

CURRICULUM VITAE

Jessica W. Cook Hale
MS, PhD, RPA
Marine Geoarchaeologist
24 College Avenue
Frederick, MD, U.S.A., 21701
jcook@uga.edu; jwheatcook@gmail.com

EDUCATION

2017: PhD Department of Anthropology, University of Georgia

DISSERTATION: “Coastal Adaptations at Submerged Archaic Sites, Apalachee Bay, Florida.”

Details: In this study, I synthesized models for potential early to middle Holocene submerged coastal occupations based on human behavioral ecology. I then examined them using spatial statistics and compared results to field and laboratory analyses of a submerged, formerly coastal, shell midden site. GIS analysis was supplemented with sedimentological analysis of site sediments and petrographic studies of lithic materials to explore site formation processes in parallel with archaeological interpretations of site use.

Supervisor: Professor Ervan G. Garrison

2008: Master of Science (MS)

Geology. University of Georgia, Athens, Georgia, U.S.A.

2003: Bachelor of Arts (AB)

Anthropology, History. University of Georgia, Athens, Georgia, U.S.A.

RESEARCH FOCUS

Geoarchaeology, archaeometry, submerged landscapes archaeology, coastal archaeology, paleolandscape reconstruction of the submerged continental shelves, terrestrial and marine geophysics, geographic information systems, human behavioral ecology and niche construction theory

PROFESSIONAL EXPERIENCE

Private consultancy, marine geoarchaeology (present)

Principal Investigator, Gray and Pape Heritage Management (Maritime Heritage) (2021-2022)

Nautical Archaeologist/Marine Geologist, R. Christopher Goodwin and Associates (Nautical Division) (2020 – 2021)

Visiting Scholar and Researcher, University of Georgia, Department of Geology (January 2020 – present)

Associate Scholar, Aucilla Research Institute (May 2015 – present)

Visiting Instructor, Department of Anthropology, Emory University (2018 - 2020)

Visiting Instructor, Department of Anthropology, University of Georgia (2017 – 2019)

TECHNICAL SKILLS

- Petrological and petrographic skills: Electron microprobe (EMPA), X-ray diffraction (XRD), optical petrography, and scanning electron microscopy (SEM).
 - Sedimentological skills: Particle size analysis (PSA) and microscopic analysis designed to identify and characterize submerged archaeological landscapes.
 - Terrestrial and marine geophysical techniques: seismic data analysis, ground penetrating radar (GPR), electromagnetic (EM)/conductivity, gradiometer/magnetometer, and electrical resistivity.
 - American Academy of Underwater Scientists (AAUS) certified scientific diver, over 120 scientific dives, advanced open water certification, and stress/rescue training.
 - Geophysical data processing, analysis, and interpretation: Hypack, SonarWiz, The Kingdom HIS software suite, GPR_Slice, OASIS Montaj, Golden Software Surfer.
 - Statistical software packages: JMP, R, PAST3
 - Geographic information systems: ESRI ArcGIS; QGIS.
-
-

PUBLICATIONS: Books

Forthcoming (in progress): Jessica W. Cook Hale. ***Articulating Florida: human landscapes and ecologies from the onshore to the off.***
University of Alabama Press, Tuscaloosa, Al. U.S.A. Submission date June 2022 (sample chapters available by request)

PUBLICATIONS: Peer reviewed journal articles

Jessica W. Cook Hale, Nathan L. Hale, Matthew Newton, Ervan G. Garrison
2022 (in press) The Tempest: geoarchaeological examinations of tropical cycle/hurricane signatures in a submerged, formerly coastal shell midden site, Econfin Channel, Florida, U.S.A. *Journal of Archaeological Science*

Jessica W. Cook Hale, Jonathan Benjamin, Katherine Woo, Peter Moe Astrup, John McCarthy, Nathan Hale, Francis Stankiewicz, Chelsea Wiseman, Claus Skriver, Ervan Garrison, Sean Ulm, Geoff Bailey
2021 Submerged landscapes, marine transgression, and underwater shell middens: comparative analysis of site formation and taphonomy in Europe and North America. *Quaternary Science Reviews* Volume 258, 15 April 2021, 106867,
<https://doi.org/10.1016/j.quascirev.2021.106867>

Ervan G. Garrison and **Jessica W. Cook Hale**.
2020 The Early Days: Underwater Prehistoric Archaeology in the U.S. and Canada. *Journal of Island and Coastal Archaeology*.

