A GLANCE AT FALL 2015-2016

The 2015-2016 academic year was a successful one. The MES program welcomed thirteen students in Fall of 2015, five students in Spring of 2016, and seven new students in Summer of 2016. During the past year, ninety-five students were enrolled and/or working on internships or thesis projects in a variety of different fields. A huge congratulations to the seventeen students who graduated from the MES program this year!

Dr. Tim Callahan completes his term as Director of the MES program, and we would like to extend our gratitude for the incredible dedication he has shown to the program. Thank you, Tim, for your time, your concern and hard work. He has had an outstanding impact on hundreds of students over the years, so please feel free to take a moment and drop him a note of thanks. We also welcomed Abbie Cain, our new Program Coordinator. Abbie took over for Dr. Vazquez in May, and is making tremendous strides.

MESSA was actively involved the past year within the community and the program. In the community, MESSA participated in the South Carolina Sea Grant Consortium Beach Sweep/River Sweep and sponsored a section of Highway 61 for Adopt-A-Highway. They also sponsored the Fourteenth Annual MESSA 8k for H2O; raising funds for the East Cooper Land Trust, an organization whose mission is to conserve our natural spaces and watersheds. MESSA continued to build relationships with local non-profits, such as The Surfrider Foundation—Charleston Chapter and Carolina Green Fair by participating in events. MESSA was also vital in building relationships within the MES program. They hosted an end of the semester Oyster Roast for students and faculty at the end of Fall 2015, and a Welcome Back Lowcountry Boil and Bash party for students and faculty at the beginning of Spring 2016.

“Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it’s the only thing that ever has.” Margaret Mead

LOOKING AHEAD TO FALL 2016

We are happy to welcome our new Program Coordinator, Abbie Cain, and our new Program Director, Dr. Annette Watson.

Orientation for our nineteen Fall 2016 and four Spring 2016 enrollees was held August 19th. MESSA welcomed all students, faculty and alumni back to campus at their Welcome Back Bash on Friday, August 19th, at the Fort Johnson Outdoor Classroom. Lots of fun was had as everyone enjoyed good food and great company! Classes began August 23rd, and with seventeen offerings to choose from—there’s sure to be something for everyone.

The MES program is share that expansions to the Garden at Dixie Plantation are happening! A variety of student-oriented workdays, which include both planting and harvesting, and workshops on topics such as sustainable agriculture and pollinator gardening will be offered.

MESSA will be hosting many volunteer days; providing MES students with the opportunity to get involved in the community and promote conservation and sustainability. They will also be hosting a networking event in October with MES alumni and current students to help facilitate involvement within the community and aid in job success after graduation.
INTRODUCING THE DIRECTOR, DR. ANNETTE WATSON

It is an honor and pleasure to be joining the Master of Environmental Studies Program as its new Director! I have been deeply engaged with the MES program since 2008, when I joined the Department of Political Science at the College of Charleston; in these years I have advised 17 MES, PCMI, and dual-degree students on their way to completing their theses and internships, and served on just as many MES research committees. I have been teaching the graduate Core course on Social Science Methods as well as within my specialty of geography and social-ecological resilience. I look forward to building on what I see is the greatest strength of the program: providing students the skills to address some of the major environmental challenges that our society must face.

Natural scientists have labeled this new geological era the “Anthropocene” to describe how human society has some of the greatest affects upon our ecosystems, even while we greatly depend upon the health of these ecosystems. The environmental problems we face in this era require interdisciplinary problem-solving and novel approaches to policy: to reformulate our human-environment relationships for more sustainable futures.

Thus, what I hope to achieve in these coming years as Director is to build upon this program’s current strengths in natural resource management, in coastal development, in geo-spatial analysis, in environmental policy, and in environmental science. I look forward in these coming months to hearing feedback and ideas from the broader MES community—current students, alumni, faculty, the broader Lowcountry community, and staff from the environmental institutions where many students intern and alumni work. Together we can continue to grow and shape the MES Program to meet the needs of a growing environmental- and sustainability-minded workforce, and develop more effective practices to take care of the places within which we all live.

