



# The SHA Newsletter

Quarterly News on Historical Archaeology from Around the Globe

## This Issue

- 2.... President’s Corner
- 3.... 2019 SHA Awards and Prizes
- 8.... Images of the Past
- 10.. 2020 SHA Conference Call for Papers
- 18...Best Practices for No-Collection Projects
- 24...Transferware Collectors Club Funding Announcement
- 25.. Current Research
  - 26.. Canada - Atlantic
  - 34.. Canada - Prairie and Arctic
  - 35...Canada - Québec
  - 38.. Latin America
  - 43.. USA - Mid-Atlantic
  - 49.. USA - Midwest
  - 53.. USA - Pacific West
  - 55.. USA - Southeast
  - 57...USA - Southwest
- 64..2020 ACUA George Fisher International Student Travel Award
- 64..Introducing “Foundations: Women in Historical Archaeology”



Charles E. Orser, Jr. Receiving the 2019 J. C. Harrington Award, page 7.



Archeolab.quebec: An Open Window on an Archaeological Reference Collection and on the Archaeology of Quebec, pp. 35-38.



Nineteenth-Century Shipwrecks in Argentina, pp. 38-40.

*SHA 2020*  
*Boston, Massachusetts*  
*8-11 January*

**Published Quarterly**  
*Subscription is via membership in the  
Society for Historical Archaeology*

**Newsletter Editor:**

Patricia M. Samford  
Director

Maryland Archaeological Conservation Laboratory  
[patricia.samford@maryland.gov](mailto:patricia.samford@maryland.gov)

**Copy Editor:**

Daniel McNaughton

**Images of the Past:**

Benjamin Pykles

**Current Research Coordinators:**

Africa: Kenneth Kelly  
Asia: Ruth Young  
Australasia & Antarctica: Pamela Chauvel, Amelia O'Donnell  
Canada-Atlantic: Amanda Crompton  
Canada-Ontario: Jeff Seibert  
Canada-Prairie & Arctic: vacant  
Canada-Québec: Stéphane Noël  
Canada-West: Benjamin Baker  
Caribbean/Bermuda: Frederick H. Smith  
Continental Europe: Natascha Mehler  
Great Britain & Ireland: Emma Dwyer  
Middle East: Uzi Baram  
Latin America: Dolores Elkin  
Underwater (Worldwide): Toni Carrell  
USA-Alaska: Robin Mills  
USA-Central Plains: Jay Sturdevant  
USA-Gulf States: Kathleen H. Cande  
USA-Mid-Atlantic: Ben Resnick  
USA-Midwest: Lynn L.M. Evans  
USA-Northeast: David Starbuck  
USA-Northern Plains & Mountain States: Nikki Manning  
USA-Pacific Northwest: Michelle Hannum  
USA-Pacific West: Kimberly Wooten  
USA-Southeast: Kendy Altizer  
USA-Southwest: Michael R. Polk

**Business Address:** Society for Historical Archaeology,  
13017 Wisteria Drive #395, Germantown, MD 20874, Phone:  
301.972.9684, Fax: 866.285.3512, Email: [hq@sha.org](mailto:hq@sha.org) (New sub-  
scriptions, change of address, subscription fulfillment matters)

## President's Corner

Mark Warner

Once again, an epic conference. Snowstorms, airport terminals on fire, impromptu hotel waterfall duck races for charity, all washed down with the free hotel happy hour—typical SHA right!? It was my original intent to spend some time highlighting several facets of what went on at the conference, but given some recent developments I want to move to some important recent events.

What I want to highlight is the fact that on 13 February, Representatives Alma S. Adams (NC-12) and A. Donald McEachin (VA-04) officially introduced HR 1179, The African American Burial Grounds Network Act. This bill will create a national database of historic African American burial grounds and provide programming to educate the general public and provide technical assistance for community members to preserve cemeteries and burial sites. It will also provide grant support for local groups to research, survey, identify, record, and aid in the preservation of sites within the network. The introduction of this bill is the result of several years of hard work on the part of many of our members. Past President Joe Joseph made this one of his primary goals while president of SHA, but this significant step was only accomplished through the work of many of our members and our professional partners. I particularly want to acknowledge SHA's Gender and Minority Affairs Committee (GMAC), The Society of Black Archaeologists, the African American Burial Grounds Working Group, and Cultural Heritage Partners for their work in support of this legislation.

I also want to be clear about what happens next. While the formal introduction of HR 1179 is a tremendous accomplishment and something that SHA should be proud of, it is only the first step of several significant legislative hurdles that will have to be addressed. Over the next few months I will be providing updates on the bill's status, as well as asking all of you to help with the process. One step that you can all take right now is to call, write, or email your representative and ask him or her to sign on as cosponsor of the bill. Frankly, there is a bit of a herd mentality on legislation of this type in Congress: the more cosponsors of a piece of legislation, the more willing other members are willing to sign on as cosponsors. This is particularly the case if the proposed legislation has bipartisan support. So please contact your representative regardless of their political affiliation. Also, if you want to take your support a step further, consider contacting any local or regional groups that would have a vested interest in seeing this legislation enacted into law and ask them to reach out to their congressional offices. I am particularly thinking of local historical, genealogical, or archaeological organizations. At a minimum, please take a few minutes to contact your congressional office and ask your representative to support this legislation.

Finally, I want to return to the events of St. Charles—for the benefit of those of you who could not make it to the conference. As always, our annual meeting means some



transitions and I want to make sure I thank several people. As I mentioned in the last newsletter, Alasdair Brooks stepped down after 11 years of service as the editor of the newsletter and with this issue Patricia Samford takes over. Timo Ylimaunu and Sarah Miller concluded their three-year terms as members of our board of directors. They came on the same year I became president-elect, which means that I have sat in on 10 board meetings with them—many thanks to the two of you and welcome to new board members Lisa Fischer and Nicole Bucchino Grinnan. I also want to thank Amber Grafft-Weiss and Tori Hawley. Amber has stepped down as social media coordinator and Tori has been the official conference photographer for the past several years. I will provide updates on who is stepping into these positions (and some other changes)

in the next newsletter, but this does raise a final issue.

I close with a gentle reminder to the membership. I think everyone who went to St. Charles thought it was a very successful and productive conference and we can celebrate a significant advocacy accomplishment with the introduction of HR 1179. However, the continued success of SHA is overwhelmingly dependent on the active engagement and participation of its membership. This means renewing your membership, attending our annual meeting, and potentially taking an active role in the organization through joining a committee. This year's conference was somewhat smaller than in past years, which sometimes leads to people forgetting to renew at the end of the year; please make a point to renew your membership and mark your calendars now to attend next year's conference in Boston.

## 2019 SHA Awards and Prizes

**Paul Mullins**

*(Photos courtesy of Tori Hawley)*

SHA's awards and prizes were presented during the 2019 conference in St. Charles, Missouri. On the opening Wednesday night of the conference, three SHA Awards of Merit and the Kathleen Kirk Gilmore Dissertation Award were presented. The Awards of Merit recognize individuals and organizations that have furthered the cause of historical archaeology. In 2019 we recognized three award winners, the first being the Greater Saint Charles Convention and Visitors Bureau for its support of cultural resource management for decades, which is reflected in the mile of restored 19th-century buildings along St. Charles' Main Street, a District on the National Register of Historic Places. The Visitors Bureau has supported archaeological fieldwork on Main Street since 2004, including excavations of a structure associated with the city's 18th-century founder Louis Blanchette.

The second Award of Merit was made to Terrance J. (Terry) Martin, who has been one of the U.S. Midwest's leading zooarchaeologists since the 1980s. He has conducted research on a vast range of prehistoric and historical archaeology projects throughout the region, including work on historic sites such as New Philadelphia, Illinois; Fort St. Joseph, Michigan; and St. Charles, Missouri. Dr. Martin is a generous scholar and colleague who has provided his advice, support, and analytic skills to countless historic archaeologists. The final Award of Merit was made to Joseph Harl in recognition of his decades of work in cultural resource management in the U.S. Midwest and for being a tireless advocate of best practices, site preservation, and public education. His work in historical archaeology has kept the spotlight on archaeology in the U.S. Midwest and has helped to preserve and interpret innumerable sites that would otherwise have been destroyed.

Paul Logue of Queen's University, Belfast received the Kathleen Kirk Gilmore Dissertation Award for his dissertation study, *A Reinterpretation of the Archaeology of the Nine Years' War in Ulster from a Cultural Perspective*. Logue's dissertation is a study of cultural interaction in Ulster between indigenous Gaelic, Anglo-Irish, and English

colonial societies during the later 16th century and focuses on the period of the Nine Years' War from 1594 to 1603. Using the work of historians, archaeologists, and geographers, the dissertation examines the role of the built environment and challenges current narratives on the role and meaning of churches, crannogs, and tower houses in Ulster Gaelic landscape and society.



*Terrance J. (Terry) Martin accepting an Award of Merit from SHA President Mark Warner, while Michael Nassaney looks on.*

Prior to the Friday SHA Business Meeting a series of award winners were recognized. The Ed and Judy Jelks Student Travel Award winners are Kimberley Connor (Stanford University) for her paper, "Feeding the Confined: Faunal Analysis of Hyde Park Barracks," and Kyla Cools (University of Maryland) for "Material Culture and Structural Violence: Reframing Evidence of the Social

Gradient in Industrial Contexts.” The Harriet Tubman Student Travel Awards were made to Oluseyi O. Agbelusi (Syracuse University) and V. Camille Westmont (University of Maryland).

The ACUA/SHA Archaeological Photo Festival Competition and People’s Choice Awards recognized a large

(UC Santa Cruz) and Sarah Peelo (Albion Environmental) for the UC Santa Cruz Castro Adobe Archaeological Field School.

The Mark E. Mack Community Engagement Award honors those individual researchers or research project teams who exhibit outstanding best practices in community collaboration, engagement, and outreach in their historical archaeology and heritage preservation work. The award commemorates the life and career of Mark E. Mack and encourages diversity in SHA and our profession by cultivating relationships between archaeologists and stakeholder communities. Awardees for 2019 were, in First Place, Collaborative Archaeology at Stewart Indian School, and, in second place, the Anthracite Heritage Project.

The Student Paper Prize is awarded to a student, or students, whose written version of a conference paper is judged superior in the areas of originality, research merit, clarity of presentation, professionalism, and of potential relevance to a considerable segment of the archaeological community. The 2018 recipient is Lindsey Cochran (University of Tennessee, Knoxville) for her paper “Spaces and Places of Antebellum Georgia Lowcountry Landscapes: A Case Study of Wattle and Tabby Daub Slave Cabins on Sapelo Island, Georgia.” The runner-up was Amanda

D. Roberts Thompson (University of Georgia/University



*Teresita Majewski, SHA President Mark Warner, and Paul Logue, recipient of the 2019 Gilmore Dissertation Award.*

number of award-winning archaeological photographs, drawings, and videos. The winners by category were: Color Archaeological Site, “Site Assessments of the steamship *Madison* in Troy Spring,” Nicole Grinnon; Color Archaeological Field Work in Progress, “Screens, Robert Carter House, Williamsburg, Virginia,” Mark Kostro; Color Archaeological Lab Work in Progress, “Elevations Underground Archaeology Beneath Mount Vernon,” Sierra Medellin; Color Artifact, “Fine Finish,” Katherine Boyle; Black and White Image, “Bee Stopper,” Mark Kostro; Color Archaeological Portrait, “Backfill by the Potomac: Alice Keith at Work in Mount Vernon’s South Grove,” Sierra Medellin; Artist’s Perspective (Illustration), “Remains of 1880s Furnace in the Cellar of George Washington’s Mount Vernon,” Lily Carhart; and Archaeological Video, “Post Michael: HMS Scout Meet-up,” Mike Thomin.

The GMAC Diversity Field School Award recognizes scholars and projects who have shown a commitment to diversity in historical archaeology by running field schools that incorporate archaeological practices that embrace diversity in research objectives, perspectives, and participation. This year’s recipients were J. Cameron Monroe



*SHA President Mark Warner presents the Jelks Student Travel Award to Kimberley Connor.*

### Enhance Your Legacy with Estate Planning

Looking for a meaningful way to protect our history, heritage, and the material legacies of the past? A simple step to protect these vital cultural assets for future generations is to make a lasting gift to SHA through your will, retirement plan, or life insurance policy. Interested in ways of giving that provide tax benefits? Please let us know! Contact us at [hq@sha.org](mailto:hq@sha.org).



of York) for the paper “Identifying Enslaved Movement on the South End Plantation (1849–1861), Ossabaw Island, Georgia.”

The Institute for Field Research supported two undergraduate student travel awards for the first time in 2019. The awards were made to Michael Betsinger (Minnesota State University, Moorehead) and Tori Galloway (Indiana University).



SHA President Mark Warner and Kyla Cools, recipient of a 2019 Jelks Student Travel Award.



SHA President Mark Warner and Camille Westmont, winner of a 2019 Harriet Tubman Student Travel Award.



SHA President Mark Warner and Oluseyi O. Agbelusi, winner of a 2019 Harriet Tubman Student Travel Award.



SHA President Mark Warner presents the GMAC Diversity Field School Award to Sarah Peelo for the UC Santa Cruz Castro Adobe Archaeological Field School.

On Friday evening the James Deetz Book Award was presented by Deetz Award Committee member Harold Mytum. The Society for Historical Archaeology named this award in honor of James Deetz, whose books were contributions to the field and are accessible to the nonspecialist audience. The winning books make both a

significant contribution to our understanding and can be read and enjoyed by anyone interested in historical archaeology. This year’s winner was Rachael Kiddey for her book *Homeless Heritage: Collaborative Social Anthropology as Therapeutic Practice* (Oxford University Press, 2017). *Homeless Heritage* is an accessible, theoretically rigorous, and collaborative study of homeless people in the cities of Bristol and York. The book reveals the ways that the homeless leave an archaeological signature in an alienating urban environment. It illuminates a way of life on the periphery of our own experience and, through engaging students and the public with the homeless through the fieldwork and dissemination events,



it has a legacy beyond the project and its publications. *Homeless Heritage* reveals the potential and limitations of what Kiddey calls a therapeutic archaeology that gave new purpose, solidarity, and engagement for the collaborators.

The John L. Cotter Award is named in honor of John Lambert Cotter (1911–1999), a pioneer educator and advocate for the discipline. One award is presented each year for outstanding achievement by an individual at the start of his/her career in historical archaeology. The recipient of the 2019 John L. Cotter Award was John Chenoweth, and the award was presented by Laurie Wilkie (University of California-Berkeley). Chenoweth was recognized for his contributions to the archaeology of the Caribbean and the archaeology of communities of faith, which resulted in the 2017 book *Simplicity, Equality, and Slavery: An Archaeology of Quakerism in the British Virgin Islands, 1740–1780* (University of Florida Press).

The Daniel G. Roberts Award for Excellence in Public Historical Archaeology was created in 2011 by John Milner Associates Inc. (now part of Commonwealth Heritage Group, Inc.) to honor their colleague Daniel G. Roberts, one of the pioneers in public historical archaeology. The award recognizes outstanding, sustained accomplishments in public historical archaeology. The 2019 Roberts Award recipient was the USDA Forest Service Passport in Time (PIT) Program. Passport in Time makes it possible for volunteers to work with professional archaeologists and historians on public lands throughout the country, and since 1991 the program has included 2,885 projects and 35,386 volunteers who have served more than 1.6 million hours.

The J. C. Harrington Award is named in honor of Jean Carl Harrington (1901–1998), one of the pioneers of historical archaeology in North America. The award is presented for a lifetime of scholarly contributions to the discipline. Charles E. Orser, Jr., received the 2019 Harrington Award both for his foundational work on southern U.S. plantations and for his success in internationalizing historical archaeology and extending it well beyond North America. His award was presented by Elizabeth Scott (Illinois State University).

Profiles of the recipients of the Cotter Award, the Roberts Award, and of the Harrington Medal will appear in *Historical Archaeology* in 2019.



SHA President Mark Warner with the first-place winners of the 2019 Mark E. Mack Community Engagement Award for the project Collaborative Archaeology at Stewart Indian School. Project director Sarah Cowie stands to the right of Mark Warner.



