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Final Report
Inventory and Monitoring Endangered Sites,
Great Island, Cape Cod National Seashore
Wellfleet, MA



Prepared for:
National Park Service
Northeast Region Archaeology Program

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University of Massachusetts Boston

Cultural Resource Management Study No. 87


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Report Certification

The 2022 archeological report *Inventory and Monitoring Endangered Sites, Great Island, Cape Cod National Seashore, Wellfleet, MA. Andrew Fiske Memorial Center for Archaeological Research, University of Massachusetts Boston, Cultural Resource Management Study No. 87* by John M. Steinberg, Christa M. Beranek, Stephen A. Mrozowski, and Dennis V. Piechota, has been reviewed against the criteria contained in 43 CFR Part 7.18(a)(1) and upon recommendation of the Park Archeological Advisor has been classified as "Not Available."



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ABSTRACT

As part of a cooperative agreement with the NPS Cape Cod National Seashore, the Andrew Fiske Memorial Center for Archaeological Research at the University of Massachusetts Boston conducted digital elevation modeling, geophysical survey, and excavations at the locations of several known archeological sites on Great Island in Wellfleet, Massachusetts. Coastal erosion is a serious threat to many of these sites, which can be deeply buried under aeolian sand. These deeply buried, eroding sites are difficult to identify, let alone assess and characterize. The Fiske Center's project had multiple goals, including developing methods for efficiently assessing sites in this environment, gathering additional information about known sites, and tracking coastal erosion that is actively destroying shell midden sites on Great Island. Fieldwork took place at Great Island Site 1 and C-10, Great Island Sites 2 and 4, the Great Island Tavern (C-9), and additional, localized colonial period deposits around the tavern in 2018. Aerial photography to track coastline changes due to erosion took place from 2018 to 2020.

To address these goals, we employed a wide suite of field and laboratory methods including aerial kite photography and photogrammetry, geophysical survey, traditional excavations and auguring (58 test locations), radiocarbon dating (36 AMS samples), and block sampling for micromorphological study. To put the results in the context of current scholarship, we reviewed intellectual developments in the study of Native sites the Northeast to suggest ways in which both existing and new data can be used to create a nuanced account of the deep and more recent history of the Cape in collaboration with indigenous scholars in order to address the legacies of colonialism that remain powerful forces in the world today.

The results from this field project are both methodological and topical. Ground penetrating radar (GPR) was successful in mapping the limits of preserved buried occupation layers and shell middens in this environment. Test excavations and AMS dating at Great Island Site 1 provided more information about two sites: a late 17th/early 18th-century site with limited boundaries, and an Indigenous shell midden deposited over a short period of time in the Middle Woodland period. Using GPR, excavation units, and cores, we refined the boundaries of Great Island Site 2, today buried under between 40 cm and 3 m of sand. At Great Island Site 2, there is a low artifact density, occupation layer preserved over a large area (200 x 75 m) with shell middens at multiple locations across the site. These deposits were formed by repeated, short-term use from the Middle Woodland (as early as Cal AD 662) to the Contact periods, possibly with use intensifying over time, primarily to gather shellfish. The dates in the Middle and Late Woodland periods do not seem to be in tight clusters, indicating that people came here regularly throughout this time period. The site extends to the coastal bluff and is actively being eroded. The Great Island Tavern (ca. 1690-1740) sits with the boundaries of Great Island Site 2. Unlike the broad extent of older Indigenous deposits, historic period deposits are very localized around the tavern and in a single outlying area.

The results from Great Island are important to understanding Cape Cod's Indigenous history because they shift the focus from artifact rich village sites to incorporate large, low-density sites that were nonetheless used repeatedly over a millennium. This result would not have been possible without an intensive program of AMS dating. With the greater temporal resolution, it is

possible for archaeologists to rethink previous interpretations of indigenous history as well as the epistemologies that have underpinned close to a century and half of archaeological practice.