<https://doi.org/10.1080/15564894.2020.1783399>

Jessica W. Cook Hale and Matthew Sanger

2020 Cultural spaces and climate change: Modeling Holocene archaeological settlement patterns on the coastal plain of the southeastern United States. *Journal of Anthropological Archaeology*, 59 (June), 101198.

<https://doi.org/10.1016/j.jaa.2020.101198>

Jessica W. Cook Hale and Ervan G. Garrison

2019 Climate change, cultural adaptations, and lower coastal plain occupations of Georgia and Florida from the early to middle Holocene: Extrapolating spatial trends into the offshore. *Journal of Anthropological Archaeology* 55 (May).

<https://doi.org/10.1016/j.jaa.2019.101071>

Jessica W. Cook Hale, Nathan L. Hale, and Ervan G. Garrison.

2018 What is past is prologue: excavations at the Econfina Channel site, Apalachee Bay, Florida, U.S.A. *Southeastern Archaeology*: 1–22.

Jessica W. Cook Hale and Ervan G. Garrison

2017 Spatial Statistical Analysis of Coastal Plain Paleoindian Site Distributions and Paleoecology: Implications for the Search for Offshore Submerged Sites in Georgia. *Early Georgia* 45(1&2): 167–180.

Jessica W. Cook Hale and Sheldon Skaggs.

2013 Confederate Guns in the Graveyard. *Early Georgia*, 41(2):243-255

Ervan G. Garrison, **Jessica W. Cook Hale**, Sean Cameron, Erin C. Smith.

2016 The Archaeology, Sedimentology, and Paleontology of Gray's Reef National Marine Sanctuary and nearby hard bottom reefs along the mid continental shelf of the Georgia Bight. *Journal of Archaeological Science Reports*. 5 (2016) 240–262

Ervan G. Garrison, Ian H. Garrison, **Jessica W. Cook Hale**.

2015 A Shallow Geophysical Prospection Study of the Cherokee Female Seminary and the Ross Cottage Sites, Cherokee Nation, Tahlequah, Oklahoma, 2009 / 2013. *ISAP News: The newsletter of the International Society for Archaeological Prospection*, issue 42

Ervan G. Garrison, Wendy Weaver, Sherri L. Littman, **Jessica W. Cook Hale**, and Pradeep Srivastava.

2012 Late Quaternary Paleoecology and Heinrich Events at Gray's Reef National Marine Sanctuary, South Atlantic Bight, Georgia. *Southeastern Geology* 48(4):165-184.

Ervan G. Garrison, **Jessica W. Cook Hale**, Jeffrey L. Holland, Alice R. Kelley, Joseph T. Kelley, Darrin Lowery, Daria E. Merwin, David S. Robinson, Christopher A. Schaefer, Brian W. Thomas, Larissa A. Thomas, Gordon P. Watts.

2011 Prehistoric Site Potential and Historic Shipwrecks on the Atlantic Outer Continental Shelf (report) U.S. Department of the Interior. Bureau of Ocean Energy Management, Regulation and Enforcement, Atlantic OCS Region. OCS Study, BOEM 2012-008. New Orleans, LA.

PUBLICATIONS: Peer reviewed book chapters

Jessica W. Cook Hale.

2019 Chapter 11: Post depositional corrosions in lithic items recovered from submerged marine contexts “*New Directions in the Search for the First Floridians*”. University of Florida presses, Gainesville, FL., U.S.A.

Garrison, Ervan G., and **Jessica W. Cook Hale**

2019 Geoarchaeology Underwater and Its Challenges: An Example from Florida. In *New Directions in the Search for the First Floridians*, edited by David K. Thulman and Ervan G. Garrison, pp. 175–193. University Press of Florida, Gainesville, Florida.