SHA President Mark Warner with the second place winners of the 2019 Mark E. Mack Community Engagement Award for the Anthracite Heritage Project. Project director Paul Mullins is at center back.



SHA President Mark Warner and Lindsey Cochran, recipient of the 2019 SHA Student Paper Prize.



SHA congratulates the recipients of the 2019 awards and thanks them for their contributions to our discipline. Thanks to all the committees, reviewers, and colleagues who nominated our honorees. If you have any questions about the SHA Awards Program and about deadlines for submitting nominations in the various categories for the 2020 awards cycle, please contact SHA Awards Committee Chair Paul Mullins at paulmull@iupui.edu.



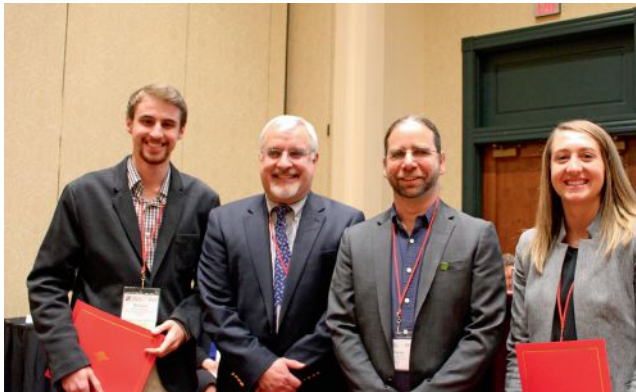
Harold Mytum, Rachael Kiddey, and SHA President Mark Warner celebrate Kiddey's award of the 2019 James Deetz Book Award for the publication *Homeless Heritage*.



The USDA Forest Service Passport in Time (PIT) Program was the recipient of the 2019 Daniel G. Roberts Award for Excellence in Public Historical Archaeology. Terry Klein accepts the award from SHA President Mark Warner.



The 2019 John L. Cotter Award to John Chenoweth with presenter Laurie Wilkie and SHA president Mark Warner.



Michael Betsinger (far left) and Tori Galloway (far right) were the recipients of the Institute for Field Research's first undergraduate student travel awards. SHA President Mark Warner and the Institute's Director of Archaeology Danny Zborover were on hand to give the awards.



SHA President Mark Warner presents Charles E. Orser, Jr. with the 2019 J. C. Harrington Award.



SHA President Mark Warner and winners of the 2019 Ethics Bowl: University of Tennessee, Knoxville students Brigid Ogden, Jordan Schaefer, and Katherine Parker. Oluseyi O. Agbelusi, Syracuse University, stands in the center.



# Images of the Past

Benjamin Pykles

## Presenting Patricia Samford

This is Patricia Samford's first issue as editor of the *SHA Newsletter*. Accordingly, we are excited to feature her in this installment of Images of the Past and thank her for her willingness to serve as our next Newsletter editor.



Patricia, who (when not editing the Newsletter) directs the Maryland Archaeological Conservation Laboratory at Jefferson Patterson Park and Museum, has been practicing historical archaeology for over thirty years. Among her earliest experiences was the 1978 Archaeological Field School at the College of William and Mary under the direction of Dr. Ted Reinhart. During that summer, she (in the skirt, flip-flops, and head scarf) and some other notable young colleagues (Mary Beaudry on top of the van, and Julie King on the van's hood with a scarf on her head) learned the trade by helping to excavate a number of 18th-century sites at Flowerdew Hundred Plantation near Hopewell, Virginia.



After earning her bachelor's degree from the College of William and Mary, Patricia was hired as staff archaeologist with the Colonial Williamsburg Foundation, where she took an active role in the archaeological exploration and investigation of that colonial Virginia city. In 1984, she and her colleagues excavated the site of an 18th-century house and gardens called Tazewell Hall in advance of a new wing being constructed on the Williamsburg Lodge. One day, a member of the archaeological crew — Gary Norman — brought a brown fedora to the site, just like the one worn by Harrison Ford in the Indiana Jones movies. Remembering the hat, Patricia later said, "The movies were popular then, and I just had to try it on and pose." A fitting initiation for a long and eventful career in historical archaeology!



# REGISTER AS A PROFESSIONAL ARCHAEOLOGIST

## TAKE ADVANTAGE OF THE REGISTER'S BENEFITS

### **YOUR PROFESSIONAL HOME!**

The Register is the largest archaeological professional registry in the Americas—and we have a place for you!

### **GET PAID MORE!**

Typically, Registered Professional Archaeologists (RPAs) receive higher salaries and greater job responsibilities than archaeologists who haven't registered.

### **SUPPORT FOR GOOD BEHAVIOR!**

The Register's grievance process protects practicing archaeologists who follow the Code of Conduct (Code) and Standards (Standards) for Research Performance. The Register supports RPAs against frivolous allegations when an investigation shows they upheld the Code and Standards.

### **EDUCATION!**

It is hard to learn enough about professional practice in a broad, diverse, and quickly changing discipline. The Register screens and certifies continuing professional education and notifies RPAs of these learning opportunities.

### **ADVERTISING YOU!**

The Register works with industry associations and the public to promote the benefits of their use of RPAs. Increase your demand!

### **REGISTRATION IS EASY!**

Use the on-line application process and submit materials at [www.rpanet.org](http://www.rpanet.org).

**REGISTER FOR FREE** if you received an advanced degree within the last six months.



**DON'T JUST BE AN ARCHAEOLOGIST,  
BE A REGISTERED PROFESSIONAL ARCHAEOLOGIST.**

**DON'T FORGET: [ArchaeologicalEthics.org](http://ArchaeologicalEthics.org)**

*Your one-stop site for resources on professional ethics.*

3601 E. Joppa Road • Baltimore, MD 21234 • **P** (410) 931-8100 • **F** (410) 931-8111

**RPA**  
Register of Professional Archaeologists

The Society for Historical Archaeology  
2020 Conference on Historical and Underwater Archaeology



8–11 January 2020  
Sheraton Boston  
Boston, Massachusetts

Call for Papers Opens: 1 May 2019  
Final Abstract Submission Deadline:  
30 June 2019

## REVOLUTION

The SHA 2020 Conference on Historical and Underwater Archaeology Committee invites you to join us in Boston, one of the oldest cities in the United States. The 2020 SHA Conference will be held at the Sheraton Boston Hotel, in the heart of downtown. You will be steps away from excellent food and shopping at the Prudential Center and Newbury Street, as well as landmarks such as Boston Common, Fenway Park, and the Boston Public Library. Stay for the whole weekend to explore the city and nearby Cambridge. Check out the brownstones in Back Bay, the many historic burying grounds, and the gas-lit streets of Beacon Hill. Head to Faneuil Hall, Boston's central marketplace since 1742, and get a Sam Adams with your lobster roll!

Boston is known as the "birthplace of the American Revolution." Eighteenth-century U.S. history is woven into the fabric of the town: its cobbled streets, historic neighborhoods, and homes of well-known patriots, poets, and philosophers. The Old North Church and Paul Revere house are iconic stops along the Freedom Trail, which winds its way through the city (including the North End, where you must get a cannoli). This year's logo depicts the two lanterns hung in the window of Old North Church, prompting Paul Revere's famous midnight ride. Signaling "one if by land, two if by sea," these lanterns represent the material culture of revolution, and reflect the terrestrial and underwater components of our conference.

We invite our colleagues to contemplate the conference theme of "revolution" in its broadest terms of inclusivity and diversity. Revolution encapsulates a spirit that persists beyond colonial history to include rebellion, resistance, survivance, and commemoration. Archaeologists have explored Boston's diverse revolutionary acts and movements at sites such as the 1806 African Meeting House and the Malcom X House. We hope that our broad theme inspires the membership to consider topics including Abolitionism, the 100th anniversary of the ratification of the 19th Amendment that gave women the right to vote, and civil rights. Also, we hope that papers can capture some of the more-recent methodological and theoretical revolutions happening in the field, both in terms of technological advancements and new intellectual avenues for interpreting the past.

### THE VENUE: SHERATON BOSTON

The Sheraton Boston Hotel is located at 39 Dalton Street, nestled among skyscrapers in Boston's Back Bay neighborhood. This venue will host all attendees, conference sessions, and meetings. Attendees will be staying in the hotel's two towers in the heart of Boston with direct access to the conference venue on the building's lower floors.

SHA has secured a conference hotel rate of \$179 (plus tax) per single- or double-occupancy room during the conference. Subject to availability of rooms, the conference-rate reservation cut-off date for the Sheraton Boston Hotel is 16 December 2019. Reservation information will be posted to the 2020 Conference page on the SHA website (<https://sha.org/conferences/>).



The hotel foyer has an extensive seating area with amenities including Starbucks, Sidebar & Grille, and Apropos restaurant. Also available to guests are a full-service spa, fitness center, and pool. The Sheraton Boston is smoke-free and pet friendly, with one dog allowed per room.

The Sheraton Boston is part of the 23-acre Prudential Center retail and commercial space of interconnected avenues and office towers. The 75 plus shops and restaurants of the Prudential Center are accessible via climate-controlled, covered walkways allowing for coat-free access no matter the weather. The Prudential Center even includes a grocery store. Its location within the heart of the city means there are a multitude of additional restaurants, bars, and shopping options nearby.

Within immediate walking distance of the venue is historic Copley Square, which includes the iconic 1872 Richardson Romanesque Trinity Church and the Boston Public Library. Other nearby highlights include the upscale Newbury Street shopping district, the Historic Landmark-designated brick bowfronts of Back Bay, and the 10-acre Christian Science Center with its I. M. Pei and Associates-designed colonnade, tower, and reflecting pool.

The archaeological, architectural, and historical highlights of Boston Common, Fenway Park, Faneuil Hall, Paul Revere House, Old North Church, and historic Freedom Trail sites are all within two miles of the venue and directly accessible via public transportation.

## CONFERENCE COMMITTEE

**Conference Co-Chair(s):** Joseph Bagley (City of Boston Archaeology), Jennifer Poulsen (Harvard Peabody Museum)

**Program Chair:** Diana Loren (Harvard Peabody Museum)

**Underwater Co-Chairs:** Vic Mastone (MABUAR), Calvin Mires (Bridgewater State University)

**Terrestrial Co-Chairs:** Steve Dasovich (Lindenwood University), Kate Ness, Tânia Manuel Casimiro (Universidade NOVA de Lisboa)

**Popular Program Co-Director(s):** Ellen Berkland (MA Department of Conservation and Recreation), Lindsay Randall (Peabody Institute of Archaeology, Andover)

**Local Arrangements Chair/Tour and Events Director:** Kathleen von Jena (City of Boston), Jade Luiz (BU), Alix Martin (Strawbery Banke)

**Bookroom Coordinator:** Annie Greco (Harvard Peabody Museum)

**Social Media Liaison:** Liz Quinlan (UMass Boston)

**Volunteer Directors:** Drew Webster (University of Maryland), Lauren Christian (East Carolina University)

**Fundraising/Partnership Liaison:** Bill Farley (Southern Connecticut State University), Sarah Johnson (Harvard Peabody Museum)

**Workshops Director:** Jade Luiz

**Awards:** Paul Mullins

**Accessibility and Inclusion:** Liz Quinlan (UMass Boston)

## SESSION FORMATS

Please read this section carefully to see changes from preceding years. By submitting an abstract in response to this Call for Papers, the author(s) consents to having his/her abstract, name(s), and affiliation(s) posted on the SHA website or listed in other published formats.

## GENERAL INFORMATION

### Using ConfTool to Submit Your Abstract

Abstract submissions should be done through the online system at [www.conftool.com/sha2020](http://www.conftool.com/sha2020). Each individual submitting an abstract must first create a user profile in the online system, which includes their name, professional affiliation, address, contact information, program division (whether terrestrial or underwater), and agreement with the SHA Ethics Principles. User profiles from previous conferences are not carried over from conference to conference, so you must create a new profile for the 2020 Conference before you can pay for and submit your abstract.

**Once you have created your profile, you will be required to pay the \$25.00 nonrefundable abstract submission fee. When this is done, you will then be allowed to submit your abstract. There is a 150-word limit for all abstract submission. NO EXCEPTIONS.**

The Conference Committee hopes to encourage flexibility in the types of sessions offered. Sessions can take the form of formal symposia, panel discussions, or three-minute forums. Sessions may contain any combination of papers, discussants, and/or group discussion. More than one "discussion" segment is permitted within a symposium, and a formal discussant is encouraged, but not required. All papers will be 15 minutes long. We strongly encourage participants to submit posters, as the latter will be given significant visibility in the conference venue.

During the conference period, participants will be allowed to serve as:

*Primary Symposium Organizer—one time during the conference.*

*Primary Author of paper (symposium or general session) or poster—one time during the conference.*

*Discussant—one time during the conference.*

*Participant in a panel/forum—one time during the conference.*

*Panel/Forum Moderator—one time during the conference.*

*Secondary Author or Secondary Organizer—as many times as desired. No guarantee can be offered regarding “double booking,” although every effort will be made to avoid conflicts.*

Each session organizer and individual presenter at the SHA 2020 Conference must submit their abstract(s) by the 30 June deadline and pay a nonrefundable \$25 per abstract fee. In addition, **all presenters, organizers, and discussants must register for the 2020 Conference by 1 November 2019 at the full conference rate.** If a presenter of a single-authored paper is not able to attend the conference and has designated another individual to deliver his/her paper, the presenter of that paper must still register for the conference at the full conference rate. For papers or posters with multiple authors, only one of the paper's/poster's authors must register for the conference.

**NOTE IMPORTANT POLICY: All presenters and session organizers at the SHA 2020 Conference will be required to register for the conference at the full conference rate by 1 November 2019. Those who fail to register by 1 November 2019 will not be allowed to present their paper/poster or have their paper/poster presented for them. This policy will be strictly enforced. For papers or posters with multiple authors, only one of the paper's/poster's authors must register for the conference. All panelists and discussants must also register at the full conference registration rate in order to participate in a session. Session organizers should advise potential participants in their session of this requirement when soliciting their involvement.**

## TYPES OF SUBMISSIONS AND SUBMISSION REQUIREMENTS

### Individual Papers and Posters

Papers are presentations including theoretical, methodological, or data information that synthesize broad regional or topical subjects based upon completed research; focus on research currently in progress; or discuss the findings of completed small-scale studies. Using the information and keywords provided, the Conference Program Co-Chairs will assign individual papers and posters to sessions organized by topic, region, or time period, and will assign a chair to each session. The assigned session chair is responsible for providing a computer for use by presenters in his/her general session.

**Please note: If you are presenting a paper as part of a symposium, your submission is not considered an individual contribution. You should submit as a Symposium Presenter.**

Posters are freestanding, mounted exhibits with text and graphics, etc. that illustrate ongoing or completed research projects. Bulletin boards will be provided; electronic equipment may be available at an additional charge to the presenter. Authors are expected to set up their own displays and be present at their displays during their designated poster sessions. Authors are encouraged to include contact information on their posters and leave business cards next to their poster so viewers can contact them with questions at a later date.

### Formal Symposia

These consist of four or more papers organized around a central theme, region, or project. All formal symposium papers will be 15 minutes long. We encourage symposium organizers to include papers that reflect both terrestrial and underwater aspects of their chosen topics.

Symposium organizers must pay the \$25 abstract submission fee\*\* and submit the session abstract online before individuals participating in their symposium can submit their own abstracts. The organizers will be required to list the speakers in their symposium—in the correct speaking order—during the abstract submission process and provide three keywords. Symposium organizers are encouraged to use the “Structure Information” section of the symposium abstract submittal page to give more details about their session, i.e., number of breaks, order of discussants, if more than one will be used, etc.

Symposium organizers should communicate the formal title of the symposium to all participants in their session before the latter submit their individual abstracts, so that all submissions are linked to the correct session. Symposium organizers are responsible for ensuring that all presenters in their sessions have submitted their completed abstracts prior to the close of the Call for Papers (30 June 2019) and are aware of the 1 November 2019 deadline for presenters to register for the 2020 Conference.

