p> <p style="text-align: center;"><b>Todd Osborne</b>, Associate Professor, UF/IFAS Soil and Water Sciences Department, Estuarine Ecosystems Laboratory, Wetland Biogeochemistry Laboratory, Whitney Laboratory for Marine Bioscience, St. Augustine, Florida</p> <p style="text-align: center;"><b><u>Keynote Presentation</u></b></p> <p style="text-align: center;">“Mitigating Harmful Cyanobacterial Blooms in a Hotter, Hydrologically More Extreme World”</p> <p style="text-align: center;"><b>Hans W. Paerl</b>, Kenan Professor of Marine and Environmental Sciences, University of North Carolina - Chapel Hill Institute of Marine Sciences, Morehead City, North Carolina</p>
12:30PM - 1:15PM	<p><b>Lunch Break and Conversation Lounge Open to Participants</b></p>

<b>Wednesday, March 24, 2021</b>			
<b>Concurrent Sessions – 1:30pm - 3:45pm [Eastern Daylight Time]</b>			
	<b>Session 7</b>	<b>Session 8</b>	<b>Session 9</b>
	<b>Forests and Mangroves</b>	<b>Interdisciplinary Soil Biogeochemistry Research - Novel Tools and Approaches</b>	<b>Toward Mitigating Climate Change: Quantifying Wetland Carbon Sequestration and GHG Emissions</b>
	<b><u>MODERATOR</u></b> <b>Victor Rivera-Monroy</b> Louisiana State University Baton Rouge, LA USA	<b><u>MODERATOR</u></b> <b>Jacob Berkowitz</b> US Army Corps of Engineers Vicksburg, MS, USA	<b><u>MODERATOR</u></b> <b>Camille Stagg</b> US Geological Survey Lafayette, LA USA
	<b><u>CO-MODERATOR</u></b> <b>Richard Keim</b> Louisiana State University Baton Rouge, LA USA	<b><u>CO-MODERATOR</u></b> <b>Christine VanZomeran</b> US Army Corps of Engineers Vicksburg, MS, USA	<b><u>CO-MODERATOR</u></b> <b>Melissa Baustian</b> The Water Institute of the Gulf Baton Rouge, LA USA
1:30pm	<b>Introductions</b>	<b>Introductions</b>	<b>Introductions</b>
1:35pm	<b>Victor Rivera-Monroy</b> Scrub Mangrove Forest Spatial Growth Patterns and Foliar Productivity in the Everglades National Park, Florida, USA: Assessing Foundation Species Stoichiometric Properties	<b>Kristell Hergoualc'h</b> Spatial and Temporal Variability of Soil N <sub>2</sub> O and CH <sub>4</sub> Fluxes along a Degradation Gradient in a Palm Swamp Peat Forest in the Peruvian Amazon	<b>Amanda Spivak</b> Hydrologic Management Strategies and Soil Carbon Storage in a Northeast Salt Marsh
1:50pm	<b>Christopher Anderson</b> Characterizing River Connectivity, Salinity, and Forested Wetland Communities along a Tidal Freshwater Gradient in West Florida, USA	<b>Navid Jafari</b> Future Trajectory of Wetland Shear Stress: Case Study of North Inlet and Implications to Other Salt Marshes	<b>Lisa Chambers</b> Soil Carbon Loss through Submergence: Understanding the Biogeochemistry of Edge Erosion in Coastal Wetlands
2:05pm	<b>Matthew Wozniak</b> Un-'mangling' Coastal Blue Carbon: Simulating Mangroves in an Earth System Model, with Rhizophora Mangle as a Test Case	<b>Shaurav Alam</b> In-situ Soil-root Bonding Strength Evaluation Equipment to Prevent Coastal Wetland Loss	<b>Melissa Baustian</b> Soil Carbon Accumulation Rates in Louisiana Marshes Provide Insights on Expected Changes from Climate Change and Coastal Restoration
2:20pm	<b>Camilo Trench</b> The Effects of Marine Litter on Mangrove Seedling Survival, Growth and Mangrove Forest Rehabilitation Efforts	<b>Jacob Berkowitz</b> A Sticky Situation: The Challenge of Optimizing Phosphorus Sorption Dynamics in Restored Wetlands	<b>Eric Ward</b> Modeling Land Cover Change and Potential Management Impacts on Carbon Stocks of Coastal Wetlands in the Mississippi River Alluvial Plain
2:35pm	<b>Bio Break</b>	<b>Bio Break</b>	<b>Bio Break</b>