-Annette Watson

“Education is the most wonderful weapon which you can use to change the world. “ Nelson Mandela

WELCOMING OUR NEW PROGRAM COORDINATOR, ABBIE CAIN

The first four months serving in the MES program have been exciting and busy! I’ve enjoyed getting to meet many of you and I look forward to future opportunities for continued interaction.

As I see it, my main purpose in the program is to assist our students with navigating their course—not just to a master’s degree, but also to life as an alumni. In this way, I also support the faculty that make this program a reality. I seek to understand the complex nature of how our interdisciplinary degree can best serve the community. In doing so, I will attempt to fill any gaps that are preventing us from being successful in that capacity. One aspect of particular interest to me is in developing a dynamic international component that is accessible to all of our students.

My door is always open to MES students and faculty, as well as other members of the greater community. I hope to challenge our students to become the best versions of themselves. I set high standards for our program and its stakeholders, but I’m willing to give back as much as I receive. Come visit me in the School of Sciences and Mathematics room 254!
Dixie aims to provide education in fields as diverse as soil sciences and business development by fostering a sense of ownership and encouraging students to become active participants at the farm. Workshops and the Farm and Garden Club are two outlets for students to literally get their hands dirty at Dixie Plantation, and both venues provide students with the opportunity to learn about everything from marketing strategies to the latest in sustainable agriculture techniques.

“Sustainable development is the masterful balance of meeting our own needs without jeopardizing future generations’ ability to do the same.”

Light of Mine

Workshops at Dixie

Sept 3rd: Pollinator Workshop and Dixie Tour
September 17th: Planting Day
October 15th – Harvest Day
November 19th – Harvest Day
End of the Year Potluck for worker and Volunteers

MESSA Spotlight

Masters of Science in Environmental Studies Student Association

MESSA officers did a tremendous job last year with getting involved in the community, providing students with funding for travel and conferences, and fundraising. Last year, MESSA sponsored the 14th annual MESSA 8k for H2O, which raised funds for the East Cooper Land Trust. MESSA also participated in the South Carolina Sea Grant Consortium Beach/River Sweep, Carolina Green Fair and built relationships with many local non-profits. This year, MESSA officers hope to meet the same standards and goals in terms of community involvement and supporting fellow students; however, they will also be hosting a networking event with local alumni. This event, SANE (Student Alumni Networking Event) Netting, will allow current MES students to bring their resumes to share with MES alumni working in their field, and get firsthand advice and exposure to potential career opportunities. Students may also learn about potential Thesis and Internship opportunities. SANE Netting will be held on October 5th in the Tate Center.

With the expansion of the Student Garden, MESSA plans to be involved in each workshop and any additional workdays presented by the Student Garden.

MESSA has been planning away for this upcoming Fall Semester, but if you have any suggestions or questions, please do not hesitate to email Catharine Parker, our 2016-2017 MESSA President. (cparker@g.cofc.edu)

The 2016-2017 MESSA Officers

President – Catharine Parker
Vice President – Stacey Weinstock
Treasurer – Alex Miller
Secretary – Fallon Parker
Volunteer Coordinator – Chelsea Acres
Social Chairs – Lucy Davis & Tim Boatright
Public Liaison – Kristen Gold

Upcoming MESSA Events

Pride Event: Brittlebank Park-August 13th
Welcome Back Bash: Fort Johnson Outdoor classroom- August 19th
Beach/river sweep: Location TBD- September 17th
Carolina Green Fair: James Island County Park - September 18th
Alumni Networking Event– Tate Center– October 5th
Farewell Party- December 2nd
**STUDENT AWARDS AND ACKNOWLEDGEMENTS**

**DANA BEACH AWARD**  
Courtney Heuring

**MES STUDENT OF THE YEAR AWARD**  
<table>
<thead>
<tr>
<th>Fall 2015</th>
<th>Spring 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brittany Fournet</td>
<td>Courtney Heuring and Tyler Hassig</td>
</tr>
</tbody>
</table>

**ESPA STUDENT OF THE YEAR AWARD**  
Aaron Holly and Malerie Suess

**GRADUATE SCHOOL VIDEO COMPETITION**  
Sean Dove and Lucy Davis

**INTERNATIONAL OCEAN COLOUR COORDINATING GROUP – SUMMER LECTURE SERIES 2016**

Dr. Adem Ali and David Flanagan- Adem’s MES graduate student, David Flanagan, has been accepted to the prestigious and extremely competitive “IOCCG* summer lecture series 2016” for ocean optics training in France (July 18th to July 30th). He will get the opportunity to train with the top scientists in ocean optics.