Symposium organizers will be the primary point of contact for session participants on such issues as changes to titles and/or abstracts, audiovisual requirements for a session, order of presentation, and cancellations. Organizers must direct any changes in authors, presenters, or affiliations to the Program Chairs.

\*\* Once the overall symposium abstract is approved by the Program Chair, the symposium organizer will be permitted to submit a second abstract for a paper in his/her symposium at no additional cost. The second abstract must be for a paper in the organizer's symposium, not for a different session.

### Forums/Panel Discussions

These are less-structured gatherings, typically between one-and-a-half and three hours in length, organized around a discussion topic to be addressed by an invited panel and seeking to engage the audience. Forum proposals must identify the



moderator and all panelists, the number of which should be appropriate to the time allotted (typically up to six participants for a one-and-a-half-hour panel discussion). The moderator must submit an abstract for the discussion topic and identify all panel participants when submitting the abstract. Moderators should advise each panel/forum participant that they must register for the 2020 Conference at the full conference registration rate by 1 November 2019. One-day registrations for forum panelists are not permitted.

### **Three-Minute Forums**

These are informal—but still academic—discussion groups consisting of a number of rapid, three-minute presentations followed by discussion. Typically these sessions last for at least 1 hour and consist of blocks of 4 or 5 presentations that are only 3 minutes in length, followed by 10–15 minutes of question-and-answer discussion on the papers. This format permits rapid presentation and discussion. Three-minute forum proposals must identify the overall moderator and all forum presenters.

### **Student Presenters**

The Student Subcommittee of the Academic and Professional Training Committee will be preparing an array of materials to help students (and perhaps even nonstudents!) navigate the conference. Further information will be posted on the conference website.

Student presenters (either individual presenters or those presenting in an organized symposium) are encouraged to submit their papers for the annual Student Paper Prize Competition. Entrants must be student members of SHA prior to submission of their papers. There can be no more than three authors on the paper; all of the authors must be students and members of SHA.

### **ROUNDTABLE LUNCHEONS**

If you have a suggestion for a roundtable luncheon topic or wish to lead a luncheon, please contact the Program Chair at [dloren@fas.harvard.edu](mailto:dloren@fas.harvard.edu) with a short description of your proposed roundtable.

### **HOW TO SUBMIT**

The regular abstract submission period is from 1 May to 30 June 2019.

If you are unable to use the SHA online abstract submission system (ConfTool) and need to submit a paper or session by mail, please correspond with the Program Chair at [dloren@fas.harvard.edu](mailto:dloren@fas.harvard.edu).

### **TIPS AND GUIDELINES FOR SUBMITTING AN ABSTRACT**

#### **ALL USERS:**

1. Go to [www.conftool.com/sha2020](http://www.conftool.com/sha2020) and click on the link for “Register New” under the green Account Log In bar. User accounts are not carried over from one conference to the next, so you must create a new user account for the 2020 Conference.
2. Pay the \$25 nonrefundable per-abstract submission fee by clicking on “Submission Fee Purchase and Payment.” You will not be able to submit your abstract or view the list of submitted symposiums without paying the \$25 fee.
3. Submit your abstract by clicking “Your Submissions.”
4. Abstracts should be no more than 150 words.

Please be sure to check the spelling, capitalization, and grammar in your abstract. Your abstract will appear in all printed materials exactly as it was entered. If you have coauthors on your paper or are submitting an abstract for a symposium or forum, check with each individual first to be sure you are entering their name as they wish it to appear (Joseph B. Smith vs. Joe Smith vs. J. B. Smith) and the email they will be using (work email vs. personal email).

NOTE: ConfTool uses email addresses to check for users and individual roles. It is very important that only one email address be used for each individual in ConfTool, so that the conflict checker can work properly.

#### **TO SUBMIT AN ABSTRACT FOR AN ORGANIZED SYMPOSIUM:**

1. Follow steps 1, 2, and 3 above. Pay only the \$25 nonrefundable abstract submission fee and submit only the Symposium Proposal abstract.

List the presenters in your symposium in the order you want them to present in your session. Be sure to check with each individual first to ensure you are entering their name as they wish it to appear (Joseph B. Smith vs. Joe Smith vs. J. B. Smith) and the email they will be using (work email vs. personal email).

Use the “Outline Structure of Session or Forum” field in ConfTool to provide specific session requests, i.e., the amount of time needed for your session, where breaks should be placed, order of discussants, etc.

2. Once you have submitted the Symposium abstract, the Program Chair will then accept your proposal in ConfTool (allow 24 to 48 hours for this to occur) and mark your record "allowed to submit," enabling you to submit a paper or introduction abstract to your own symposium at no additional cost.

#### **TO SUBMIT AN ABSTRACT TO AN ORGANIZED SYMPOSIUM:**

1. Follow steps 1, 2, and 3 above.
2. Select the correct symposium from the dropdown list. If you do not see the symposium listed, contact the symposium organizer to ensure that the symposium has been entered into ConfTool and accepted and that you have the correct title for the symposium.

NOTE: Submitting your abstract to a general session and sending an email to the Program Chairs indicating that your paper should be added to a symposium is not the correct way to submit to an organized symposium and does not guarantee proper placement.

#### **DEADLINE**

**The deadline for online abstract submission is 30 June 2019. Mailed submissions must be postmarked on or before 30 June 2019. No abstracts will be accepted after 30 June 2019.**

#### **AUDIOVISUAL EQUIPMENT AND INTERNET ACCESS**

A digital (LCD) projector for PowerPoint presentations, a microphone, and a lectern will be provided in each meeting room. The Session Organizer is responsible for coordinating among the presenters in his/her session to ensure that one laptop computer is available to all presenters during the session. **SHA will not provide laptop computers for presenters.** If you are chairing a session in which PowerPoint presentations will be used, you must make arrangements for someone in your session to provide the necessary laptop computer. We strongly recommend that session chairs bring a USB flash drive with sufficient memory to store all the PowerPoint presentations for their session.

All PowerPoint presentations should be loaded onto the designated laptop or USB flash drive by the Session Organizer prior to the beginning of the session for a seamless transition between papers. Presenters are discouraged from using a computer other than the one designated by the Session Organizer to prevent delays arising from disconnecting/reconnecting the digital projector. **Presenters may not use online presentation software, such as Prezi Online,** as the quality of the Wi-Fi connections cannot be guaranteed. Carousel slide projectors and overhead acetate-sheet projectors will not be provided at the conference venue. Questions regarding audiovisual equipment should be sent to Karen Hutchison at [karen@sha.org](mailto:karen@sha.org) well in advance of the conference.

**Note:** Please be aware that SHA does not endorse presenters participating in the conference via Skype or other electronic means. Under very narrow circumstances, such participation may be permitted by the Program Chair. However, any presenter participating via Skype or other electronic means will be required to pay any additional costs associated with enabling such participation and register at the full conference rate by 1 November 2019. Arrangements should be coordinated with the Program Chair well in advance of the conference.

#### **ACUA INFORMATION**

##### *Underwater Archaeology Proceedings 2020*

Individuals presenting underwater archaeology papers are eligible to submit written versions of their papers to be considered for publication in the ACUA Underwater Archaeology Proceedings 2020. To be considered for inclusion in the proceedings, presenters must register through the link on the ACUA website ([www.acuaonline.org](http://www.acuaonline.org)) by 10 February 2020. Author manuscript deadline is 1 March 2020, and author final edits deadline is 15 April 2020. Submitters are required to carefully follow the formatting and submission guidelines for the proceedings posted on the ACUA website.

##### *ACUA George R. Fischer International Student Travel Award*

Students who are interested in applying for this award should go to [www.acuaonline.org](http://www.acuaonline.org) for more information. Information will be available by 1 May 2019. Please note that this international award is open to all students residing outside of the country where the conference is held.

##### *ACUA Archaeological Photo Festival Competition*

The ACUA invites all SHA members and conference attendees to participate in the ACUA 2020 Archaeological Photo Festival Competition. Photos relating to either underwater or terrestrial archaeology may be submitted. Deadline for entry is 20 December 2019. Images will be displayed at the SHA conference in Boston, and winning entries will be posted to the ACUA website and may be part of the 2021 ACUA/SHA calendar. Please consult the ACUA website for further information and to download details of entry, digital uploads, and payment ([www.acuaonline.org](http://www.acuaonline.org)).

## **ELIGIBILITY**

Membership in the Society for Historical Archaeology is not required to give a presentation at the 2020 Conference on Historical and Underwater Archaeology. It is necessary, however, for all presenters to register at the full conference registration rate by 1 November 2019 and for their presentations to conform to the ethical standards upheld by the society. Participants submitting abstracts must acknowledge their agreement with the SHA Ethics Statement, provided here.

## **SHA ETHICS PRINCIPLES**

Historical archaeologists study, interpret and preserve archaeological sites, artifacts and documents from or related to literate societies over the past 600 years for the benefit of present and future peoples. In conducting archaeology, individuals incur certain obligations to the archaeological record, colleagues, employers, and the public. These obligations are integral to professionalism. This document presents ethical principles for the practice of historical archaeology. All members of The Society for Historical Archaeology, and others who actively participate in society-sponsored activities, shall support and follow the ethical principles of the society. All historical archaeologists and those in allied fields are encouraged to adhere to these principles.

### **Principle 1**

Historical archaeologists have a duty to adhere to professional standards of ethics and practices in their research, teaching, reporting, and interactions with the public.

### **Principle 2**

Historical archaeologists have a duty to encourage and support the long-term preservation and effective management of archaeological sites and collections, from both terrestrial and underwater contexts, for the benefit of humanity.

### **Principle 3**

Historical archaeologists have a duty to disseminate research results to scholars in an accessible, honest and timely manner.

### **Principle 4**

Historical archaeologists have a duty to collect data accurately during investigations so that reliable data sets and site documentation are produced, and to see that these materials are appropriately curated for future generations.

### **Principle 5**

Historical archaeologists have a duty to respect the individual and collective rights of others and to not discriminate on the basis of age, race, color, ethnicity, national origin, religion, sex, sexual orientation, gender identity and expression, marital status, place of birth and/or physical disabilities. Structural and institutional racism, male privilege and gender bias, white privilege, and inequitable treatment of others are prevalent and persistent issues in modern culture. Historical archaeologists have an obligation to treat everyone with dignity and respect and to adhere to zero tolerance against all forms of discrimination and harassment.

### **Principle 6**

Historical archaeologists shall not sell, buy, trade, or barter items from archaeological contexts. Historical archaeologists shall avoid assigning commercial value to historic artifacts except in circumstances where valuation is required for the purposes of appraisal and insurance or when valuation is used to discourage site vandalism.

### **Principle 7**

Historical archaeologists have a duty to encourage education about archaeology, strive to engage citizens in the research process and publicly disseminate the major findings of their research, to the extent compatible with resource protection and legal obligations.

## **GETTING TO AND AROUND BOSTON**

The hotel venue is directly accessible from nearby Logan airport via Boston's subway system called the "T" and you will be a short walk or public transportation ride from nearly any destination while attending the conference.

### **Airport**

Boston Logan International Airport (BOS) is six miles from the hotel venue. Major and minor airlines have numerous flights each day. Subway fare is \$2.75 from the airport to the hotel. Cab and ride-share costs will be approximately \$30. The Sheraton Boston offers an airport shuttle for \$17 one way, and parking at the downtown conference/hotel venue is \$42/night.



Other nearby airports include Worcester Regional Airport (KORH) in Worcester, Massachusetts; Manchester-Boston Regional Airport (KMHT) in Manchester, New Hampshire; and T. F. Green Airport (KPVD) in Warwick, Rhode Island.

### **Transportation during the Conference**

While you are here, there are extensive public transportation networks surrounding the venue with multiple subway or “T” stations located within a very short walk, and several accessible options for conference attendees with limited mobility. The Prudential Center stop on the MBTA’s “E” train along the Green Line has elevator and full up-and-down escalator access, as well as a portable boarding lift available on request. The Massachusetts Avenue stop on the MBTA’s Orange Line has elevator access, an “up” escalator, and a long ramp available for use. For more comprehensive accessibility information, including trip planning guides, access maps, and information on the MBTA’s paratransit service, the RIDE, please see the Accessibility on the MBTA webpage ([www.mbta.com](http://www.mbta.com)).

The hotel and conference venue is part of the larger Prudential Center, a 23-acre bright and modern development of shops, restaurants, and office towers connected by multiple arcades allowing for access to much of the area’s food and retail options without going outside. Several taxicab services are available, as are rideshare services such as Uber and Lyft.

### **Train**

Boston is serviced by three Amtrak stations (South Station, North Station, and Back Bay). The closest station to the conference venue is Back Bay.

*Amtrak* - Amtrak is a passenger rail service that connects Boston, New York, Washington, DC, Philadelphia, Baltimore, Portland (Maine), and other points nationwide. Amtrak trains depart from South Station (Red Line), Back Bay Station (Orange Line), and North Station (Green and/or Orange Line).

*Amtrak Acela* - Created with business travelers in mind, Amtrak’s high-speed train Acela provides fast service along the Northeast Corridor High-Speed Rail between Washington, New York, and Boston.

Traveling at speeds up to 150 miles per hour, each Acela is fully equipped with power outlets and audio entertainment in-seat, bistro cars, elegant first-class cars, wide seats, conference and meeting areas, and other amenities.

Phone: 800.872.7245

Toll-free: 800.USA.RAIL

[Amtrak.com](http://Amtrak.com)

### **MBTA Commuter Rail**

Operated by the Massachusetts Bay Transportation Authority, Boston’s Commuter Rail services the outlying Boston suburbs. Service is available from several “T” stations, but most departures take place from North Station, South Station, and Back Bay Station.

Phone: 617.722.3200

[mbta.com](http://mbta.com)

### **Car Rental**

Most major car rental companies are available at Boston Logan Airport and throughout the city. Parking at the Sheraton is \$42/day.

### **THURSDAY NIGHT RECEPTION**

The Peabody Museum of Archaeology and Ethnology at Harvard University will host our Thursday Night Reception. Founded in 1866 by philanthropist George Peabody, the Peabody Museum is among the oldest anthropology museums in the world, and still occupies its original 19th-century building. The museum’s mission and operations, however, have changed considerably over the past one hundred and fifty years.

The Peabody is well-known for its significant collections of archaeological and ethnographic materials from around the world, many of which were acquired during the era of European and American expansion, exploration, and colonization.

The collections number some 1.2 million objects from cultures around the world. You will enjoy local food and drink, guided tours, and unique behind-the-scenes experiences.

### **TOURS AND EXCURSION OPPORTUNITIES**

We have a number of opportunities for you to experience the rich archaeological and historic resources of the Greater Boston Area.

### **Planned Tours**

*Tour of the abandoned half-mile-long MBTA Boylston Street Subway Tunnel:* This exclusive tour of the country’s first subway is not available to the public and tickets will go quickly.

*Tour of Paul Revere House* ([www.paulreverehouse.org](http://www.paulreverehouse.org)): Get a behind-the-scenes tour of the Paul Revere Memorial Association's new Education and Visitor Center, "The Midnight Ride in Revere's Own Words" exhibit, and learn how archaeological excavations contributed to this revolutionary expansion project.

*Tour of Plimoth Plantation* ([www.plimoth.org](http://www.plimoth.org)): To mark the 400th anniversary of the *Mayflower's* arrival, join David Landon, Associate Director, Andrew Fiske Memorial Center for Archaeological Research at the University of Massachusetts Boston, for a tour of Plymouth, Massachusetts, including: dig sites of Project400, a collaborative archaeological project; and a newly opened exhibition at Plimoth Plantation, home of the legendary historical archaeologist James Deetz, titled "Biography of the Landscape", that highlights the findings of Project400.

*Tour of Strawberry Banke Museum* ([www.strawberrybanke.org](http://www.strawberrybanke.org)): A guided tour of this 10-acre outdoor history museum in Portsmouth, New Hampshire, its nearly 40 extant buildings, and 29 archaeological sites will be followed by lunch in the museum cafe and optional time on the museum's ice skating rink (skate rentals available) or visits to the nearby Portsmouth African Burying Ground or Warner House.

