Michelle E. Harris

Coastal & Ocean Processes

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EDUCATION

2024 Ph.D. Geography

University of South Carolina

Dissertation: "Integrated Coastal Science and Dune Management: A South Carolina

Perspective"

Advisor and Committee Chair: Jean Taylor Ellis

2019 M.S. Geography

University of South Carolina

Thesis: "Evaluating the Efficacy of Sand Fences on Dunes Impacted by Hurricanes"

Advisor and Committee Chair: Jean Taylor Ellis

2016 B.S. Geography (highest honors)

Minor in Geo-Spatial Science with GIS Certification

Sam Houston State University

Honors Undergraduate Thesis: "The Lion's Share: A Spatial Analysis of the Invasive Red

Lionfish, Pterois volitans"
Thesis Advisor: Mark Leipnik

PROFESSIONAL APPOINTMENTS

2024 – Current Virginia Institute of Marine Science (VIMS) | College of William & Mary (WM)

Postdoctoral Research Associate

Coastal & Ocean Processes – Coastal Geology Lab

2020 – 2021 National Oceanic and Atmospheric Administration (NOAA)

John A. Knauss Marine Policy Fellow

Integrated Ocean Observing System (IOOS)

RESEARCH EXPERIENCE

2017 – 2024 Wind-sediment Interactions and Nearshore Dynamics Lab (WINDlab)

Research Associate (USC)

2019 (Summer) Carolina's Integrated Science Assessment (CISA)

Research Associate (USC)

TEACHING EXPERIENCE

University of South Carolina (USC)

Instructor of Record

GEOG 105: The Digital Earth (Spring 2022 [F2F], Fall 2022 [F2F], Spring 2023 [F2F], Summer 2023 [online accelerated], Fall 2023 [F2F], Spring 2024 [F2F])

GEOG 104: Introduction to Physical Geography (Spring 2021 [online], Summer 2021 [online accelerated], Fall 2021 [F2F])

Teaching Assistant

GEOG 201: Landform Geography (Fall 2019 [F2F])

GEOG 202: Weather and Climate (Spring 2018, Fall 2018, Spring 2019 [F2F])

GEOG 495: Seminar in Geography (Fall 2017 [F2F])

GEOG 104: Introduction to Physical Geography (Fall 2017 [F2F])

Sam Houston State University (SHSU)

Teaching Assistant

GEOG 201: Weather and Climate (Summer 2016, Fall 2016 [F2F])

REFEREED PUBLICATIONS

Harris, M.E., and Ellis, J.T. (2025). Managed coastal dunes and the role of slope in storm impact and recovery. Ocean and Coastal Management, 261. https://doi.org/10.1016/j.ocecoaman.2025.107539

Ellis, J.T., **Harris, M.E.**, and Barrineau, J.B. (2024). Topographic-Vegetation Interactions on an Incipient Foredune Field Post-Tropical Storm. *Geohazards*, *5*(4), 1207-219. https://doi.org/10.3390/geohazards5040057

Harris, M.E., and Ellis, J.T. (2021). Comparing Tropical Cyclone and King Tide Impacts on a South Carolina Coastal Dune System. *Journal of Coastal Research*, *37*(5), 923-932. https://doi.org/10.2112/JCOASTRES-D-21-00025.1

Ellis, J.T., **Harris, M.E.,** Román-Rivera, M.A., Ferguson, J.B., Tereszkiewicz, P.A., McGill, S.P. (2020). Application of the Saffir-Simpson Hurricane Wind Scale to Assess Sand Dune Response to Tropical Storms. *Journal of Marine Science and Engineering*, 8(9), 670, https://doi.org/10.3390/jmse8090670.

Ellis, J.T., Román-Rivera, M.A., **Harris, M.E.,** and Tereszkiewicz, P.A. (2020). Two years and two hurricanes later: Did the dunes recover? *Shore and Beach*, 88(4), 3-12.

Harris, M.E. and Ellis, J.T. (2020). A holistic approach to evaluating dune cores. *Journal of Coastal Conservation*, 24(4), https://doi.org/10.1007/s11852-020-00760-w.

Harris, M.E., Ellis, J.T., and Barrineau, C.P. (2020). Evaluating the Geomorphic Response from Sand Fences on Dunes Impacted by Hurricanes. *Ocean and Coastal Management*, 193. https://doi.org/10.1016/j.ocecoaman.2020.105247.