Only the Samuel Smith Tavern Site is already listed on the National Register of Historic Places. Great Island Site 1 and Great Island Site 2 are eligible under Criterion A and/or D individually. All Great Island and Great Beach Hill sites are also eligible as a part of an archaeological district.

ACKNOWLEDGEMENTS

This work was funded by the North Atlantic Coast-Cooperative Ecosystem Studies Unit (NAC-CESU). The CESU is a national consortium of federal agencies, tribes, academic institutions, state and local governments, nongovernmental conservation organizations, and other partners working together to support informed public trust resource stewardship. The title of the CESU project is “Inventory and monitor endangered archeological sites at Great Island and Great Beach Hill, Cape Cod National Seashore, Wellfleet, Massachusetts,” and it was conducted by the Andrew Fiske Memorial Center for Archaeological Research at The University of Massachusetts Boston (UMass Boston) in cooperation with the Cape Cod National Seashore (CACO) unit of the National Park Service (NPS).

From UMass Boston, John Steinberg oversaw the project and coordinated the different activities. Christa Beranek directed the excavations and gathered the historical documentation. Dennis Piechota oversaw conservation, environmental assessment, and micromorphology. Brian Damiata oversaw the geophysics and radiocarbon dating. John Schoenfelder oversaw the kite flights and mapping. Melody Henkel photographed the artifacts. Steven Mrozowski is the principal investigator and the collector of record.

At the NPS, James M Harmon (Archeologist at the Northeast Region Archeology Program, now retired) believed that additional archaeological work at the Tavern Site on Great Island would yield important results. We are thankful that Jim brought this wonderful idea to The Fiske Center and spearheaded the cooperative work. Additional assistance in organizing and running the project came from James Nyman (Regional Archeologist) and William A Griswold (Archaeologist and Region 1 ARPA Coordinator). David Goldstein (Tribal and Cultural Affairs) helped with the collaborative agreement.

At CACO, we appreciate superintendent Brian Carlstrom’s support of the project. We thank Chief Ranger Leslie Reynolds, and her Law Enforcement crew for invaluable and flexible logistical support. Mark Adams and Margaret Wilkes assisted with GIS and other databases. Kite flight approval was coordinated and granted by David Crary, Geoffrey Sanders, Kelly Medeiros, Alyssa Colwitz, and Nita Tallent. William “Bill” Burke, the Cultural Resources Program Manager, was incredibly helpful as a liaison with the NPS and we are grateful for his logical and intellectual contributions.

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A number of the sections of this report are authored by specific individuals, but all chapters benefitted from intensive, ongoing, collaborative discussions between the project team members. In addition, we want to acknowledge the work of the field and laboratory crew in both producing and organizing much of the raw field data that made subsequent analysis possible, and the work of students who created and maintained much of the digital data including profile drawings, the digital artifact catalog, and GIS maps. Field and laboratory work was directed by the report authors but greatly assisted by additional staff and students from the Fiske Center for Archaeological Re-

search and the Department of Anthropology at the University of Massachusetts Boston. Student field participants include Melissa Ritchey, Grace Bello, Gary Ellis, Nicholas Zeitlin, Lauryn Poe, and Ana Opishinski. Melissa Ritchey made substantial innovations to the coring program and Grace Bello did the initial analysis of the contexts. Elizabeth DeMarrais (Cambridge University) also helped with the fieldwork. At UMass Boston, Jonah Delasanta did much of the digitization and Justin Malcolm performed much of the photogrammetry and GIS. Elizabeth M. Quinlan did the initial faunal analysis which was followed up by Alexander Hartgrove who concentrated on analyzing the shellfish. Additional assistance with the kite flights was provided by Leah Palmer, Rita Shepard, and Jocelyn Lee. Heather Trigg guided the flotation and helped with seed identification and AMS sample selection. David Landon assisted with shell and bone identification.

Any opinions, findings, conclusions, or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the individuals and institutions who support this work. Products or instruments mentioned should not be construed as an endorsement.

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