## Excursions

One of Boston's premier historical attractions is the *Freedom Trail* ([www.thefreedomtrail.org](http://www.thefreedomtrail.org)), with led tours year-round, featuring themes including Revolutionary Women, African-American Patriots®, and Pirates and Patriots®.

*Tour the Peabody Museum of Archaeology and Ethnology at Harvard University* ([www.peabody.harvard.edu](http://www.peabody.harvard.edu)): If you miss the Thursday Museum Reception behind-the-scenes tour of Harvard's Peabody Museum, there will be free admission to the museum's exhibits (but not behind the scenes) for all conference attendees throughout the conference.

*The Museum of African American History* ([www.maah.org](http://www.maah.org)) in Boston is New England's largest museum dedicated to preserving, conserving, and interpreting the contributions of African Americans. Guided and self-guided walking tours of the museum's Black Heritage Trails® are available.

Visit the *USS Constitution* ([www.navy.mil/local/constitution/](http://www.navy.mil/local/constitution/)) and *USS Constitution Museum* (<https://ussconstitution-museum.org>) to learn how "Old Ironsides" has remained undefeated since it was launched in 1797.

*The Boston Tea Party Ships and Museum* ([www.bostonteatartyship.com](http://www.bostonteatartyship.com)) gives visitors the opportunity to relive the 1773 town meeting and protest the Tea Act.

*The New England Historic Genealogical Society* ([www.americanancestors.org](http://www.americanancestors.org)) is the oldest and largest genealogical society in the United States and will be offering free research passes for conference attendees.

*The Massachusetts Historical Society* ([www.masshist.org/](http://www.masshist.org/)), near the hotel, is the nation's oldest historical society and located in a landmark-designated historic building in Boston's nearby Fenway neighborhood.

*Boston's Museum of Fine Arts* ([www.mfa.org](http://www.mfa.org)) is located just 20 minutes (0.8 miles) from the conference center by foot. It is one of the most comprehensive art museums in the world, with its holdings including an extensive collection of early Americana in the Art of the Americas wing.

*The Isabella Stewart Gardner Museum* ([www.gardnermuseum.org](http://www.gardnermuseum.org)) is a unique museum of arts, archives, and architecture in an "inside out" Venetian palazzo. And yes, it's the site of the famous 1990 heist (the reward is still available). The Gardner is 25-minute walk from the hotel venue (1.1 miles).

*The Commonwealth Museum* ([www.sec.state.ma.us/mus](http://www.sec.state.ma.us/mus)) next to the John F. Kennedy Presidential Library and Museum features the history of the Massachusetts experience from 1620 to today, telling the story of four families of Native American, English, African American, and Irish heritage.

*The 1742 Faneuil Hall Marketplace* (<http://faneuilhallmarketplace.com>) is a popular historic site and mixed-use marketplace. Check out the history, the shops, and the cuisine at the Quincy Market Colonnade.

## Local Eating

The Sheraton Boston Hotel is located in Boston's vibrant downtown Back Bay area within walking distance to hundreds of dining options. At the hotel, Apropos serves breakfast, and the Sidebar & Grille is a large bar with small plates. There are three grocery stores nearby including a Star Market, Trader Joe's, and a Whole Foods Market, and a number of restaurant options from upscale Italian and seafood to fast-casual burritos, Sweetgreen, and coffee shops. Check out Trident Booksellers and Cafe on Newbury Street, or Casa Romero, a hidden Mexican treasure at 30 Gloucester.

# Best Practices for No-Collection Projects and In-Field Analysis in the United States

Submitted by the Archaeological Collections Consortium (ACC)

The Archaeological Collections Consortium (ACC)<sup>1</sup> includes representatives from the Society for American Archaeology (SAA), the Society for Historical Archaeology (SHA), and the American Cultural Resources Association (ACRA), who are focused on the use, preservation, and management of archaeological collections. A key ACC goal is to develop and act upon a common platform of objectives that seek to benefit the discipline and ultimately the public, for whom archaeological collections are curated in the public trust.

The ACC is concerned about the growing trends of no-collection, in-field artifact analyses, and collections reburial.<sup>2</sup> The use of these practices is driven by several factors, including limited availability of collections storage space, costs of curation, pressure among agencies to reduce overall project costs, and concerns among some tribal historic preservation officers (THPOs) and tribes about how their patrimonies are being treated by others once archaeological objects are removed from a site. These practices negatively impact the types and breadth of archaeological collections available for present and future research, interpretation, and education. They impede the archaeologist's ability to analyze existing artifacts by using future research designs and methods and independently verifying results, actions that are critical to the credibility of an archaeological project and the scientific process in general. They also run counter to the professional ethics of the organizations participating in the ACC.<sup>3</sup>

Furthermore, these strategies are not justified in law and are rarely included in federal or state standards and guidelines, and very little has been published on these topics.<sup>4</sup> Statutory authority for recovery of archaeological material remains on federal land primarily comes from Sections 106 (compliance) and 110 (resource management) of the National Historic Preservation Act (NHPA) and the Archaeological Resources Protection Act (ARPA). These federal laws were enacted in recognition of the need to preserve and research the enormous historic, cultural, and scientific value of archaeological materials for the benefit of the American people. By specifying that such items located on federal land are the property of the federal government, and by systematizing the procedures for the excavation and handling of covered objects, ARPA sought to (1) protect the items from pillage, and (2) by doing so, better enable the American people to learn about and appreciate the lives of those who came before them. Likewise, the NHPA ensures that development considerations are balanced with preservation values, and confirms the public's interest in heritage preservation. Compliance agreements under Section 106 of NHPA require management considerations, which in many cases include archaeological data recovery and curation of the recovered collections. ARPA permits also govern archaeological data recovery and curation of the recovered collections. The federal regulations 36 CFR Part 79 (Curation of Federally-Owned and Administered Archaeological Collections) then ensure that the recovered and analyzed collection is deposited in a repository that meets certain standards. Burial in the ground does not meet those standards.

The ACC is not aware of any published studies that explore the relative costs of no-collection and in-field analysis versus long-term curation to determine where the most-significant expenses/savings occur when both follow professional ethics and guidelines. No-collection strategies might actually cost agencies more than curation if sites must be revisited and reevaluated because collections are not available to verify artifact identifications and the specific attributes of those artifacts. Additionally, even when artifacts are not collected during a project, the associated records, whether hard copy or digital, should be assembled as a collection and may be subject to curation fees (Childs et al. 2010; Drew 2010; Kintigh and Altschul 2010).

Various combinations of no-collection and in-field identification and analysis have been implemented, particularly in the western United States. It is unclear whether these practices were developed using data sets and studies about their benefits and drawbacks, or whether an assessment was made of how these practices may run counter to historic preservation laws. The effectiveness and reproducibility of these practices and their impacts on the archaeological record and future research should be carefully considered by archaeologists and other stakeholders involved in an archaeological investigation.

Therefore, for all of the reasons stated above, the ACC strongly discourages the use of no-collection, in-field analysis, and collections reburial until further study can be done, with exceptions for the use of no-collection and in-field analysis in the following circumstances: when a site is subject to a hazmat situation (e.g., harmful contamination) and for projects that conform to selected types of surface survey only (e.g., water lines, culverts, power lines, pump houses, microwave towers). For these few instances when the applications may be appropriate, the ACC offers the following best practices to provide guidance to stakeholders. The goal of these guidelines is to ensure that no-collection and in-field identification and analysis methods—when agreed upon, documented, and adopted—are implemented with appropriate care and ethical consideration. The ACC decided not to provide best practices on reburial at this time, because the reasons for reburial and the methods used seem to be widely varied, unevaluated, and unpublished in the United States (an exception is Williams 2011 on reburial for conservation).



These best practices should be considered interim until more research is conducted on the history, legal foundations, and long-term impacts of no-collection and in-field identification and analysis on the archaeological process (see Moving Forward section below). Primary stakeholders for these guidelines include government (federal, tribal, state, and local) archaeologists and resource managers, descendant communities, cultural resource management companies, academic archaeologists, students, and professional societies, all of whom might participate in developing archaeological research designs.

The ACC also considers these best practices to provide a framework that can be adjusted to specific archaeological projects and, perhaps, state policies and guidelines. There is considerable regional variation in how prehistoric and historical archaeological investigations are undertaken across the United States, especially during survey projects, which can affect these practices. Factors such as local flora, topography, and soil type(s) should be considered when choosing appropriate archaeological field methods, as should the guidelines presented below.

### **Best Practices for No-Collection and In-Field Analysis**

- Determine if a no-collection and/or in-field analysis and identification strategy is appropriate for the project. Consider the following instances when these field methods might not be appropriate:
  - Projects where the discovered sites will yield artifacts that are difficult to identify, are unique, and/or will require precise artifact identification, such as chemical or microscopic analysis, to answer the research questions established for the project.
  - Projects where accurate artifact identification is critical to determining the eligibility of a site for listing in the National Register of Historic Places.
  - Projects where one or more sites are at high risk of being destroyed through natural (e.g., erosion or climate change) or human (e.g., development or mitigation) causes.
  - Testing and data recovery projects, since the long-term research value of the well-documented contextual associations for these collections will be lost. Exceptions might be if a site contains burials or hazardous materials.
- Prepare to curate the project records. Field notes, maps, photographs, artifact data, background research, and other records associated with any archaeological project are a crucial part of the resulting collection. For a no-collection project, the associated records will constitute the entire collection and therefore should be curated in a repository just like records that have associated artifacts. The associated digital records, including all the data about the artifacts found but not collected, should be curated in a repository that has well-established procedures for long-term preservation, management, and accessibility of digital records and data. For federal and many state projects, the collections must be curated in a repository that meets the standards in 36 CFR Part 79, and the repository must be identified prior to the start of fieldwork. It is strongly recommended that the repository be identified in the project report.
- Consider no-collection and in-field analysis methods in agency or other program planning. The use of no-collection and/or in-field analysis is usually decided during project scoping and is identified in a request for proposal for a contracted archaeological project or scope of work/performance work statement. However, the efficacy of no-collection and/or in-field analysis needs to be considered at a programmatic level and should be addressed in agency/installation/university planning documents (i.e., integrated cultural resources management plans). Agencies and university programs, in particular, should find opportunities to engage stakeholders in discussion and meaningful consultation regarding the merit of these methods, including during Section 106 consultation under the National Historic Preservation Act to inform scoping of specific projects. Any positions of agreement and disagreement should be recorded in writing, used for future planning, and curated with the project's associated records. The following considerations related to no-collection and/or in-field analysis should be assessed by stakeholders during any opportunities for consultation:
  - The results of background research to identify the potential for archaeological resources, including previous land use; geomorphological processes that have affected the project area; previous archaeological investigations in the project area and surrounding area; and, when appropriate, historical sources (e.g., original maps, deeds, birth records). If no archaeological project has been done in the area, then carefully consider whether no-collection and/or in-field identification and analysis is appropriate at all.
  - The results of examining existing collections from the project and surrounding area, if available, to determine the range of potential artifact classes and corresponding cultural time periods. If several artifacts were difficult to identify in the existing collections, then this information should be factored into the appropriateness of no-collection and/or in-field identification and analysis for the new project.
  - The proposed collection strategy (i.e., collection, no-collection, limited no-collection when diagnostics are kept, or no-collection with some sampling at a complex site) to be used, including the reasons for collecting versus not collecting artifacts that are appropriate to the project at hand.
  - Details about the documentation process. This should include the qualifications of those who will be responsible for field analysis and artifact identification; the process that will be used to record the presence/absence and identification of the artifacts; and the standardized information that will be recorded about each artifact found.

- o The location where artifact identification and documentation will be performed during the project (e.g., at the location of discovery, field laboratory, or nonfield laboratory). A dedicated laboratory—a separated space away from the site itself—is recommended for artifact identification, analysis, and documentation to ensure that the process is performed accurately. Discuss the relative benefits of in-field versus laboratory analysis, if the former is intended to be used.

- o The method to be used to test the accuracy of in-field artifact identification and analysis (see “Verify research results” below).

- o Final disposition of the recovered artifacts, including the rationale for, and location where they will be relocated at the site, if no-collection and/or in-field identification and analysis are used.

- Develop a contingency plan. All project scopes of work designed with a no-collection and/or in-field identification and analysis method should have a contingency if, during the project, it becomes clear that the method(s) is not appropriate. For example, a survey anticipating late-prehistoric sites might encounter an early Paleoindian component, which might justify modification of collection strategies. Therefore, project scopes of work should include the following:

- o Criteria that identify when no-collection and/or in-field identification and analysis should be reevaluated.

- o A clause in the Scope of Work and/or contract that allows the archaeologist performing the work to recommend a change in scope and, when applicable, allows the project proponent to modify the scope.

- o An alternate plan for collection recovery that would be triggered in these circumstances, including consideration of an appropriate budget and how funding would be acquired to carry out collection recovery, analysis, and curation.

- Define appropriate in-field analysis procedures. Many government agencies and some cultural resource management firms have a technical field manual for archaeological investigations. Such manuals should include the following information for projects involving no-collection surveys and/or in-field identification and analysis:

- o Explicit information on how to identify and record the potential artifact types, especially for prehistoric and early historic-period sites (e.g., preindustrial). Since artifact types vary by region across the United States, pertinent resources to assist with this step are available through state archaeologists, state historic preservation offices, tribal historic preservation offices, state historical societies, and others. Provide a full citation of any books or articles from which typological definitions are derived.

- o Standardized forms for each anticipated artifact type for field technicians to record key information about each artifact found, including but not limited to provenience, including descriptive information about context (e.g., high-density artifact concentration; on top of a visible feature); description; dimensions; diagnostic/decorative elements; and degree of fragmentation.

- o Standardized procedures for photographing cleaned artifacts using current technology appropriate for the project. A representative percentage of artifacts should be photographed using a sampling strategy that is appropriate to the project goals. A dimensional scale should be used to ensure that future researchers, resource managers, and persons conducting background research about the site and region have enough information to make appropriate decisions about the artifact type. The manual should include explicit information on how to decide which artifacts to photograph, when there are many comparable examples; how to select a representative sample size of an artifact type; the number of faces of the artifact to photograph, based on the artifact type; and how to record the photographs in standardized photo logs and/or by metadata tagging.

- o A strategy for identifying and documenting artifacts that are difficult to classify. Identify the qualified material culture specialist(s) and/or institutions who will consult on artifact identification. Provide the procedure to follow if unexpected diagnostics or other artifacts are found when no one on the crew is qualified to identify them. Define circumstances when diagnostics and/or other artifacts will be retained for curation and which material culture specialist(s) will make that decision (see “Develop a contingency plan” above).

- Train field technicians. Prior to fieldwork, it is critical to train all field technicians to identify and record artifact types specific to the survey area, region, and cultural time periods expected to be represented. The training should complement the information in the technical manual provided and include the following:

- o How to operate any handheld devices that are used to record artifact location and conduct artifact identification.

- o How to clean artifacts, whether in the field or lab, to ensure that artifact identification is accurate and photo documentation is of good-to-excellent quality.

- o How to accurately identify artifacts using replicable artifact classifications and standardized forms.

- \* Develop an exercise to test field technicians on artifact identification prior to starting fieldwork. The exercise should be overseen by appropriate material culture specialists.

- o Whom to go to with questions about identifying particular artifacts. If possible or practical, discuss the use of mobile devices to take photos and whom to send them to for identification.

- o How to accurately photograph artifacts using appropriate, current technology for permanent documentation purposes and how to complete a photo log or to record metadata about the photographs.

- Verify research results. Within the first few days of the project, the accuracy and adequacy of in-field artifact identification/documentation should be tested by each person tasked with the work. Any inaccuracies must be corrected in the forms already completed, and new training should be initiated to correct the procedures to ensure standardization



and accuracy. Periodic testing of the accuracy of in-field artifact analysis should occur to ensure consistent procedures and accurate data collection.

