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## Submerged prehistory in the Americas: Methods, approaches and results

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### ARTICLE HISTORY

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Archaeology underwater has experienced a renaissance in both popular and professional interest as witnessed in numerous movies, television specials, academic papers, conference symposia, and a spate of recent textbooks. For most archaeologists, as well as in the public imagination, underwater archaeology is the romantic discovery and study of shipwrecks. The best-known underwater discoveries to date have involved lost vessels and many of the techniques used for underwater exploration were designed initially for shipwreck hunting. Yet, there are fundamental differences between the study of shipwrecks and the investigation of ancient archaeological sites on now submerged landscapes. Shipwrecks pose, essentially, a historical problem. Whether we are searching for a known vessel that was lost, or attempting to identify a discovered wreck, the investigation is paradigmatically a historical one. The goal of the exercise is to link the material remains with a documentary record. Except for possibly identifying ancient shipping lanes or wreck traps, the location and character of the sea floor where the wreck is encountered is incidental.

If, on the other hand, we want to investigate archaeological sites on a submerged landscape, the problem is entirely different. Now, the sea floor location is critical since it represents the land surface on which the ancient inhabitants lived, and its reconstructed environment provides the primary line of evidence for discovering ancient sites. This type of study is paradigmatically anthropological and requires a different set of approaches, even as many of the underwater survey techniques remain the same.

Underwater archaeology, although a relatively new branch of academic research, has mirrored the development of modern archaeology. It experienced its own *New Archaeology* phase initiated by Keith Muckelroy (1978), a student of David Clarke at Cambridge, who attempted to systematize and theorize the study of maritime archaeology. It has also experienced the bumps and bruises that accompanied the legal and ethical issues inherent to compliance-based archaeology. However, no unified disciplinary or conceptual model for prehistoric underwater research has yet emerged.

The archaeological sites preserved on the world's continental shelves are relevant to a wide range of contemporary research questions, and their importance increases with the heightened awareness of climate change and associated changes in modern sea levels. Certainly, in the Americas, where much interest relating to the early colonization of the

continents is focused on the inundated land of Beringia and the Pacific coast (see Braje et al. 2019; Dixon and Monteleone 2014), archaeologists recognize the data they are missing, and speculate on what might be preserved below the waves. Yet despite this recognition, precious little in the way of concrete results has been forthcoming (see Flatman and Evans 2014), and most underwater finds continue to be treated as novelties lacking archaeological context or associations.

The same disparity between shipwreck archaeology and submerged prehistory confronts North American students seeking training in underwater research. The *Institute for Nautical Archaeology* at Texas A&M or the *Maritime Studies* program at East Carolina University, for example, both provide focused training for the prospective shipwreck archaeologist, but there is no equivalent program for underwater prehistory. Instead, students must seek out individual faculty members at disparate universities that happened to be engaged in such research. Particularly as submerged landscapes become more central in developing archaeological explanations, the lack of research infrastructure and student training will be an increasingly serious deficiency.

These and other concerns were highlighted in a series of recent sessions devoted to the conduct of submerged site archaeology on the continental shelf and elsewhere at the *Society for American Archaeology* (San Francisco 2015, Orlando, 2016) and *Society for Historical Archaeology* (Boston 2020) annual meetings. Several important points emerged from these sessions, which provided the impetus for the current special issue:

1. While there is growing interest in the study of submerged prehistory, training in underwater archaeology in the Americas is dominated by the study of shipwrecks and the historical particular methods and questions that shipwreck research necessarily entails (Bass 1983).
2. Research in Europe has made major advances in creating an infrastructure for the conduct of submerged site research via the SPLASHCOS initiative (Submerged Prehistoric Archaeology and Landscapes of the Continental Shelf, Bailey et al. 2020), and similar efforts in Africa (Werz, Cawthra, and Compton 2014), Asia and Australia (AIMA 2020)) but there has been no equivalent effort at multi-institutional and multi-national coordination in the Americas.
3. While there is consistent acknowledgement and comment on the “great potentials” for underwater prehistoric research, there are surprisingly few results, to date, to show for this potential.

The papers presented here attempt to address at least some of these issues. While many of the authors illustrate the obvious similarities between prehistoric and shipwreck research underwater, particularly in the areas of exploratory technologies, they also highlight how submerged site archaeology is fundamentally different from shipwrecks and traditionally nautical archaeology. The papers also share an emphasis on the conduct and results of underwater research rather than simply citing potentials.

The papers in this volume begin by addressing the disciplinary base and history of submerged site research in North America. Ashley Lemke (2020) discusses the place of underwater prehistory within the discipline of Anthropology more generally, while Ervan Garrison and Jessica Cook-Hale (Garrison and Cook-Hale 2020) provide a

succinct history of underwater prehistory in North America. While this paper explicitly addresses the history of research, similar historical echoes occur in a number of the papers, as befits the fact that many of the authors are themselves the ones that created the history.

The next set of papers is focused on the operationalization of submerged site research, the goal being not simply how to discover sites, but how to do so systematically in a way that makes the underwater finds relevant and compatible with archaeological discoveries on land. The papers by Jessie Halligan (2020) and Neil Puckett (2020) are of particular interest as they challenge the assumed dichotomy between terrestrial and submarine investigations. The papers by Michael Faught and Morgan Smith and by O'Shea illustrate submerged landscape approaches. Faught and Smith (2020) evaluate recent efforts to apply context-based site discovery methods, while O'Shea (2020) describes a micro-regional approach to quantify site distributions and associations. The next set of papers discusses actual results, or lack of results, of underwater research in two important research regions. Easton, Moore, and Mason (2020) describe the history and results of research on the North Pacific Coast, while Shawn Joy (2020) asks why more prehistoric sites on the Atlantic continental shelf have not been found. These papers were to be supplemented by a consideration of submerged research on the Pacific coast of Chile by Isabella Cartajena and her colleagues, but medical emergencies intervened. It is hoped that such a treatment of this important region will be forthcoming in the future.

The final contribution is by Nic Fleming (2020), a driving force behind underwater research in Britain and Europe, and a principal contributor to the SPLASHCOS initiative. This paper puts the current North American work into a global context, and shares insights into ways that underwater research might better be integrated in the Americas in light of the SPLASHCOS experience. The problems and potentials for the conduct of submerged site archaeology are truly global in character and it is our hope that this special issue will allow the American experience to be added to the collective effort to understand the world's submerged past.

The papers presented here were solicited specifically for this special issue and are not prior conference presentations. I am grateful to the contributors for their willingness to write to the questions posed, and for allowing a “freshie” (one that works in fresh water as opposed to oceanic contexts) to take the lead in assembling the volume. We are all grateful to the editors of *The Journal of Island and Coastal Archaeology*, Todd J. Braje and Scott M. Fitzpatrick, for allowing us to create this special issue (a proposal that was first pitched to Fitzpatrick in a tapas bar in Ann Arbor) and for their diligent assistance as the papers underwent peer review and ultimate assembly into this issue.

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