**THREE MINUTE THESIS COMPETITION**

Second Place & People’s Choice Award: Caitlyn Mayer, M.S. Environmental Studies  
“Field Spectroscopy as a Tool for Enhancing Water Quality Monitoring in Coastal Watersheds: Ace Basin, South Carolina”

**GRADUATE RESEARCH POSTERS SESSION**

Kelsey McClellan–Natural Sciences and Abstract Mathematics Category Winner  
"Chasing the Salt-Wedge: Assessing the Recreational and Commercial Blue Crab Fisheries of SC"

“Education is the most wonderful weapon which you can use to change the world.”  
Nelson Mandela

**COASTAL MANAGEMENT FELLOWSHIP**

Alex Braud-Coastal Management Fellowship: Alex, a concurrent degree candidate, is one of six 2016-2018 NOAA Coastal Management Fellows. He was matched with the San Francisco Bay Conservation & Development Commission and will began work in August. The San Francisco BCDC is a California regional state agency with permit authority over work in the Bay and along the shoreline. His work will be to expand the San Francisco Bay Regional Sediment Management Program beyond the pilot stage and into new parts of the Bay Area. This includes creating a comprehensive regional sediment management plan that is inclusive of dredging, sand mining, flood protection, habitat restoration and climate change adaptation.
In 2015-2016, thirteen students were active in the Peace Corps Masters International (PCMI) Program. Two of those students, Sarah Staub Meyers and Tyler Hassig, graduated in Spring 2016. Three new students will join the PCMI program this Fall as the final cohort to participate. Sadly, the Peace Corps has decided to phase out the Master’s International Program, which will formally close on September 30th, 2016. The Peace Corps will honor all existing commitments as well as students accepted prior to September 30th.

For those of you interested in international options, never fear! The MES program is working on several different international opportunities. These will vary in duration, location, and funding, and will be announced as they are finalized. If you have any interest in studying/researching/interning/volunteering abroad, please contact Abbie Cain to discuss how we can accommodate your plans.

“... International education cannot be the work of one country. It is the responsibility and promise of all nations. It calls for free exchange and full collaboration... The knowledge of our citizens is one treasure which grows only when it is shared.” - Lyndon B. Johnson

Apart from the PCMI Program, several MES students have already studied abroad or have plans in the works to do so. The MES Program had five students study abroad to Glover’s Reef, Belize in the Spring of 2016 to evaluate the health of coral reefs through scuba diving. Students performed experiments to assess the impact of sea urchins on algal overgrowth, and collected samples to determine levels of microplastics in the water. Transects were also run along the wreck line to evaluate the amount of debris that is washed ashore, and the type of debris. This analysis can be used to determine where most of the debris came from, and will aid in helping reduce pollutants and contaminants within the water.

Megan Shearer, a concurrent degree student, will be studying conservation biology and international environmental policy in Australia in the Spring of 2017. She will be taking classes and working to develop her Thesis project at the University of Queensland in Australia.
SEAN BATH

Sean graduated from the concurrent degree program in 2015 and was accepted to the University of South Carolina Geography Ph.D. program and to the one-year Knauss Marine Policy Fellowship in Washington, DC. To pursue both opportunities, he is taking a short leave of absence from the Ph.D. program. As a Fellow, Sean was placed as an Interagency Policy Liaison in the Office of the Oceanographer of the U.S. Navy. As a staff member, he represents the Navy at the National Ocean Council, US Group on Earth Observations, and the Committee on Marine Transportation. He also supports the efforts of Navy Task Force Climate Change to adapt naval operations and infrastructure to changing environmental conditions, especially in the Arctic.