### **Moving Forward**

The ACC and others (Heilen and Altschul 2013) advocate for more research on no-collection and in-field identification and analysis practices across the United States. Some critical topics to explore, which are ripe for dissertation or thesis work, include the following:

- The driving forces or reasons behind the use of these practices to better understand how pervasive they are. The ACC recognizes that limited availability of collections storage space; high curation costs; pressure from government agencies at all levels to reduce overall project costs; and tribal feedback and concern are some of the reasons, but are there others? How do the reasons break down across stakeholder groups and in different regions of the United States? How are those reasons impacting the frequency of the practices across the country?
- How and when were these practices developed by different stakeholder groups? Were considerations given to the effects of these practices on future research potential or replicability of the data created and interpreted at different types of sites, or by project phases (i.e., survey, testing, and data recovery)?
- Other than the study by Heilen and Altschul (2013), has any research been done to determine the accuracy of the data created during projects using no-collection and/or in-field artifact identification by different stakeholder groups or by region? Are there any other testing strategies that compare and evaluate the data from no-collection projects with data from projects that collected artifacts to identify if there are meaningful differences in the information recovered? If there are meaningful differences, what are some recommended solutions?
- Where are these practices codified in law, regulation, policy, and/or guidance with a breakdown by stakeholder group (e.g., federal, tribal, state, and local agencies; academia; private developers)? What is the range of variation in the methods prescribed and what might be motivating any variation found?
- How can in-field artifact identification and analysis be further improved through training, technology, or other means to increase the accuracy and reproducibility of the data and of the interpretation of the sites that rely on those data?
- What are the relative costs of no-collection and in-field analysis versus the costs of long-term curation of both artifacts and associated records, including digital records, when all are done appropriately and follow professional ethics and guidelines? How does this vary by region of the United States? How does the cost of curation compare to the cost of revisiting a site when questions arise, and artifacts are not available to verify conclusions?
- What are the possible impacts of no-collection and in-field artifact identification and analysis on the dissemination of the results of the archaeological investigation, as well as on public outreach and education for investigations that use these strategies? Consideration needs to be given to the future number and types of artifacts available for exhibition and research in museums and other venues for public outreach and education.
- What are the possible effects of no-collection strategies on the commercialization of the archaeological record? If fewer artifacts are curated, how might the laws of supply and demand affect the commercial value of artifacts obtained either legally or illegally? Will this encourage or discourage looting of archaeological sites?
- Artifact reburial is often associated with no-collection and in-field artifact identification and analysis. Research related to reburial is needed on a number of topics. These include the reasons for artifact reburial; best methods to ensure that reburial will not be mistaken for an archaeological site or cultural component of a site in the future; the physical and chemical impacts on artifacts that are reburied; whether reburied artifacts are ever retrieved to evaluate the accuracy of previous identifications or to test new hypotheses; and the potential impact of reburial on public perception of, interest in, and knowledge about archaeological investigations.

In conclusion, the ACC contends that the practices of no-collection, in-field analysis, and collections reburial run counter to historic preservation laws and professional ethics. In only two circumstances—the event of a hazardous situation and for some kinds of surface survey—does the ACC recognize that no-collection and in-field analysis could be utilized. Additional comparative studies on this topic are needed; the few that exist clearly demonstrate that no-collection and in-field analyses cannot match analysis completed in the laboratory, in terms of replicability and accuracy. However, given that no-collection projects are proceeding without clear answers to the questions outlined above, the ACC offers these best practices for no-collection projects and in-field artifact identification and analysis as interim guidance. When further research into the legality, legitimacy, and cost-effectiveness of these archaeological field strategies is completed, this guidance can be amended. In drafting these initial best practices, the ACC is making an effort to fill an informational void for those who undertake such projects while trying to preserve a breadth of archaeological collections available for present and future research, interpretation, and education.

### **Notes**

1. The current ACC members and authors of this article are Ralph Bailey, Danielle Benden, S. Terry Childs, Jenna Domeischel, Julia King, Teresita Majewski, Heather Olson, Sarah Rivers Cofield, Michael “Sonny” Trimble, and Mark Warner.

2. Several of the terms used in this document are defined by the ACC in a compendium of definitions jointly published in *The SAA Archaeological Record* (2016, 16(1):41–43), *SHA Newsletter* (2015, 48(4):4–6), and ACRA’s February Monthly Member Update (2017).

3. ACRA Code of Ethics: <http://acra-crm.org/code-of-ethics>; SHA Ethics Principles: <https://sha.org/about-us/ethics-statement/>; SAA Principles of Archaeological Ethics: <http://saa.org/AbouttheSociety/PrinciplesofArchaeologicalEthics/tabid/203/Default.aspx>

4. For exceptions, see Butler (1979); Griset and Kodack (1999); Heilen (2013); Heilen and Altschul (2013); Heilen et al. (2008); and Williams (2011). Only Butler (1979) and Heilen and Altschul (2013) are in peer-reviewed publications.

5. The ACC is not including immediate reburial of large organic objects for preservation purposes in its consideration of artifact reburial.

## REFERENCES

Butler, William

1979 The No-Collection Strategy in Archaeology. *American Antiquity* 44:795–799.

Childs, S. Terry, Karolyn Kinsey, and Seth Kagan

2010 Repository Fees for Archaeological Collections: Trends and Issues over a Decade of Study. *Heritage Management* 3:189–212.

Drew, Natalie

2010 Curating Associated Records: Budget Development and Cost-Saving Strategies. *Heritage Management* 3:275–289.

Griset, Suzanne, and Marc Kodack

1999 *Guidelines for the Field Collection of Archaeological Materials and Standard Operating Procedures for Curating Department of Defense Archaeological Collections*. Report to the Department of Defense Legacy Resource Management Program Project No. 98-1714. Mandatory Center of Expertise for the Curation and Management of Archaeological Collections, U.S. Army Corps of Engineers, St. Louis, Missouri. Electronic document, <https://www.denix.osd.mil/cr/lrmp/home/projects/guidelines-for-the-field-collection-of-archaeological-materials-and-standard-operating-procedures-for-curating-department-of-defense-archaeological-collections-pdf-report-legacy-98-1714/>. Accessed 22 October 2018.

Heilen, Michael P.

2013 *An Experimental Test of the Accuracy and Adequacy of In-Field Artifact Analysis*. Legacy Resource Management Program Project No. 11-157. Technical Report 12-90. Statistical Research, Tucson, Arizona.

Heilen, Michael P., and Jeffrey H. Altschul

2013 The Accuracy and Adequacy of In-Field Artifact Analysis: An Experimental Test at Two Archaeological Sites in the Western United States. *Advances in Archaeological Practice* 2:121–138.

Heilen, Michael P., Christopher L. Nagle, and Jeffrey H. Altschul

2008 *An Assessment of Archaeological Data Quality: A Report Submitted in Partial Fulfillment of Legacy Resource Management Program Project "To Develop Analytical Tools for Characterizing, Visualizing, and Evaluating Archaeological Data Quality Systematically for Communities of Practice within the Department of Defense."* Legacy Resource Management Program Project No. 07-353. Technical Report 08-65. Statistical Research, Tucson, Arizona.

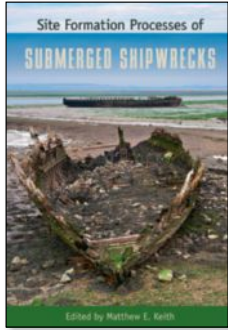
Kintigh, Keith W., and Jeffrey H. Altschul

2010 Covering the Costs of Digital Curation. *Heritage Management* 3:255–263.

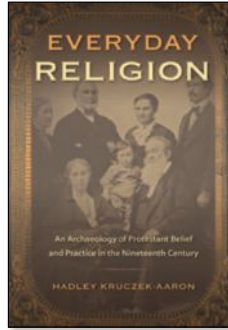
Williams, Emily

2011 Deep Storage: Reburial as a Conservation Tool. In *Objects Specialty Group Postprints*, Volume 18, Sanchita Balachandran, Christine Del Re, and Carolyn Riccardelli, compilers, pp. 25–31. American Institute for Conservation of Historic & Artistic Works, Washington, DC.





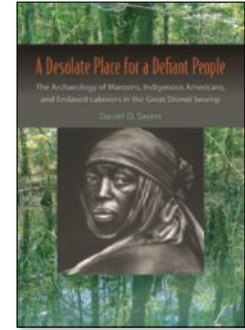
**Site Formation Processes of Submerged Shipwrecks**  
MATTHEW E. KEITH, ED.  
Hardcover \$79.95 **\$35.00**



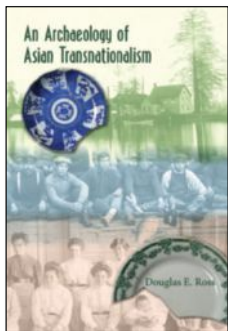
**Everyday Religion**  
*An Archaeology of Protestant Belief and Practice in the Nineteenth Century*  
HADLEY KRUCZEK-AARON  
Hardcover \$79.95 **\$35.00**



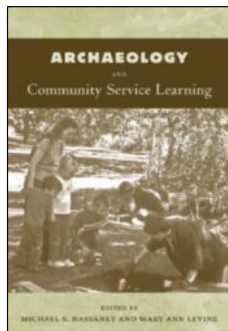
**The Archaeology of Race in the Northeast**  
CHRISTOPHER N. MATTHEWS AND ALLISON MANFRA MCGOVERN, EDS.  
Hardcover \$84.95 **\$40.00**



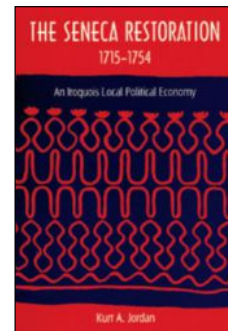
**A Desolate Place for a Defiant People**  
*The Archaeology of Maroons, Indigenous Americans, and Enslaved Laborers in the Great Dismal Swamp*  
DANIEL O. SAYERS  
Paper \$24.95 **\$18.00**



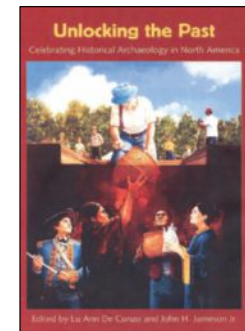
**An Archaeology of Asian Transnationalism**  
DOUGLAS E. ROSS  
Hardcover \$79.95 **\$35.00**



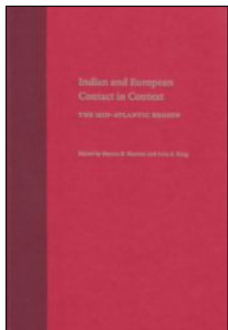
**Archaeology and Community Service Learning**  
MICHAEL S. NASSANEY AND MARY ANN LEVINE, EDS.  
Hardcover \$69.95 **\$30.00**



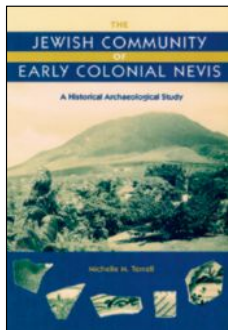
**The Seneca Restoration, 1715-1754**  
*An Iroquois Local Political Economy*  
KURT A. JORDAN  
Paper \$32.95 **\$20.00**



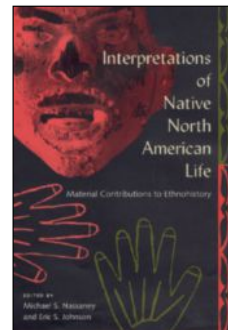
**Unlocking the Past**  
*Celebrating Historical Archaeology in North America*  
LU ANN DE CUNZO AND JOHN H. JAMESON JR., EDS.  
Hardcover \$39.95 **\$20.00**



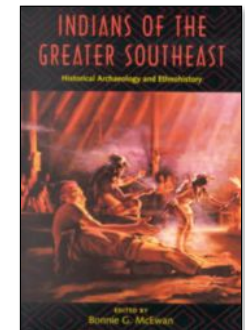
**Indian and European Contact in Context**  
*The Mid-Atlantic Region*  
DENNIS B. BLANTON AND JULIA A. KING, EDS.  
Hardcover \$65.00 **\$30.00**



**The Jewish Community of Early Colonial Nevis**  
*A Historical Archaeological Study*  
MICHELLE M. TERRELL  
Hardcover \$59.95 **\$25.00**



**Interpretations of Native North American Life**  
*Material Contributions to Ethnohistory*  
MICHAEL S. NASSANEY AND ERIC S. JOHNSON, EDS.  
Paper \$24.95 **\$15.00**



**Indians of the Greater Southeast**  
*Historical Archaeology and Ethnohistory*  
BONNIE G. MCEWAN, ED.  
Paper \$24.95 **\$15.00**

View titles at [upress.ufl.edu/CHUA19](http://upress.ufl.edu/CHUA19)  
Use code **CHUA19** for discounts up to 60%  
Or call 800-226-3822



# New Funding for the study of British Transferware

2019 Research Grant Proposals now being accepted



The Transferware Collectors Club, a US-based international non-profit organization dedicated to the study of British transfer-printed ceramics, is pleased to welcome applications for the 2019 Paul and Gladys Richards Charitable Foundation Research Grant Program for the study of British Transferware.

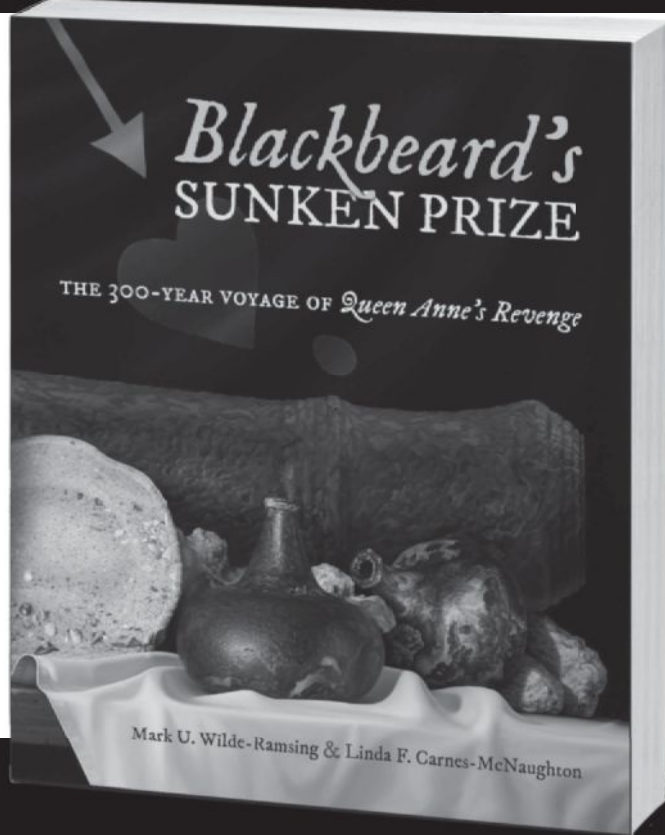


## Funding

Launched in 2009, the Richards Research Grant Program is dedicated to supporting research focused on British transferware produced between 1750 and 1900. Annual funding for this program remains at \$10,000. To date the program has funded twenty-two projects. A summary of winning proposals from previous years is available on the club's website. Grant funding for selected proposals is made available by the end of August each year.

All grant applications must be received by May 4 of the year the request is made. Application forms are available for download on the club's website: <http://www.transcollectorsclub.org/research>

## The definitive story of one of America's most storied pirate ships



"The first comprehensive book to address all aspects of the *Queen Anne's Revenge* excavation—a major contribution to our knowledge of the pirate Blackbeard and his lost ship."

—James E. Bruseth, author of *From a Watery Grave*

"Having played vital roles in the shipwreck's recovery and interpretation, the authors vividly reveal in words and images the ship's first use as a French privateer and slave ship, its capture and use by Blackbeard's armada, the circumstances of its sinking, and all that can be known about life as an eighteenth-century pirate based on a wealth of artifacts now raised from the ocean floor."

—McCormick Messenger



224 pp., 227 color plates, 42 halftones, 14 maps, 3 graphs, 4 tables  
ISBN 978-1-4696-4052-5 \$28.00 paperback  
Also available as an Ebook



Available wherever books are sold  
[uncpress.org](http://uncpress.org) · [uncpressblog.com](http://uncpressblog.com)

## Current Research

Please send summaries of your recent research as a Word file to the appropriate geographical coordinator listed below. Contributions are generally between 500-2000 words in length. Submit illustrations as separate files (.jpeg preferred, 300 dpi or greater resolution; minimum 200 dpi). The slideshow feature also allows contributions to feature more photographs than in a print publication. Video should be supplied in FLV format; recommended bitrate is between 300 kb/s and 700 kb/s. Maximum file size for a video is 100 MB. Audio should be in MP3 audio format.