MANUSCRIPTS UNDER REVIEW AND REVISION

Harris, M.E., and Ellis, J.T. Sand Fences in Coastal Management: A South Carolina Inventory and Impact Assessment. *Submitted to Coastal Management*.

Turner, E., Ombres, E., Bennett-Mintz, J., Dortch, Q., Broadwater, M., Berger, H., and **Harris, M.E** (2021). *NOAA Ocean Acidification Program: Harmful Algal Blooms and Ocean Acidification Workshop: Defining a Research Agenda*. U.S. Department of Commerce, NOAA Technical Memorandum OAR-OAP-3, 76 p.

Knapp, L., Dow, K., **Harris, M.E.,** Braud, A., Levine, N., and Watson, S (2019). *Flood Vulnerability Assessment: City of Beaufort, SC.* 40 p.

GRANTS AND FELLOWSHIPS

| 2022 | Slocum-Lunz | Foundation | Grant | (\$1.200) | 1 |
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| 2022 | DIOCUIII LUIIL | 1 Oundanon | Orunt | (ΨΙ•ΔΟΟ) | / |

John A. Knauss Marine Policy NOAA Fellowship (\$74,500)

HONORS AND AWARDS

Stipend Awards

2019 – 2024 College of Arts & Sciences Graduate Stipend Enhancement Award (\$16,000)

Departmental Awards

| 2023 | Department of Geography | y Graduate Instructor Award | (USC) (\$100) |
|------|-------------------------|-----------------------------|----------------------|
| 1013 | Department of Geograph | y Graduate monactor rivara | (Ο Ο Ο) (Ψ1 Ο Ο) |

Bennett S. Masaschi Graduate Award (USC) (\$500)

Paul E. Lovingood Graduate Research Award (USC) (\$500)

2016 Let's Talk Honors Award (SHSU) (\$100)

2015 – 2016 Robert and Mabel Richardson Endowment Award (SHSU) (\$500)

University Awards

| 2024 | Learn, Discover, Innovate Faculty Grant (WM) (\$2000) |
|------|--|
| 2024 | Generative AI Faculty Working Group Award (WM) (\$750) |
| 2023 | Dean's Award for Excellence in Leadership (USC) (\$1000) |

2023 Graduate Teaching Assistant Teaching Resource Development Grant (USC) (\$1000)

2013 – 2015 Emerging Scholar Award (SHSU) (\$200)

Bearkats Read to Succeed Essay Scholarship Recipient (SHSU) (\$100)

Competitive Travel Grants

| 2021 | The Graduate School Travel Grant (USC) (\$500) |
|-------------|--|
| 2018 - 2019 | The Graduate School Travel Grant (USC) (\$500) |

2018 Supplemental Travel Funding for Department Service (USC) (\$250)

2016 College of Science (COS) Undergraduate Research Travel Award (SHSU) (\$1000)

INVITED TALKS (first author is presenting author unless noted)

Harris, M.E. (2023). Working with the Wind: Assessing Management Strategies for Enhancing Coastal Dune Resilience in South Carolina. Hazards, Vulnerability, and Resilience Institute (HVRI) Brown Bag Research Talk Series, Columbia, SC.

Harris, M.E., Hulett, C., Raghu, S., Srivastav, A., van de Sandt, J. (2023). *Thriving, Not Just Surviving: Navigating Work-Life Balance in Graduate School.* Women's Leadership Institute Annual Conference, Columbia, SC. (panel presentation)

Ellis, J.T. and **Harris, M.E.** (2021). *Thoughts on Protecting the Isle of Palms Beach-Dune System Notwithstanding Storms and King Tides*. South Carolina Beach Advocates, Wild Dunes Resort, Isle of Palms, SC. (co-presenters)

Gouldman, C., Rayner, R., and **Harris, M.E.** (2020). *The Ocean Enterprise: Delivering the Benefits*. Webinar presented virtually as part of the Marine Technology Society Seminar Series, online. (co-presenters)

Harris, M.E. (2016). *The Sustainability of the Marine Aquarium Fishery Industry on the Big Island of Hawaii*. Invited guest lecture at the Kona Science Café conference series, Kailua-Kona, HI.