Sean shares his experience with the MES Program:
“The MES program prepared me for this path thanks to its mix of policy and science. Although course work is inevitably broad, the program provides the overview needed to focus your research interest during the thesis/internship project. Personally, I benefited greatly by getting hands-on planning experience while interning at South Carolina Sea Grant. I settled on climate adaptation as my interest area and began networking at conferences. I highly encourage current and future MES students to take every opportunity to engage in hands-on work in their topic of choice. Consider the Sea Grant fellowships and funding opportunities. They are broader than you might think!”

If you have any questions or would like to reach out to Sean, feel free to email him at Sean.Bath@navy.mil.

KRISTI KERRIGAN

“As the Reef Resilience Coordinator in Florida’s Coral Reef Conservation Program, I have a variety of job responsibilities relating to resource management, education and outreach, and field research. More specifically, I am the coordinator for the Southeast Florida Action Network (SEAFAN), a reporting and response program that allows citizens to report signs of trouble for the coral reefs. As part of this program, I travel around the region to train people on how to recognize coral bleaching and disease and how to fill out reports. I am also the regional lead for the Marine Debris Program, which includes initiating removal efforts for emergency debris and organizing reef cleanups throughout the summer. Along with these tasks, I manage various contracts for reef resilience and coral disease related research and lead the field monitoring within the Florida Reef Resilience Program (FRRP). In a nutshell, I absolutely love my job and am extremely thankful for the knowledge and experiences I gained from the Masters of Environmental Studies Program. The multi-disciplinary nature of this program helped me acquire the necessary skills for both resource management and research. I am particularly grateful for the experiences I gained as the Volunteer Coordinator in the Masters of Environmental Studies Student Association. Between this role, the broad spectrum of classes, and my master’s thesis, I acquired other critical skills such as problem solving, time management, critical thinking, public speaking, and networking.”