### AFRICA

Kenneth G. Kelly, University of South Carolina, [kenneth.kelly@sc.edu](mailto:kenneth.kelly@sc.edu)

### ASIA

Ruth Young, University of Leicester, [rly3@le.ac.uk](mailto:rly3@le.ac.uk)

### AUSTRALASIA AND ANTARCTICA

Pamela Chauvel and Amelia O'Donnell, University of Sydney, [thirtywest90@bigpond.com](mailto:thirtywest90@bigpond.com) and [a\\_od89@hotmail.com](mailto:a_od89@hotmail.com)

### CANADA-ATLANTIC (New Brunswick, Newfoundland and Labrador, Nova Scotia, Prince Edward Island)

Amanda Crompton, Memorial University of Newfoundland, [ajcrompt@mun.ca](mailto:ajcrompt@mun.ca)

### CANADA-ONTARIO

Jeff Seibert, Trent University Archaeological Research Centre/Seibert Heritage Services, [jeffseibert@hotmail.com](mailto:jeffseibert@hotmail.com)

### CANADA-PRAIRIE AND ARCTIC (Manitoba, Saskatchewan, Northwest Territories, Yukon, and Nunavut)

Vacant - contact the Newsletter editor for more information

### CANADA-QUÉBEC

Stéphane Noël, Université Laval, [stephane.noel.2@ulaval.ca](mailto:stephane.noel.2@ulaval.ca)

### CANADA-WEST (Alberta, British Columbia)

Benjamin Baker, [benjaminkyle.baker@gmail.com](mailto:benjaminkyle.baker@gmail.com)

### CARIBBEAN AND BERMUDA

Frederick H. Smith, North Carolina A & T State University, [fsmith@ncat.edu](mailto:fsmith@ncat.edu)

### CONTINENTAL EUROPE

Natascha Mehler, University of Vienna, [natascha.mehler@univie.ac.at](mailto:natascha.mehler@univie.ac.at)

### GREAT BRITAIN AND IRELAND

Emma Dwyer, [ed136@le.ac.uk](mailto:ed136@le.ac.uk)

### LATIN AMERICA

Dolores Elkin, CONICET (Argentina), [lolielkin@hotmail.com](mailto:lolielkin@hotmail.com)

### MIDDLE EAST

Uzi Baram, New College of Florida, [baram@ncf.edu](mailto:baram@ncf.edu)

### UNDERWATER (Worldwide)

Toni L. Carrell, Ships of Discovery, [tlcarrell@shipsofdiscovery.org](mailto:tlcarrell@shipsofdiscovery.org)

### USA-ALASKA

Robin O. Mills, Bureau of Land Management, [rmills@blm.gov](mailto:rmills@blm.gov)

### USA-CENTRAL PLAINS (Iowa, Kansas, Missouri, Nebraska)

Jay Sturdevant, National Park Service, [jay\\_sturdevant@nps.gov](mailto:jay_sturdevant@nps.gov)

### USA-GULF STATES (Arkansas, Louisiana, Mississippi, Oklahoma, Texas)

Kathleen H. Cande, Arkansas Archeological Survey, [kcande@uark.edu](mailto:kcande@uark.edu)

### USA-MID-ATLANTIC (Delaware, District of Columbia, Maryland, New Jersey, Pennsylvania, Virginia, West Virginia)

Ben Resnick, GAI Consultants, [b.resnick@gaiconsultants.com](mailto:b.resnick@gaiconsultants.com)

### USA-MIDWEST (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin)

Lynn L.M. Evans, Mackinac State Historic Parks, [EvansL8@michigan.gov](mailto:EvansL8@michigan.gov)

### USA-NORTHEAST (Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, Vermont)

David Starbuck, Plymouth State University, [dstarbuck@frontiernet.net](mailto:dstarbuck@frontiernet.net)

### USA-NORTHERN PLAINS AND MOUNTAIN STATES (Colorado, Montana, North Dakota, South Dakota, Wyoming)

Nikki Manning, [nikki.manning@umconnect.umt.edu](mailto:nikki.manning@umconnect.umt.edu)

### USA-PACIFIC NORTHWEST (Idaho, Oregon, Washington)

Michelle Hannum, SWCA Environmental Consultants, [michellehannum@yahoo.com](mailto:michellehannum@yahoo.com)

### USA-PACIFIC WEST (California, Hawaii, Nevada)

Kimberly Wooten, [kimberly.wooten@dot.ca.gov](mailto:kimberly.wooten@dot.ca.gov)

### USA-SOUTHEAST (Alabama, Florida, Georgia, Kentucky, North Carolina, South Carolina, Tennessee)

Kendy Altizer, University of Tennessee Knoxville, [kaltizer@vols.utk.edu](mailto:kaltizer@vols.utk.edu)

### USA-SOUTHWEST (Arizona, New Mexico, Utah)

Michael R. Polk, Aspen Ridge Consultants, [polk130@gmail.com](mailto:polk130@gmail.com)

CURRENT RESEARCH BEGINS ON NEXT PAGE



# Canada - Atlantic

## Newfoundland

**Archaeology at Ferryland 2018** (submitted by Barry Gaulton and Donna Teasdale, Memorial University): Our 2018 fieldwork was largely informed by the discoveries of the previous summer, which revealed evidence for a masonry structure and associated slate roof tile collapse at Area D and a rich domestic midden in nearby Area J. The former feature dates to the early years of the colony of Avalon in the 1620s, whereas the latter deposit was formed sometime between the late 17th and early 18th centuries. The goals for the 2018 field season were to better understand the nature and duration of occupation at Area D, and to locate evidence for in situ structural remains associated with the domestic deposit at Area J. As discussed below, additional excavations in 2019–2020 are required before any firm conclusions can be drawn.

The investigation of Area D's early-17th-century stone structure (Feature 217) was divided between two teams, each with disparate tasks. The first group focused on expanding excavations to the north and west of the structure to further expose architectural remains and associated construction and occupation layers. The second group, directed by graduate student Alexa Spiwak, conducted a targeted excavation to the south of the structure to answer questions pertaining to the manufacture of slate roof tiles at Ferryland. This newsletter report will outline the work of the first team; for a discussion of the second team's findings see Spiwak (2019).

Tantalizing traces of a cobblestone pavement and possible doorway uncovered at the west and north ends, respectively, of Feature 217 during the previous field season (Gaulton and Lacy 2017) were further exposed in 2018 to reveal a 0.91 m x 1.52 m (3 ft. x 5 ft.) hearth floor set with cobblestones, and a 1.17 m (3 ft. 10 in.) wide doorway (Figure



FIGURE 2. Base of furnace immediately north of Feature 217 hearth.

1). The cobblestones on the hearth floor are large and set in an east–west orientation. At the north end of the hearth—and at the same level as the floor—is an oval-shaped furnace set into the west wall of the building. A large rectangular flagstone sits at the opening of the feature, but its interior is floored with small cobblestones, many of which are spalled from repeated heat exposure (Figure 2). The interior walls of the furnace, built of clay-bonded masonry but also utilizing bricks as part of the above superstructure, show similar amounts of spalling and fire reddening. Although excavations must proceed further west to fully expose the base of the furnace, its interior dimensions are approximated at 0.69–0.85 m wide by 1.28–1.5 m deep.

Positive identification of a door at the northeastern end of Feature 217 prompted additional excavations to the north, encompassing both the north wall of the structure as well as nearby construction and/or occupation layers. This operation provided architectural details in the form of wall thickness (0.76 m or 2ft. 6 in.) but also evidence for further fenestration in the form of window-glass fragments. Unsurprisingly, refuse deposits were particularly evident outside the doorway; however, the quantity and variety of artifacts in these deposits are quite modest compared to those associated with other early-17th-century structures, both domestic and nondomestic, at Ferryland.

Low numbers of clay tobacco pipe, case bottle glass, and ceramic fragments—inside and outside Feature 217—suggest a brief occupation despite the significant investment required to construct a building with stone walls and a slate tile roof. The handful of early pipe bowls and associated marks, in particular, lend support to a 1620s occupation that may not have extended into later decades (Figure 3). The building's location, some 30 m outside the original 4-acre fortified settlement, is also anomalous with respect to all other structures associated with Calvert's colony, and is perhaps an important clue to understanding its purpose/function.

Based on existing archaeological evidence and historical records, several possibilities can be presented.



FIGURE 1. Feature 217, looking west. Note the cobblestone hearth in the southwest and doorway in the northeast of the structure.





FIGURE 3. Clay pipe makers' marks found in the occupation layer outside Feature 217.

One idea is that this building predates 'official' settlement in August 1621. It has been suggested that the first governor of Ferryland, Captain Edward Wynne, and others overwintered in 1620 to reconnoiter the land in advance of planting a colony (Gaulton and Miller 2009:118). This sturdy stone building could have served such a purpose, seeing continued use while the fortified colony was being constructed but being abandoned shortly thereafter. A second theory is that this structure was built to serve an industrial function(s). The large doorway (nearly 4 ft. wide), earthen floor, and oval furnace provides tangential evidence, as does the dearth of domestic material culture and its location outside the village proper in the event that an accidental fire would not result in conflagration of other buildings. This theory gained traction in 2018 with the discovery of hundreds of small pieces of glassy, bubbly residue or waste product outside the door of the building (Figure 4). Correspondence with specialists in the UK cast doubt on the possibility that these pieces pertained specifically to an industry such as glassmaking.



FIGURE 4. Glassy by-product formed inside the furnace of Feature 217.

Instead, the glassy waste was interpreted as an unintended by-product formed when the sandy clay that bonded the stones inside the furnace reacted to repeated and prolonged heat exposure. These small glass-like bits, sometimes referred to as 'kiln sweat' (Sarah Paynter 2018, pers. comm.), would have been gathered up among the spent fuel from the floor of the

furnace and discarded out the north door of Feature 217.

A masonry building with an active furnace located outside the colony not far from the water (13 m away) brings to mind an almost-forgotten trial industry attempted at Ferryland in the earliest years of settlement that is known from historical records: salt making. In 1621 Edward Wynne requested that the sending of a "salt pan" (for boiling down salt water to extract salt) be deferred one year (Wynne 1982:253–257). A lone salt maker, John Hickson, arrived in July 1622 and the "salt work" was near completion (Wynne 1623a). By mid-August limited production was underway, for Hickson had produced "a barrel of the best salt that ever my eyes beheld" (Wynne 1623b). Considering that excavations have revealed no trace of the 1622 saltworks inside the 4-acre village, and that this kind of activity was conducted on a small-scale trial basis by one individual, Feature 217 may yet be a viable candidate. With only half the structure uncovered thus far, many more discoveries await, as does the possibility that Feature 217 could have served multiple functions over its short lifespan.

For 2 weeks in 2018 we shifted our efforts to investigate the late-17th- to early-18th-century domestic deposit at Area J, located on a gently sloping hillside some 30 m south of Area D. Evidence for occupation on this part of the site lay in stark contrast to that of Feature 217. Here, a rich midden deposit contained thousands of ceramic, clay tobacco pipe, glass, and iron fragments, along with an assortment of items of personal adornment that strongly point to a domestic occupation; yet no structural remains have been found, save the occasional brick fragment or fire-cracked rock. The previous excavation from 2017 (a 2 x 5 m N-S trench) was extended east by 1 m, followed by a preliminary magnetic susceptibility/conductivity survey conducted by MUN graduate student Allan Wolfrum. Allan was generous enough to volunteer his time and instrument before heading to Labrador for summer field research in Sheshatshiu. Unfortunately, neither the expanded excavation nor the noninvasive survey were successful in locating in situ structural remains. One area of potential interest 6 m west of the 2017 excavation trench was identified during the magnetic susceptibility/conductivity survey; however, subsurface testing proved negative.

The results of the 2018 excavation in Area J bear further discussion, as work in the area continues to refine our understanding of those who lived here. As in 2017, the midden deposit consisted primarily of large pieces of ceramic, glass, and clay tobacco pipe, some of which can only be dated to within several decades. Several links from a copper chain, a large amber bead, and a silver-plated finger ring with an undecipherable inscription etched on its interior surface continue to demonstrate the former residents' predilection for objects of adornment. A copper thimble further hints at domesticity in the form of sewing activities (Figure 5). The most notable artifact from Area J, a glass bottle seal bearing the name "John Dennis," was unfortunately found in a questionable context under a large boulder at the intersection between the midden and an overlying plowzone layer (Figure 6). Research into John



FIGURE 5. Artifacts recovered from the late-17th- to early-18th-century deposit in Area J. Top left to bottom right: silver-plated finger ring; amber-colored glass bead; copper thimble; copper chain links corroded onto an iron 'nail.'



FIGURE 6. "John Dennis" bottle seal found in Area J.

Dennis is still ongoing, but the name is not recorded among known residents of Ferryland from the 17th or 18th century. In all likelihood Dennis was someone of note, possibly a prominent Newfoundland planter or even the captain of a fishing, merchant, or naval vessel plying the waters around the Avalon Peninsula.

As for the ongoing search for a dwelling at Area J, traces of a nearby structure are suggested by a large door hinge recovered from the northernmost unit excavated in 2018. Whether this overturns our previous assertion that the dwelling would be found on a leveled terrace further south can only be answered through continued investigation.

#### Postscript

The copper chain links recovered from Area J (noted above) were adhered to what looked like a corroded iron nail fragment. However, following our standard practice of



FIGURE 7. X-ray image of CgAf-02:765455 showing scissors with chain.

x-raying ferrous metal objects, the 'nail' and copper chain links turn out to be something much more informative (Figure 7). This artifact has been identified as part of a chatelaine (sometimes referred to as an equipage), typically worn by women and hung from the waist. Chatelaines were constructed to support a variety of items, which could include a watch, a pendant case containing sewing tools, scissors, a thimble, a ruler, a pencil, and a miniature pair of compasses, as well as keys, money, or other objects that would have seen daily use. Items were suspended from metal chains, usually made from a copper-tin alloy but also from silver, steel, or gold (Evans 1970:160). The chatelaine came into use during the 17th century in England and was considered to be highly fashionable; however, by ca. 1830 it was worn mainly for utilitarian purposes (Newman 1981:65).

The x-rayed iron object is a pair of fragmented iron scissors. They are small, measuring approximately 12 cm in length if complete. Two finger loops or bows are partially intact, the rivet that connected the scissor blades at the pivot point is visible, and the void between the shanks can be clearly seen through radiography. The copper-alloy chain is concreted to the scissor fragment in numerous areas along the scissor shaft and wrapped around what remains of the finger loops. Where the chain was fastened to the scissors remains unknown. Further conservation will hopefully bring more information to light.

#### Acknowledgements

We would like to thank Sara Rivers Cofield for identifying the ferrous metal object and copper chain links as part of a chatelaine.



## References

Evans, Joan  
1970 *A History of Jewellery, 1100–1870*. Boston Book and Art Publisher, Boston.

Gaulton, Barry and Roby Lacy  
2017 Archaeology at Ferryland 2017. *Provincial Archaeology Office 2017 Annual Archaeology Review*. Stephen Hull and Delphina Mercer eds. Department of Tourism, Culture, Industry and Innovation. Volume 16: 114-117.

Gaulton, Barry and Aaron Miller  
2009 Edward Wynne's *The Brittish India or A Compendious Discourse tending to Advancement* (circa 1630/31). *Newfoundland and Labrador Studies* 24(1):111–137.

Newman, Harold  
1981 *An Illustrated Dictionary of Jewelry*. Thames and Hudson, New York.

Spiwak, Alexa  
2019 "A slator or two": Exploring the 17th-Century Slate Industry at Ferryland. *2018 Provincial Archaeology Office Annual Review 17*, Stephen Hull and Delphina Mercer, editors. Department of Tourism, Culture, Industry and Innovation.