Ole Grøn, Anton Hansson, **Jessica W. Cook Hale**, Caroline Phillips, Annabell Zander, Daniel Groß, Björn Nilsson

2022 “Mapping Stone Age sites by means of topographical modelling - problems and possibilities” Chapter 12 in Springer Handbook of Cultural Heritage Analysis, Sebastiano D'Amico and Valentina Venuti, editors. Springer Publishing, Berlin

CONFERENCE PRESENTATIONS AND INVITED TALKS

**Sessions chaired*

+Invited talks

+Jessica W. Cook Hale

“*Submerged Landscape Archaeology and the Peopling of the Western Hemisphere*”. May 23rd, Flinders University Archaeology Seminar Series, Flinders University, Adelaide, South Australia, Australia, Virtual Presentation

+Jessica W. Cook Hale

“*Submerged Landscape Archaeology and the Peopling of the Western Hemisphere*”. July 29th, James Cook University Archaeology Seminar Series, James Cook University, Cairns and Townsville, Queensland, Australia, Virtual Presentation.

+Jessica W. Cook Hale

The Tempest: a geoarchaeological examination of post-depositional processes driven by tropical cyclone impacts at a submerged shell midden site in Florida, U.S.A.

December 9th, 2020. Australian Archaeological Association, Virtual Conference,
December 7th – 10th, 2020.

+Jessica W. Cook Hale

“*A tale told...signifying nothing.*” October 4th, 2019, Aucilla Research Institute, Old Stories & New Discoveries Conference, Monticello, Florida. U.S.A.

Jessica W. Cook Hale

“On The (Basin) Edge: Problems and Potentials in Radiometric Dating for Drowned Archaeological Landscapes.” May 20th, 2019, Radiocarbon and Archaeology 9th International Symposium, Athens, Georgia. U.S.A.

+ Jessica W. Cook Hale

“Sea Changes: managing coastal archaeological sites in the face of climate change.” April 12th, 2019, Society for American Archaeology 84th Annual Meeting, Albuquerque, New Mexico, April 10th – 14th, 2019

+ Jessica W. Cook Hale

October 17th, 2018. “Peace: the charm’s wound up! Predictive modeling at the intersection of theory and methodology”. Reevaluating the Submerged Paleoindian Landscape of the Gulf of Mexico. Bureau of Ocean Energy Management, New Orleans, Louisiana, October 16-18, 2018.

+Jessica W. Cook Hale, and Ervan G. Garrison.

October 17th, 2018. “Scour nuclei, erosion, and the potential for site discovery”. Reevaluating the Submerged Paleoindian Landscape of the Gulf of Mexico. Bureau of Ocean Energy Management, New Orleans, Louisiana, October 16-18, 2018.

+*Jessica W. Cook Hale, and Ervan G. Garrison.

April 13th, 2018. “This is why we can’t have nice things: geoarchaeology and its challenges in submerged prehistoric sites.” Society for American Archaeology 83rd Annual Meeting, Washington, D.C. April 11 - 14, 2018.

+*Jessica W. Cook Hale, Nathan L. Hale, and Ervan G. Garrison.

March 31, 2017. “The Tempest” Society for American Archaeology 82nd Annual Meeting, Vancouver, British Columbia, March 29-April 2, 2017.

Jessica W. Cook Hale, and Nathan Hale.

October 27, 2016. “What’s past is prologue...” Southeastern Archaeological Conference, Athens, Georgia, U.S.A.

+*Jessica W. Cook Hale, and Nathan Hale.

April 8, 2016. “Recent excavations at the Econfina Channel Site, Apalachee Bay, Florida. Society for American Archaeology 81st Annual Meeting, Orlando Florida, April 6-10, 2016

Jessica W. Cook Hale.

November 21, 2015 “...This is why we can't have nice things: The taphonomy and geochemistry of lithic assemblages from submerged prehistoric sites”. Southeastern Archaeological Conference, November 18-21, Nashville, TN., U.S.A.

+Jessica W. Cook Hale.

October 2015 “...Those are pearls that were his eyes: an atypical lithic assemblage from Ray Hole Springs (8Ta171), a submerged prehistoric site in Apalachee Bay, Florida, U.S.A.” First Floridians Conference, Monticello, Fl., U.S.A.

