

Presentation 14: Jessica W. Cook Hale

“Peace! The charm’s wound up.” Predictive modeling at the intersection of theory and methodology

Predictive modeling is a critical component of submerged prehistoric archaeology given the challenging nature of marine landscapes, but debate over what constitutes an effective method remains an active and sometimes contentious area of scholarship. Even more so than for terrestrial archaeology, the stakes are high, and the price of an empty hole even higher. However, just as technologies for detection and excavation of submerged sites have evolved, so have methodologies for landscape analysis, including the submerged landscapes of the continental shelves. Combinations of these advancing technologies, along with an increasing awareness of the utility of middle range and higher level archaeological theory have potential to generate increasingly robust models for testing in offshore environments. I present here two such examples that combine ecological approaches to understanding site distributions onshore and off, with middle range theory than accounts for historical-cultural processes. Both case studies – one within the lower coastal plain of Georgia, and another along the northeastern Gulf of Mexico – suggest that predictive models for offshore sites must take into account both edaphic conditions, and cultural-historical trends that cannot be directly associated with those edaphic conditions.