Feel free to reach out and ask Kristi any questions you may have about the program, her career path and passions and how she found success. Kerrigan.Kristi@gmail.com
<table>
<thead>
<tr>
<th>Graduate</th>
<th>Year</th>
<th>Thesis/Internship</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Katie Biedler</td>
<td>2016</td>
<td>Effects of branching order on fine root traits and decomposition in a managed loblolly pine (Pinus taeda) plantation</td>
<td>Dr. Seth Pritchard</td>
</tr>
<tr>
<td>Kathleen Clancy</td>
<td>2016</td>
<td>An Index of Potential Environmental Risk Due to Hazardous Material Releases within Berkeley, Charleston, and Dorchester Counties South Carolina</td>
<td>Dr. Norman Levine</td>
</tr>
<tr>
<td>Tyler Hassig</td>
<td>2016</td>
<td>Evaluating the Effectiveness of Community Managed Marine Protected Areas (MPAs) on Guimaras Island, Philippines</td>
<td>Dr. Tracy Burkett</td>
</tr>
<tr>
<td>Courtney Heuring</td>
<td>2016</td>
<td>The Status of an Introduced Species (Phrynosoma cornutum) on Barrier Islands in South Carolina</td>
<td>Dr. Eric McElroy</td>
</tr>
<tr>
<td>Ashlyn Hochschild</td>
<td>2016</td>
<td>Sustainable Campus Food Procurement: An Assessment and Recommendation of Dining Purchasing at the College of Charleston, Charleston SC.</td>
<td>Dr. Annette Watson</td>
</tr>
<tr>
<td>Aaron Holly</td>
<td>2016</td>
<td>Integrated Approaches for Policy Recommendations in High Density Bicycle and Pedestrian Collision Zones in Charleston</td>
<td>Dr. Matthew Nowlin</td>
</tr>
<tr>
<td>Sarah Meyers</td>
<td>2016</td>
<td>Changes and perceived sustainability among traditional medicinal practitioners in Ofuman, Brong Ahafo, Ghana</td>
<td>Dr. Annette Watson</td>
</tr>
<tr>
<td>Austin Morrison</td>
<td>2016</td>
<td>Watershed hydrologic analysis at varying scales: Turkey Creek, Santee Experimental Forest, Hoger, South Carolina</td>
<td>Dr. Tim Callahan</td>
</tr>
<tr>
<td>Lisa Scarano</td>
<td>2016</td>
<td>Investigating the attachment biology of the Tassel barnacle xenobalanus globicipitis and its incidence on dead and debilitated dolphins</td>
<td>Dr. John Zardus</td>
</tr>
<tr>
<td>Megan Shiverdecker</td>
<td>2016</td>
<td>Characteristics of an effective residential compost program for Charleston, South Carolina</td>
<td>Dr. Jo Ann Ewalt</td>
</tr>
<tr>
<td>Malerie Suess</td>
<td>2016</td>
<td>An Evaluation of Lowcountry Local First's Growing New Farmers Program</td>
<td>Dr. Jo Ann Ewalt</td>
</tr>
<tr>
<td>Carl Taylor</td>
<td>2016</td>
<td>Site Assessment and Landscape Planning Strategy for the Student Garden at the College of Charleston, Charleston, South Carolina</td>
<td>Dr. Victoria Vazquez and Dr. Tim Callahan</td>
</tr>
<tr>
<td>Jessica Tipton</td>
<td>2016</td>
<td>Perfluorinated Alkyl Acid (PFAA) Concentrations in American Alligators (Alligator mississippiensis) Harvested for Consumption during South Carolina Public Hunts</td>
<td>Dr. Susan Lovelace</td>
</tr>
<tr>
<td>Marines Bishop</td>
<td>2015</td>
<td>An Advocacy Coalition Framework Analysis of the Offshore Wind Development in South Carolina</td>
<td>Dr. Matthew Nowlin</td>
</tr>
<tr>
<td>Ashley Buffington</td>
<td>2015</td>
<td>Blueways-Greenways: Developing examples as models for other communities</td>
<td>April Turner</td>
</tr>
<tr>
<td>Brittany Fournet</td>
<td>2015</td>
<td>Determining the Impact of Human Disturbance on Least Tern Breeding Colonies Along a Gradient of Disturbance</td>
<td>Dr. Paul Nolan</td>
</tr>
<tr>
<td>Maggie Jamison</td>
<td>2015</td>
<td>Range Determination of Cynoscion arenarius and Characterization of Cynoscion spp. Hybridization in nearshore Habitats Along the Southeastern U.S. Atlantic Coast with Implications for Management of Cynoscion regalis</td>
<td>Dr. Tanya Darden</td>
</tr>
<tr>
<td>Kristi Kerrigan</td>
<td>2015</td>
<td>Development of a Regional Bio-optical model for Water Quality Assessment in the U.S. Virgin Islands</td>
<td>Dr. Adem Ali</td>
</tr>
</tbody>
</table>
The Program of Study form should be completed and turned in to the Program Coordinator, Abbie Cain, by the end of your first semester. If you are past your first semester and still have not turned in a Program of Study form, please do so ASAP, they can be found on the website: http://mes.cofc.edu/current-students/student-forms.php

Are you interested in how people think about coastal issues like climate? In how they make decisions and discuss them with others? Dr.s Matt Nowlin and Susan Lovelace have a grant funded project to explore the efficacy of using a deliberative process in coastal resources decision-making. The objectives include assessing effectiveness of small group engagement of residents, natural resources decision-makers, municipal staff and others in deliberating current issues in coastal planning and management, prioritizing issues and tasks associated with climate resilience including, seafood security, water resources, environmental and human health, natural resources and biodiversity, access to coastal waters and beaches and energy development and analyzing the differences in public opinion on issues associated with climate resilience and comparing deliberated opinions with statewide knowledge and beliefs. A 2-year grad assistant position will be solicited through the SC Sea Grant Consortium to start in October. There will be plenty of opportunity to find a thesis through the project. If you are interested in applying please talk to one of the investigators. (lovelaces@cofc.edu and nowlinmc@cofc.edu)

Dr. Norm Levine is looking for one more student to work on his CRN Grant. Student must have experience and interest in GIS hydrology and flood impacts. Interested students should contact Dr. Levine at LevineN@cofc.edu

- Search @Dixie.Sustainable.Garden on Facebook
- Instagram: cofc_studentgarden

- MESSA Facebook Group – Closed – www.facebook.com/groups/8590153229/
- MES Facebook Group – CofC Master in Environmental Studies Program
- MES Instagram- CofC_mesprogram
- MES Twitter – CofC_mes
- LinkedIn – Mes at the College of Charleston – Current Students and Alumni