+Jessica W. Cook Hale, and Ervan G. Garrison.

April 2015 “These are the pearls that were his eyes: interpretive frameworks for submerged Middle Archaic sites in the Big Bend of Florida and the Georgia Bight, U.S.A.” Society for American Archaeology, 80th Annual Meeting, San Francisco, California.

Jessica W. Cook Hale, Ervan G. Garrison, Michael K. Faught.

November 2014 “A fine kettle of shellfish”. Southeastern Archaeological Conference, Greenville, South Carolina.

Jessica W. Cook Hale.

March 2014 “Submerged prehistory and behavioral ecology: Looking beyond site detection and towards a wider anthropological context for interpretation”. Graduate Archaeology at Oxford (GAO), Oxford University, United Kingdom

Ervan G. Garrison and Jessica W. Cook Hale.

November 2011 “Visually Modeling Late Quaternary Coastal Environments”. Southeastern Archaeological Conference (SEAC), Jacksonville, FL.

Ervan G. Garrison and Jessica W. Cook Hale.

September 2011 “Drowned Rocks: The characterization of rock outcrops and potential lithic resources from a submerged context in the Georgia Bight”. Developing International Geoarchaeology, Knoxville, TN.

Ervan G. Garrison and Jessica W. Cook Hale.

August 2011 “Marine Geoarchaeology of the Georgia Bight: Sea Levels and Shorelines.” Symposium on Southeastern Coastal Plain Archaeology (SOGART), Douglas, GA.

Jessica W. Cook Hale and Sheldon Skaggs.

March 2007 “Confederate Guns in the Graveyard”, Southeastern section meeting, Geological Society of America, Savannah, Georgia.

POSTERS

Cole, George, **Jessica W. Cook Hale**, David Ward, and Zachary Joanas

May 2017 “Use of Bathymetric LiDAR for Paleolandscape Description.” In *Lost and future worlds: marine palaeolandscapes and the historic impact of long-term climate change*. Chicheley Hall, Buckinghamshire, United Kingdom.

Skaggs, Sheldon, **Jessica W. Cook Hale**, and Chris Fleischer.

October 2005 “Two Roman Metal Studies at the University of Georgia, USA”
DIG2005 Developing International Geoarchaeology, Saint John, New Brunswick,
Canada

Jessica W. Cook Hale.

April 2005 “Geophysical Prospection in a Hostile Soil”, UK Archaeological Science
Poster presentation

FELLOWSHIPS AND OTHER AWARDS

- Florida State Historic Preservation Grant Number 18.h.sm.200.047, “Identifying the Source of Florida River Artifacts”, \$40,912, July 2017
 - Interdisciplinary and Innovative Research Grant, University of Georgia Graduate School, \$1500, May 2015
 - Summer Doctoral Research Fellowship, University of Georgia Graduate School, \$3500, May-June 2015
 - June 2008 to June 2009: Wormsloe Fellow. Wormsloe Institute, Savannah, GA
-
-

RESEARCH ASSISTANTSHIPS

- August 2009 to May 2010: Research Assistant, Department of Anthropology, University of Georgia.
 - August 2008 – July 2009 – Research Fellow, Wormsloe Institute of Environmental History, Savannah, Georgia.
 - August 2007 to May 2008: Graduate Research Assistant, Department of Geology, University of Georgia.
 - August 2005 to December 2005 Graduate Research Assistant. Department of Geology. University of Georgia.
-
-

TEACHING EXPERIENCE

Fall 2017 - Spring 2019: Instructor, Department of Anthropology, University of Georgia.

Courses taught: ANTH 3290, Celts and Proto-Celts; ANTH 1102, Introduction to Anthropology; ANTH 2120H, Honors Introduction to Anthropology; ANTH 4262, Foraging to Farming; ANTH 6/4200; ANTH 6/4240, FSTY 1002, Field studies in Archaeology, Lab methods in Archaeology, summer field school. Fall 2018 – Spring

2020: Instructor, Department of Anthropology, Emory University.
Courses taught: ANTH 204, Introduction to Archaeology; ANTH 410, Foraging to Farming.