CONFERENCE PRESENTATIONS (first author is presenting author unless otherwise noted)

Harris, M.E., Ellis, J.T., and Barrineau, B. (2023). *Establishing relationships between topography and vegetation for a post-storm incipient foredune system*. Paper presented at the annual meeting of the Association of American Geographers (AAG), Denver, CO.

Ellis, J.T. and **Harris, M.E.** (2021). *King tide and tropical cyclone impacts on a South Carolina coastal dune system.* Annual Meeting of the American Shore and Beach Preservation Association (ASBPA), New Orleans, LA, online.

Harris, M.E., Schmaus, C., and Cavagnaro, R. (2020). *Powering the Blue Economy: Ocean Observing Prize*. Webinar presented virtually as part of the NOAA Central Library Seminar Series, online. (co-presenters)

Harris, M.E. (2020). *Understanding Coastal Dune Response to Tropical Cyclones*. Webinar presented virtually as part of the NOAA Central Library Seminar Series, online.

Ellis, J.T., Román-Rivera, M.A., **Harris, M.E.**, Tereszkiewicz, P.A. (2019). *Post-Storm Beach-Dune Recovery on a Meso Tidal Barrier Island*. Paper presented at the annual meeting of the American Shore and Beach Preservation Association (ASBPA), Myrtle Beach, SC.

Ferguson, J.B., Ellis, J.T., Román-Rivera, M.A., and **Harris, M.E.** (2019). *Geomorphic Response of the Beach-Dune System to the 2017 and 2018 Hurricane Seasons at the Isle of Palms, SC.* Paper presented at the annual meeting of the American Shore and Beach Preservation Association (ASBPA), Myrtle Beach, SC.

Harris, M.E., Ellis, J.T., Ferguson, J.B., and Tereszkiewicz, P.A. (2019). *Coastal Management on the Fence: Evaluating the Geomorphic Impact of Sand Fences*. Paper presented at the annual meeting of the Association of American Geographers (AAG), Washington, D.C.

Harris, M.E., and Ellis, J.T. (2018). *Analyzing the Efficacy of Hardcore Dunes*. Illustrated paper presented at the annual meeting of the Association of American Geographers (AAG), New Orleans, LA.

Harris, M.E. (2016). *The Lion's Share: A Spatial Analysis of the Invasive Red Lionfish, Pterois volitans*. Illustrated paper presented at the annual Undergraduate Research Symposium (URS) at Sam Houston State University, Huntsville, TX.

ORGANIZED CONFERENCE SESSIONS

Co-Organizer and Chair, Graduate Student Leadership Panel. 2022 Women's Leadership Institute Annual Conference, USC, Columbia, SC.

Co-Organizer and Co-Chair, Pathways to Success: Reflecting on Careers in Coastal, Aeolian, and Marine Science. Annual Meeting of the American Association of American Geographers (AAG), New York, NY, 2022 (virtual).

Co-Chair, Community Health and Resilience. 2021 Carolinas Climate Resilience Conference, Durham, N.C. (hybrid).

Co-Chair, Charleston Vulnerability and Risk Assessment, Major Findings and Next Steps. 2021 Carolinas Climate Resilience Conference, Durham, N.C. (hybrid).

Co-Organizer and Regional Session Chair, Harmful Algal Blooms and Ocean Acidification Workshop: Defining A Research Agenda. Sponsored by The National Oceanic and Atmospheric Administration (NOAA) Ocean Acidification Program (OAP) and NOAA National Centers for Coastal Ocean Science (NCCOS). 2020 (virtual).

Co-Organizer and Session Chair. Modeling, Prediction, and Sensor Networks for U.S. Coastal Inundation and Sea Level Rise. US East Coastal Solutions Workshop 2020 (virtual).