Wynne, Edward  
1623a A Letter to George Calvert dated 28 July 1622. In *A Discourse and Discovery of New-Found-Land*, R. Whitbourne.

Felix Kingston, London.

1623b A Letter to George Calvert dated 17 August 1622. In *A Discourse and Discovery of New-Found-Land*, R. Whitbourne R. Felix Kingston, London.

1982 A Letter to Sir George Calvert dated 26 August 1621. In *Newfoundland Discovered: English Attempts at Colonization, 1610–1630*, G. T. Cell, editor. The Hakluyt Society, London.

**The Avalon Historic Petroglyph Project (2018)** (*submitted by Barry Gaulton, Bryn Tapper, Donna Teasdale, and Duncan Williams, all Memorial University*): This report discusses the preliminary findings of the Avalon Historic Petroglyph Project, the goals of which center on the recording, interpretation, and preservation of historic graffiti and other parietal art on Newfoundland's Avalon Peninsula. Three sites were investigated during spring/fall of 2018: one in an undisclosed location in Conception Bay North, and two along the eastern shore of the Avalon Peninsula, at Fermeuse and Brigus South. Below we highlight the survey, computational photography, and conservation techniques used in the recording of these sites, as well as our current thoughts on who made them, when, and what they represent.

The Conception Bay North petroglyph (hereafter referred to as CBN 1) came to our attention in fall 2017. A local resident informed us of a lichen-covered inscription inside a small cave-like crevice in the hillside behind a community in Conception Bay North. Recent cleaning of the area around the inscription revealed a small yet stunning series of glyphs including two anthropomorphs and one zoomorphic figure (Figure 1). Based upon the photographs provided, our team set into motion a plan to document and analyze elements of the petroglyphs in 2018 using both photogrammetry and Highlight-Reflectance Transformation Imaging (H-RTI) (Duffy et al. 2013; Mudge et al. 2012). The former technique enabled us to produce accurate, high-resolution 3-D surface models of the rock surface on which the petroglyphs were engraved, as well as to record detailed measurements of the dimensions and morphology of individual components. H-RTI allowed us to generate a series of images of the same subject, but with varying highlights and shadows that reveal surface detail and information not visible or clear under normal light conditions.



FIGURE 1. Photograph taken in 2017 of petroglyphs from Conception Bay North. (Photo courtesy of unnamed local resident.)

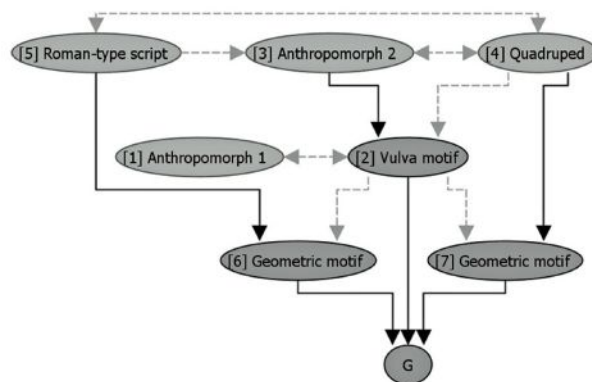
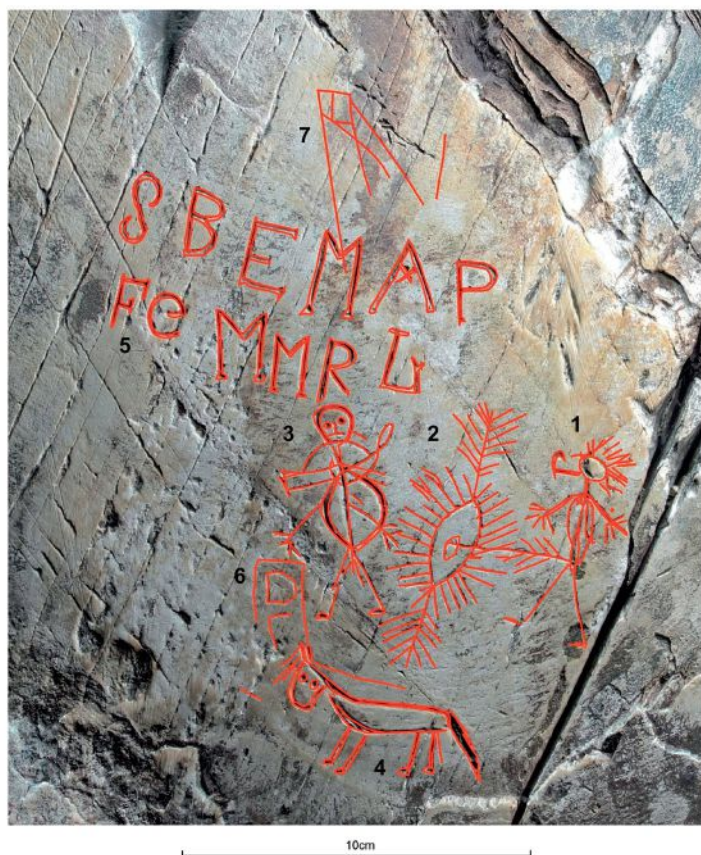


FIGURE 2. Line-drawing interpretation of the CBN 1 petroglyphs (left) and inferred sequence of carving where “G” is the rock surface (right). (Images courtesy of Bryn Tapper.)

The enhanced legibility of surface relief afforded by photogrammetry and H-RTI provided a means to analyze faint details of individual glyphs, enabling the identification of the manufacturing technique as well as the stratigraphic relationships where petroglyphs overlap. The results show the CBN 1 petroglyphs having been incised using a metal tool—likely the point and edge of a small knife. The relative sequence of carving and the relationship between glyphs appears to begin with two faint geometric motifs in the upper and lower parts of the panel, followed by a vulva motif and ithyphallic anthropomorph, which together form what can best be described as a symbolic copulation scene (Figure 2). Respecting this paired scene, and at a slightly different angle, the second anthropomorph and underlying quadruped appear to have been laid down next, followed by the Roman-type script, which changes direction to avoid the second anthropomorph. The possible meanings of the glyphs and script are still being deciphered; however, based upon the isolated location of the site, the size of the glyphs, and especially the close similarities between the morphological traits of the script and motifs, they may have been carved by a single individual in a short period of time.

They also appear to tell a story. One possible interpretation is that the central motifs form a life-and-death scene, with the copulation motif to the right and a floating corpse-like figure rising above or leaving the body of the anthropomorph to the left. A second, related theory pertains to the stages of

copulation, pregnancy, and birthing.

A comparison of the CBN 1 petroglyphs to both European and Indigenous North American rock art places these motifs firmly within an Algonquian tradition. Numerous examples of the vulva and ithyphallic motifs, either shown separately or together in association, are found in the pre- and postcontact rock art of Algonquian-speaking peoples from Eastern Canada and New England, including in the famous corpus of Middle–Late Woodland petroglyphs known from Peterborough, Ontario (Lenik 2002; Vastokas and Vastokas 1973). Regionally, similar compositions are recorded in the pre- and postcontact rock art of eastern Maine and from the historic-period Mi’kmaq petroglyphs at Kejimkujik Lake and Bedford Barrens in Nova Scotia (Hedden 1985, 1989; Molyneaux 1984; Whitehead 1992).

As for when the CBN 1 petroglyphs were carved, all evidence points to an Indigenous inscription from the historic period. The 1697 or 1705 incursions by French and Wabanaki forces into English settlements in Conception Bay are one possible explanation, as the cave where the petroglyphs were carved could have served as a small shelter during either of these winter campaigns. Independent skirmishes by Mi’kmaq warriors into Conception Bay after 1706 provide another possibility (Martijn 2003:73–74). Even a 19th-century carving is not out of the question. Given the current uncertainty, plans are underway to excavate inside the cave-like crevice in the hopes that datable material may be found. The date,



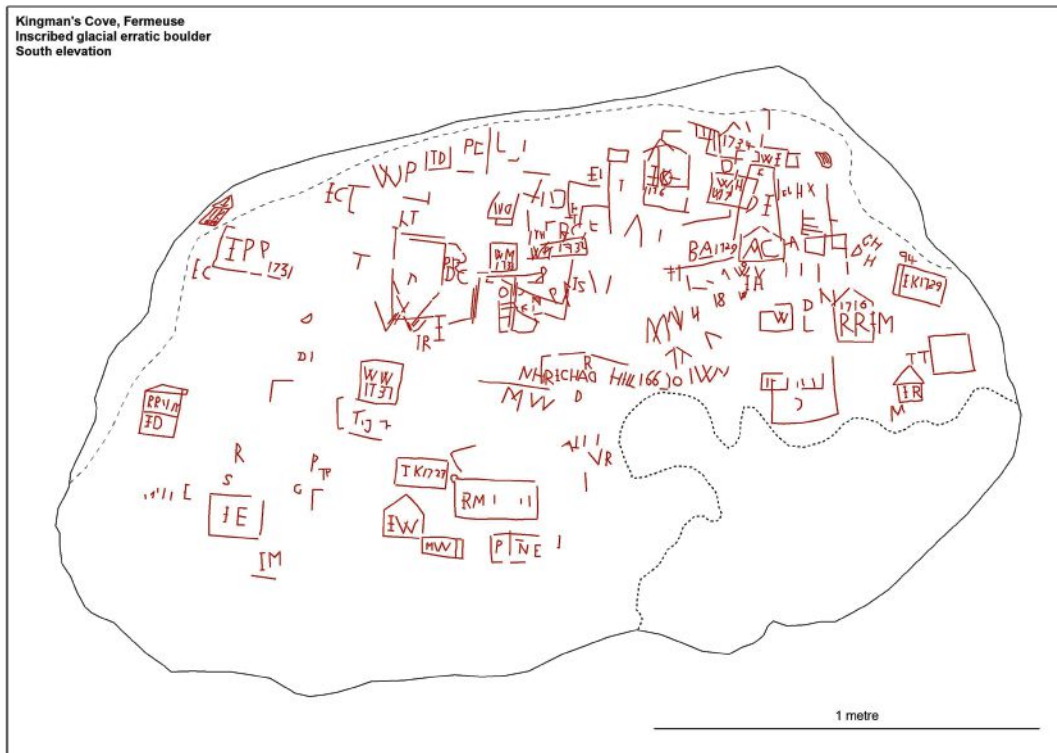


FIGURE 3. Line-drawing interpretation of the Kingman's Cove boulder. (Image courtesy of Bryn Tapper.)

nevertheless, is of secondary importance compared to its cultural attribution. If our preliminary interpretations hold true, then CBN 1 is the first Indigenous petroglyph found on the island of Newfoundland.

The techniques employed at CBN 1 were also used at Kingman's Cove on the south side of Fermeuse Harbour. A large glacial erratic situated on an elevated slope 300 m south of the water's edge was first brought to the attention of Dr. Peter Pope in 1986, and again in 2002 with the assistance of local residents (Pope 2003:14). At the time of Pope's recording, many historic inscriptions were visible on the south and east faces of the rock, and their approximate spatial relationships noted. Revisiting the site some 16 years later, our first tasks involved the acquisition of more-accurate GPS coordinates and the cutting back of surrounding overgrowth to facilitate closer inspection, photogrammetry, and H-RTI.

The surface model produced of the south face of the boulder shows the precise placement, size, and even stratigraphic relationships between dozens of different inscriptions, thus providing a much more detailed and accurate representation (Figure 3). Consider, for example, the "Marshall Hill" inscription first recorded in 2002. Photogrammetry revealed not only that the name was Richard Hill (not Marshall Hill), but that the spelling of the given name was corrected with the subsequent addition of a second "R" between, and slightly above, the letters "A" and "D."

H-RTI on selected areas of the inscription-strewn boulder produced evidence for carefully rendered carvings such as the 1684 IK petroglyph first sketched in 2002. The anchor at the top of the inscription is a nautical theme clearly fitting in with the maritime economy and way of life of early modern

Newfoundland (Figure 4). This particular example—as well as other house-like glyphs containing initials and dates spanning into the latter decades of the 18th century—are of interest for their close similarities to church graffiti recorded in various parts of England, and cautiously interpreted by graffiti scholar Matthew Champion as memorials to the dead (Champion 2015:202–203). Given the secular location and context of the Kingman's Cove inscriptions, an alternative interpretation can be proposed.

Perhaps these carefully bounded and dated inscriptions can be viewed as a form of place making, whereby this prominent rock feature is transformed into a communal monument. The key to

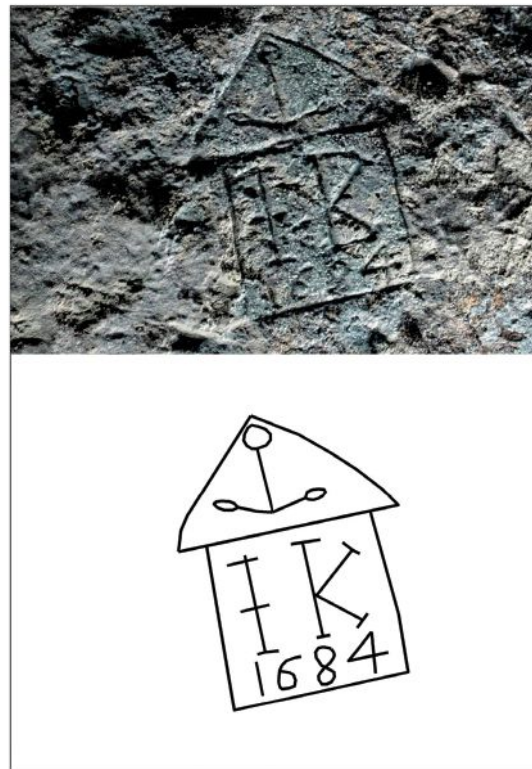


FIGURE 4. "IK 1684" inscription artificially lit using the H-RTI technique (top) and line-drawing interpretation (bottom). (Image courtesy of Bryn Tapper.)





FIGURE 5. Photograph of Brigus South inscriptions. (Photo courtesy of Barry Gaulton.)

understanding this idea lay in the fact that the Kingman's Cove rock is situated along an old historic footpath between the communities of Fermeuse and Renewes. As a waypoint or "half-way rock," this glacial erratic is where settlers and seasonal visitors alike may have stopped for a rest,

and sometimes marked their presence/passage before traversing the rest of the distance for the purposes of business or pleasure. In 1666 Plymouth surgeon James Yonge described his weekly journey from Renewes to Fermeuse, possibly using the very same footpath (though no mention is made of the Kingman's Cove boulder): "Every week I went over once, and my companion once. The walk was through the woods and two marshes. I used to leave a bottle of brandy hid behind a tree, which I would mark, and take a dram on my way" (in Poynter 1963:56).

The final site discussed in this report is in Brigus South, 16 km north of Fermeuse. The historic petroglyph is accessible via a footpath roughly 1 km south of the modern community and is carved atop a shale outcrop jutting out into the water. Just like the other two sites, local residents informed us of the inscriptions. A quick visual inspection immediately draws your attention to the name "Michael Gregory," the place name "Brigus South," the date "April 3rd 1879," a partially preserved two-masted ship, and the word "Devon" (Figure 5). The small size and near-horizontal orientation of these inscriptions allowed for a relatively straightforward recording, compared to that of the other two sites.