Summer 2012: Instructor, Department of Geology, University of Georgia.

Courses taught: Geology 1121, Environmental Processes and Environments, 1121 lab, Environmental Processes and Environments

GRADUATE TEACHING ASSISTANTSHIPS

- August 2010 to May 2017: Department of Anthropology, University of Georgia.
- July 2009: Teaching Assistant, Shallow Geophysics Field School, University of Georgia.
- 2006 to 2007: Department of Geology, University of Georgia, University of Georgia

REPORTS ON FILE

Jessica W. Cook Hale.

June 2009 “Geophysical and Geoarchaeological Surveys at the Wormsloe Plantation”

May 2008 “Electron and Wavelength Dispersive (EMPA, XRD) Characterization of Roman Bronze Foundry Slags, Aventicum, Switzerland.” Masters Thesis

June 2006 “A Ground Penetrating Radar Survey at Spring Island, South Carolina”.

Cook Hale, Jessica W., and Sheldon Skaggs.

March 2006 “A Ground Penetrating Radar and Gradiometer/Magnetometer Survey at Myrtle Hill Cemetery, Rome, Georgia”

COMMUNITY ENGAGEMENT

2017: Geophysical survey to determine the extent of the Old Athens Cemetery, University of Georgia, Athens, Georgia, U.S.A. This survey sought to delineate the areas of the cemetery used by formerly enslaved peoples in the community. Reports on file available by request.

2014 to present: Associate Scholar status with the Aucilla Research Institute, Monticello, Florida. Work includes both offshore survey and excavation efforts at the Econfina Channel site, GPR survey at Wakulla Springs to identify high probability subsurface features for excavation, and GPR survey of cemeteries used by formerly enslaved people. Reports on file available by request.

2010: Assistant to geophysical survey training for members of the Western Band of the Cherokee Nation

2009: Geophysical survey work for the Western Band of the Cherokee Nation in support of efforts to identify the site of the Cherokee Women’s Seminary, first institution of higher education for women west of the Mississippi River.

PROFESSIONAL MEMBERSHIPS

Society for American Archaeology
Southeastern Archaeological Conference
Geological Society of America
Southeastern Archaeological Conference
International Society for Archaeological Prospection
Sigma Xi (full member)
The Geological Society of Washington

PROFESSIONAL SERVICE

Society for American Archaeology Media Relations committee (appointed until April 2023)
Archaeological Institute of American, Athens, Georgia chapter: Program Coordinator, Fall 2010 – Spring 2017

PROFESSIONAL SERVICE: PEER REVIEW

Society for Exploration Geophysics annual meeting abstract review
Journal of Archaeological Science
Journal of Archaeological Science: Reports
Quaternary International
Southeastern Archaeology
NOAA Ocean Exploration and Research grant proposal review
National Science Foundation grant proposal review
International Journal of Geo-Information (MDPI)

LANGUAGES

English, French (fluent in reading, basic conversation), Latin (fluent in reading)

REFERENCES

Professor Ervan G. Garrison

Department of Anthropology and Department of Geology
University of Georgia, Athens, GA 30602
egarriso@uga.edu

Associate Professor Jonathan Benjamin

Associate Professor in Maritime Archaeology
Research Higher Degree Coordinator (Archaeology)
Co-Chair, UNESCO UNITWIN Network for Underwater Archaeology
Chief Investigator: The Deep History of Sea Country: Climate, Sea Level and Culture (DP170100812)
College of Humanities, Arts & Social Sciences
Sturt Road, Bedford Park, South Australia 5042

GPO Box 2100 Adelaide SA 5001 jonathan.benjamin@flinders.edu.au
www.flinders.edu.au/people/jonathan.benjamin www.deephistoryofseacountry.org

Professor Victor D. Thompson

Department of Anthropology

University of Georgia

Athens, Georgia, 30602

Phone: 706.542.1480 vdthom@uga.edu

<http://anthropology.uga.edu/directory/people/victor-thompson>

Dr. C. Andrew Hemmings

Associate Scholar

Aucilla Research Institute

555 North Jefferson Street, Monticello, FL 32344

ahemmings@paleotopioeer.com