PROFESSIONAL SERVICE

| 2022 - Current Geography External Advisory Council, Department of Environmental and Geosciences, Sam | | | |
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| | Houston State University; Member | | |
| 2022 | Knauss Marine Policy Fellowship; Application Reviewer | | |
| 2021 - 2024 | American Geophysical Union, Earth and Planetary Surface Processes (EPSP); Elected Student | | |
| | Committee Member; DEI Subcommittee, Promotion Subcommittee, and Mentorship | | |
| | Subcommittee Member | | |
| 2021 - 2022 | Knauss Connector Editorial Board Member; Blue Art Dive Editor for monthly newsletter | | |
| 2021 | Coastal and Marine Specialty Group (COMA) Annual Board Meeting; Secretariat | | |
| 2021 | Norbert P. Psuty Student Paper Merit Award; Judge | | |
| 2020 | Fellows for Organized Coastal Efforts (FORCE); Student Committee Member | | |
| 2020 | NMFS-Sea Grant Population and Ecosystem Dynamics Fellowship; Application Reviewer | | |
| 2020 | Federal Hurricane Disaster Supplemental; Application Reviewer | | |
| 2020 | IOOS Diversity and Inclusion STEM Working Group; Administrative Coordinator | | |
| 2020 | Knauss Outreach Committee; University Outreach Co-chair | | |

DEPARTMENT AND UNIVERSITY SERVICE

| 2024 - Current Virginia Institute of Marine Science (VIMS) Seminar Series Committee Member | | |
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| 2022 - 2024 | Graduate Fellowship Peer Mentor, National Fellowships and Scholars Program (USC) | |
| 2022 | Discover USC Volunteer | |
| 2021 - 2022 | USC Vice President of Research Search Committee Graduate Student Representative | |
| 2020 - 2022 | Graduate Student Association (GSA) | |
| | Chief of Staff to the President (Fall 2021-Spring 2022) | |
| | Election Commissioner (Spring 2022) | |
| 2019 | Secretary (Fall 2020-Spring 2021) | |
| 2020 - 2022 | Provost Advisory Committee for Women's Initiatives (PACWI) (USC) | |
| | Graduate Student Subcommittee Chair (2021); Co-chair (2020) | |
| 2018 - 2019 | Undergraduate Summer Admissions Fair Department of Geography Representative (USC) | |
| 2019 | Invited Panelist, Center for Teaching Excellence (USC) | |
| 2018 | Student Professional Development Workshop Organizer (USC) | |

| 2018 | Library Outreach Committee (USC) |
|-------------|--|
| | Geography Representative |
| 2018 | GIS Day Mapathon Committee Co-Lead (USC) |
| 2018 | USC Department of Geography, Faculty Search Student Representative |
| 2018 | USC Geography Department Career Day Co-Lead |
| 2017 - 2019 | USC Department of Geography Graduate Student Association (GGSA) |
| | Acting President 04/18 – 2019 |
| | <i>Vice President 2018 – 04/18</i> |
| 2015 - 2016 | Gamma Theta Upsilon, Sam Houston Chapter (SHSU) |
| | President – 2016 |
| | Vice President – 2015 |
| 2016 - 2022 | Alpha Chi National Honor Society |
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COMMUNITY OUTREACH AND INVOLVEMENT

| 2024 | Letters to a Pre-Scientist PenPal |
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| 2024 | AKC PupPals Program Volunteer PenPal |
| 2020 | Sea Grant Community Engaged Internship Mentor |
| 2018 | 62nd USC Science and Engineering Fair Judge |
| 2017 | Total Solar Eclipse 2017 Community Volunteer at Lake Murray, SC |

CERTIFICATES AND TRAINING

| 2024 | First Aid/CPR Certified - DAN |
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| 2024 | FAA Part 107 Remote Pilot's License |
| 2023 | Intercultural Inclusion and Diversity Learning Series Certification (Competitive) (USC) |
| 2021 | Teaching Online for Graduate Students Short Course Certification (Competitive) (USC) |
| 2021 | Trans Ally Training Certification (USC) |
| 2021 | USC Gamecock Recovery Ally (USC) |
| 2021 | USC Safe Zone Ally (USC) |
| 2021 | Skills, Habits, and Research Program for Graduate Students (SHARPGrads) Certification (USC) |

SKILLS

- Topographic/bathymetric surveying: Data collection and analysis for RTK-GPS, terrestrial LiDAR (TLS), sUAS, single beam sonar, and total station
- GIS (ArcMap, ArcGIS Pro, ArcGIS Online, ArcGIS StoryMaps)
- Computing languages: Python
- Field project development, data collection, and management
- Sediment processing (Ro-Tap, CAMSIZER)

SERVICE AS A REVIEWER

Journal of Coastal Research – 2021, 2024 Journal of Environmental Management – 2024