2:40pm	<b>Robert Twilley</b> The Role of Mangroves in Blue Carbon Mitigation: Storage vs. Sequestration	<b>Sophie Comer-Warner</b> The Impacts of Restoration and Land-Use on Nitrogen Biogeochemistry and Greenhouse Gas Fluxes in Tropical Coastal Wetlands	<b>Audrey Goeckner</b> Carbon Dynamics of Urban Stormwater Ponds: Burial, Gas Flux, and Dissolved Organic Matter Quality
2:55pm	<b>Candy Feller</b> The Many Mechanisms of Freeze Tolerance: Their Role in Mangrove Range Expansion or Contraction	<b>Jessica Vaccare</b> The Denitrification Potential of Eroding Wetlands in Barataria Bay, LA, USA: Implications for River Reconnection	<b>Craig Allan</b> Riparian Atmospheric and Water Borne Material Exchanges along a Freshwater Tidal Gradient, South Eastern USA
3:10pm	<b>Richard Keim</b> Marine Influence on Soil Chemistry at a Coastal Forest-Marsh Transition	<b>Christine VanZomeran</b> Declining Wildrice ( <i>Zizania Palustris</i> ) Production and the Role of Soil Physicochemical Properties	<b>Jorge A. Villa</b> Plant-Mediated Methane Transport in a Temperate Freshwater Estuarine Marsh
3:25pm	<b>Erin Swails</b> Contributions of Methane and Nitrous Oxide to Peat Greenhouse Gas Emissions from Forest and Oil Palm Plantations in an Indonesian Peatland	<b>Callie Snow</b> 2019 Toxic Cyanobacteria Bloom Development in Lake Pontchartrain Estuary	<b>Robert Bordelon</b> Effects of Plant Senescence in Southern Cattails ( <i>Typha domingensis</i> )
3:40pm	<b>Discussion</b>	<b>Discussion</b>	<b>Discussion</b>
4:00pm - 5:00pm	<b>Conversation Lounge Open to Participants [Eastern Daylight Time]</b>		
6:00pm - 7:30pm	<b>Poster Session &amp; Networking Social [Eastern Daylight Time]</b>  This fun and interactive poster session will be conducted live via Zoom. Those presenting posters virtually will be designated as individual Breakout Rooms. Attendees can jump from room to room (poster to poster) to engage with presenters and attendees. Presenters will be able to share their screens and show PowerPoint slides visualizing each section of their poster to describe their work in more detail. As an incentive for attendees to visit as many posters as possible, we are giving away four \$125 gift cards. The more posters one visits, the more times their name is entered in a drawing for each session. Winners will be selected randomly and announced at the end of the Closing Plenary.		

Thursday, March 25, 2021	
10:00AM - 11:00AM	<b>Conversation Lounge Open to Participants</b> [Eastern Daylight Time]
11:30AM - 12:30PM	<p><b><u>Plenary Session</u></b>                      [Eastern Daylight Time]</p> <p><b><u>Moderator</u></b>                      John White, Associate Dean of Research, CC&amp;E and John and Catherine Day Professor of Oceanography &amp; Coastal Science, Louisiana State University                      Dept. of Oceanography and Coastal Sciences, Baton Rouge, Louisiana</p> <p><b><u>Keynote Presentation</u></b>                      “Investment in Wetland Conservation - The Ducks Unlimited Mission”</p> <p><b>Ellen Herbert</b>, Ecosystem Services Scientist, Conservation, Ducks Unlimited,                      National Headquarters, Memphis, Tennessee</p>
12:30PM - 1:15PM	<b>Lunch Break and Conversation Lounge Open to Participants</b> [Eastern Daylight Time]

Thursday, March 25, 2021			
	Session 10	Session 11	Session 12
<b>Concurrent Sessions – 1:30pm - 3:45pm [Eastern Daylight Time]</b>			
	<b>Dynamics of Coastal Systems</b>	<b>The Interplay of Ecosystem Restorations and Effects on Wetland Biogeochemistry: Lessons from the Florida Everglades</b>	<b>Shifting Ecosystems: Consequences for Decomposition in Coastal Wetlands</b>
	<b><u>MODERATOR</u></b> <b>Leonard Scinto</b> Florida International University Miami, FL USA	<b><u>MODERATOR</u></b> <b>David P. Krabbenhoft</b> US Geological Survey Middleton, WI USA	<b><u>MODERATOR</u></b> <b>Loraé Simpson</b> Florida Oceanographia Society Stuart, FL, USA
	<b><u>CO-MODERATOR</u></b> <b>Todd Osborne</b> UF/IFAS Whitney Lab. for Marine Bioscience St. Augustine, FL USA	<b><u>CO-MODERATOR</u></b> <b>Brett Poulin</b> University of California, Davis Davis, CA USA	<b><u>CO-MODERATOR</u></b> <b>Julia Cherry</b> University of Alabama Tuscaloosa, AL, USA
1:30pm	<b>Introductions</b>	<b>Introductions</b>	<b>Introductions</b>
1:35pm	<b>Songjie He</b> Dissolved Organic Carbon and Greenhouse Gases (Carbon Dioxide and Methane) Characteristics of a Salt Marsh in Coastal Louisiana	<b>Brett Poulin</b> The Biogeochemistry of Mercury, Sulfur, and Organic Carbon in Wetlands – From the Subtropic to the Arctic	<b>Julia Cherry</b> Factors Regulating Organic Matter Decomposition in Tidal Wetlands of the Northern Gulf of Mexico
1:50pm	<b>Yanda Ou</b> A Numerical Investigation of Salinity Variations in Barataria Estuary, Louisiana in Connection with the Mississippi River and Restoration Activities	<b>William Orem</b> Understanding the Increasingly Important Role of Sulfur In the Biogeochemistry of Wetland Ecosystems	<b>Camille Stagg</b> The Role of Plants in Mediating Climate Change Impacts on Coastal Wetland Carbon Cycling
2:05pm	<b>James Javaruski</b> Fate of Red Tide Brevetoxins in Shallow Southwest Florida Coastal Sediments	<b>David Krabbenhoft</b> Biogeochemical Controls on Mercury Methylation in Everglades Peat Soils Spanning a Large Range of Trophic Enrichment	<b>Loraé Simpson</b> Mangrove Decomposition in a Shifting, Eutrophied Ecosystem
2:20pm	<b>Leonard J. Scinto</b> Variation in Soils and Soil Biogeochemistry along a Coastal Ecogeomorphic Setting	<b>Benjamin Peterson</b> Identification of Mercury-Methylating Organisms along a Trophic Gradient in the Florida Everglades	<b>Tracey Quirk</b> Plant Species Shifts in Response to Nutrient-Enrichment and Sediment Deposition: Consequences for Organic Matter Cycling
2:35pm	<b>Bio Break</b>	<b>Bio Break</b>	<b>Bio Break</b>
2:40pm		<b>Nathan Johnson</b> Diverse Communities of hgcAB+ Microorganisms Methylate Mercury in Freshwater Sediments Subjected to Experimental Sulfate Loading	<b>Samantha Chapman</b> Organic Matter Decomposition is Mostly Insensitive to Dominant Plant Shifts and Temperature Warming in Ecotonal Wetlands
2:55pm		<b>Arioe Vreedzaam</b> Total Mercury Concentrations in Freshwater Fish and Riverine Sediment in Suriname, South America	<b>Sarah Hartung</b> Coastal Riverine Wetland Biogeochemistry Follows Soil Organic Matter Distribution Along a Marsh-to-Mangrove Gradient (Florida, USA)
3:10pm		<b>Colleen Jones</b> Mobilization and Bioaccumulation of Selenium in Constructed Wetlands	<b>Ashley Booth</b> Impacts of Altered Hydrology on Nutrient Cycling in Belowground Biomass of <i>Phragmites australis</i> , <i>Typha</i> spp., and <i>Schoenoplectus californicus</i>
3:25pm		<b>Discussion</b>	<b>Robert Doyle</b> Biodegradable Organic Carbon Determination Using a Long-Term Biological Oxygen Demand Assay: Application in a Constructed Wetland
3:40pm	<b>Discussion</b>		<b>Discussion</b>
<b>Breakouts Conclude - Attendees Reconvene in Main Session Room for Closing Plenary</b>			
3:45pm - 4:30pm	<b>Closing Plenary</b> [Eastern Daylight Time] <b>Poster Attendance Drawing and Presentation of the Prestigious "Golden Cattail Award" for Excellence in Biogeochemistry</b> This award will be presented to a deserving individual in recognition of their lifetime of exceptional contributions to the science of wetland biogeochemistry.		
4:30pm	<b>Symposium Concludes</b>		