H-RTI revealed additional faint inscriptions, dates, and

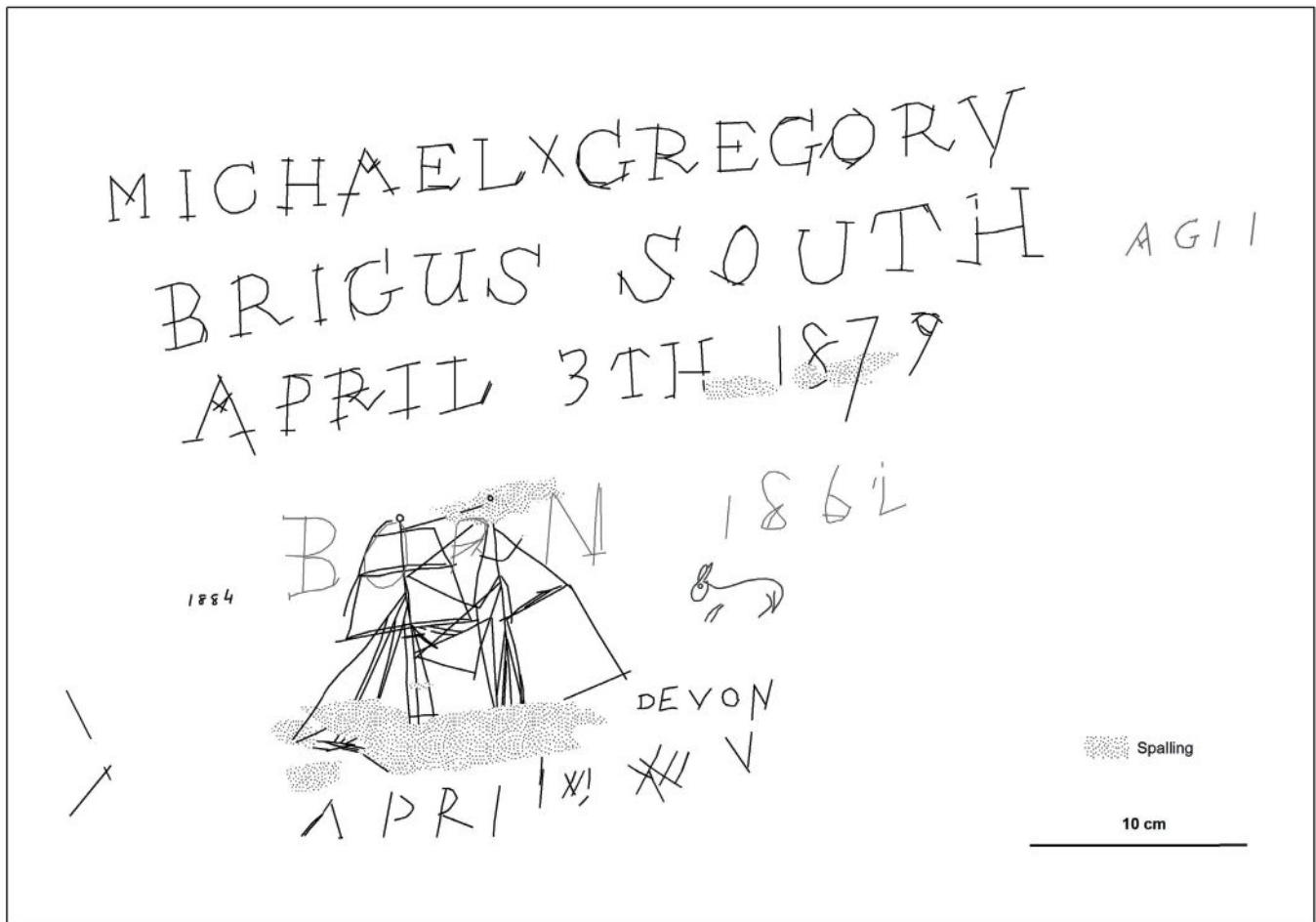


FIGURE 6. Line-drawing interpretation of the Brigus South inscriptions following photogrammetric and H-RTI analysis. (Image courtesy of Bryn Tapper.)

even a small hare/rabbit in the right corner of the panel (Figure 6), suggesting at least two different episodes of carving, starting with the Michael Gregory inscription and followed by the two-masted brigantine and 1884 date. The relationship between the Michael Gregory inscription and that of the hare and Devon place name, however, are still unclear.

Records from the 19th and early 20th century list several Brigus South residents named Michael Gregory: one is listed as a fisherman in 1870, another is recorded as having died at 22 years of age in 1887, and a third is enumerated in 1921 as a head of household. That this third Michael Gregory and the one who carved his name on the rock are one and the same can be clearly demonstrated by the fact that the 1921 census also lists his date of birth (born 1861) and his month of birth (April). From these details we can connect the historic inscription to the 18-year-old Michael Gregory, who may (or may not) have been born in Devon, but who certainly made his mark on this rock outcrop on 3 April 1879, almost 140 years ago.

Despite its relatively recent age, the Brigus South inscriptions also bore the most evidence of spalling damage due to freeze/thaw action of the three sites investigated. Therefore, an additional recording method was brought to bear in the form of a silicone cast. This involved the application of a release agent and the construction of a barrier wall using potter's clay around the area of the inscription to contain the poured silicone rubber. After 16 hours of cure time at 20°C, the finished product produced similarly detailed results to that of H-RTI, but with the added bonus that this silicone cast will be donated to the Brigus South Heritage Society for display next summer.

To conclude, we hope that the results of this ongoing research will serve as a springboard for the further examination of historic graffiti and parietal art throughout Newfoundland and Labrador, as well as an example of how techniques such as photogrammetry and H-RTI can greatly assist in both analysis and interpretation.

### Acknowledgments

First and foremost, we would like to thank the Provincial Archaeology Office, Department of Tourism, Culture, Industry and Innovation for supporting this nascent project. The unnamed resident of Conception Bay North (you know who you are!) and Ian Gillies from Brigus South also deserve special thanks for bringing these sites to our attention. We would like to acknowledge the previous work of Dr. Peter Pope, who conducted a preliminary survey and recording of several sites in Fermeuse Harbour, including that of Kingman's Cove. Finally, Sanford Flemming College Cultural Heritage Conservation and Management Intern Joshua Forth assisted with all stages of the silicone casting of the Brigus South inscriptions, for which we are very grateful.

### References

Champion, Matthew  
2015 *Medieval Graffiti*. Ebury Press, London.

Duffy, Sarah, Paul Bryan, Graham Earl, Gareth Beale, Hembo Pagi, and Eleni Kotouala  
2013 *Multi-light imaging for heritage applications*. English Heritage, Swindon.

Hedden, Mark  
1985 Sexuality in Maine petroglyphs. *Maine Archaeological Society Inc. Bulletin* 25(1):3–9.

Hedden, Mark  
1989 Petroglyph Evidence for a Possible 19th Century Survival of Algonkian (Passamaquoddy) Shamanism in Eastern Maine. *Maine Archaeological Society Inc. Bulletin* 29(1):21–28.

Lenik, Edward J.  
2002 *Picture Rocks: American Indian Rock Art in the Northeast Woodlands*. University Press of New England, Hanover and London.

Martijn, Charles  
2003 Early Mi'kmaq Presence in Southern Newfoundland: An Ethnohistorical Perspective, c. 1500–1763. *Newfoundland Studies* 19(1):44–102.

Molyneaux, Brian Leigh  
1984 *An Analysis and Interpretation of the Micmac Petroglyphs of Kejimikujik National Park* (3 Vols.). Parks Canada, Nova Scotia.

Mudge, Mark, Carla Schroer, Tommy Noble, Szymon Rusinkiewicz, and Corey Toler-Franklin  
2012 Robust and Scientifically Reliable Rock Art Documentation from Digital Photographs. In *A Companion to Rock Art*, J. McDonald and P. Veth, editors, pp. 644–659. Blackwell Publishing Ltd., Somerset, NJ.

Pope, Peter  
2003 *Fermeuse Area Survey, 2002*. Final report to Archaeology Office, Province of Newfoundland and Labrador. Waterfront Archaeology Project, MUN, St. John's.

Poynter, F. N. L.  
1963 *The Journal of James Yonge (1647–1721)*. Longmans, London.

Vastokas, Joan, and Roman Vastokas  
1973 *Sacred Art of the Algonkians: A Study of the Peterborough Petroglyphs*. Mansard Press, Peterborough, ON.

Whitehead, Ruth Homes  
1992 A New Micmac Petroglyph Site. *The Occasional* 13(1):7–12.



## Canada - Prairie & Arctic



FIGURE 1. Whale bone at Svalbard. (Photo courtesy of Union of Concerned Scientists.)

### Rapid Warming Is Creating a Crisis for Arctic Archaeology

(by Adam Markham, Deputy Director, Climate and Energy Program; Blog Post, Union of Concerned Scientists, <https://blog.ucsusa.org/adam-markham/rapid-warming-is-creating-a-crisis-for-arctic-archaeology>): There are at least 180,000 archaeological sites in the Arctic. Many are already being lost to climate change—virtually all of them are vulnerable. A new study by an international group of archaeologists and experts (including from the National Park Service and UCS) and published in *Antiquity Journal* provides the first synthesis of climate threats to the Arctic region's unique archaeological record. The cold and wet conditions in the Arctic have resulted in extraordinary preservation of organic materials such as bone, fabrics, animal skins, and wooden tools for hundreds or thousands of years. But the Arctic is warming twice as fast as the global average, and the changing conditions are proving disastrous for many archaeological sites.

Working in Greenland, Jørgen Holleson (lead author of the new study and an archaeologist at the National Museum of Denmark) has demonstrated at Qajaa in West Greenland that warming soil temperatures and changes in soil moisture are accelerating microbial decay of organic archaeological materials. Also according to Holleson, at some Thule Culture grave sites in southern Greenland, where organic remains including mummies, kayaks, and hunting implements were present as late as the 1970s, recent field work has revealed that little or no organic material still remains.

Coastal erosion is washing away our heritage

Perhaps the most urgent issue in Arctic archaeology is that of coastal erosion. Permafrost thaw, changes in the freeze/thaw cycle, and wave action during storms are combining

to accelerate erosion processes. The loss of seasonal sea ice, which protects the coastline from winter storms in some parts of the Arctic, is also a major factor.

On Alaska's North Slope, co-author Anne Jensen is engaged in a major rescue effort at Walakpa to study and document the archaeology of land occupied by semisedentary Alaskan Natives for at least 4,000 years, which is eroding alarmingly rapidly, taking with it structures, artifacts, and graves. Severe erosion is also wiping out archaeological sites on the East Siberian Sea coast and in North Western Canada where the most important sites of the aboriginal inhabitants, the Inuvialuit, are endangered. "We're losing the history of large areas of Canada" study co-author, Max Friesen of the University of Toronto, told the *Globe and Mail*. The site of Nuvugaq on the Mackenzie

River delta, for example, where 17 large houses and a communal structure used by an Inuit bowhead hunting group known as the Nuvugarmiut, which was first reported from the Franklin Expedition in 1826, has already been completely washed away due to thawing permafrost and storms.

A 2016 photo of the remains of a large Inuvialuit house on the Tuktoyaktuk Peninsula on Canada's Beaufort Sea coast, which has since been completely washed away. Photo: Max Friesen.

Loss of sea ice, tundra fires, and uncontrolled development Also directly threatening archaeological sites in the Arctic are worsening tundra fires and the spread of shrubby



FIGURE 2. A 2016 photo of the remains of a large Inuvialuit house on the Tuktoyaktuk Peninsula on Canada's Beaufort Sea coast, which has since been completely washed away. Photo: Max Friesen.



## Canada - Québec

### Archeolab.quebec: An Open Window on an Archaeological Reference Collection and on the Archaeology of Québec

*A project by Pointe-à-Callière, Montreal's archaeology and history complex, in partnership with Québec's Ministry of Culture and Communications*

During the last half-century, archaeology has assumed an increasingly prominent place in Western society. More intensive regional programs of research and mitigation have led to more precise knowledge about the past and a

vegetation as temperatures warm. Additionally, loss of sea ice in the Arctic is opening the region to more shipping traffic, military activity, and industrial and urban development. It is also enabling increased tourism, including on larger cruise ships. The potential for uncontrolled tourism development causing damage to archaeology in a warming Arctic is very real. Tour companies will likely seek new landing areas for small boats carrying more visitors into fragile areas in the high Arctic, and in parts of the region there is expected to be increased pressure from tourists walking on sites, camping, and using motorized vehicles.

Treasure hunting and looting of archaeological sites is also becoming a more serious problem with warming. Co-author Vladimir Pitulko of the Russian Academy of Sciences has documented "mining" of mammoth ivory at important "kill sites" in Siberia, where poachers use high-pressure pumps to extract ivory from the thawing ground to sell on the black market. The increased numbers of tourists in the Arctic means that more people are able to casually pick up and keep (often illegally) artifacts they find eroded from coastal sites or melting ice patches and glaciers. And increased storm damage and erosion means that more artifacts are emerging.

A rapid assessment is needed to prioritize actions. In the face of unprecedented changes to the Arctic environment, the study authors argue that there is an urgent need to rapidly assess the vulnerability of key Arctic archaeological sites and develop strategies for prioritizing the use of scarce resources most effectively. With every storm, important archaeological remains are being washed into the ocean, whilst throughout the region organic materials are being rapidly lost to decay in warming soils after being preserved for centuries. Undoubtedly the assessment that there are 180,000 archaeological sites in the Arctic is an underestimate, and many important sites are likely to be lost or damaged before they have even been recorded. The impact of climate change on Arctic archaeology represents a catastrophe for world heritage, and one that requires urgent mitigation and adaptation action to respond to the scale of the crisis.

*This article is reprinted with permission from the Union of Concerned Scientists. <https://www.ucsusa.org/>*

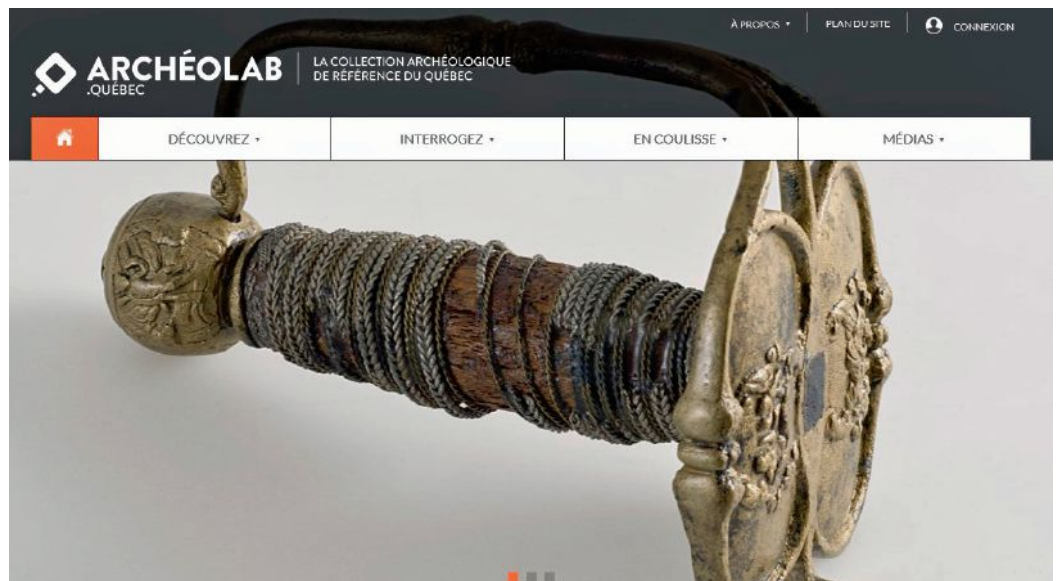


FIGURE 1. Home page of Archeolab Québec. <https://www.archeolab.quebec/>.

growing number of collections demanding management and curation. Paradoxically, in light of their scientific and heritage values, these collections often remain understudied and somewhat inaccessible. In the province of Québec, this heritage represents 12,000 years of human occupation, some 10,000 recorded sites, and deserves better understanding and appreciation nationally and internationally. This is why Pointe-à-Callière, Montréal's archaeology and history complex, partnered with Québec's Ministry of Culture and Communications to create a digital archaeological reference collection and a platform of dissemination to highlight the province's archaeological heritage and the archaeological discipline in Québec more generally. This initiative, financed by the Plan culturel numérique du Québec, brings together a diversity of experts and promotes the development of new fields of expertise. The collection is composed of material culture representing the entirety of the province's cultural periods and its regional diversity. The platform Archeolab.quebec ([www.archeolab.quebec](http://www.archeolab.quebec)) enables Québec archaeology to enter the digital age and thus contributes to the quality and diversity of cultural content available



FIGURE 2. This page lets you explore the Archeolab Québec collections. <https://www.archeolab.quebec/>.

online. This initiative responds to demands for information, research, stewardship, and dissemination from agents of cultural management, but also to imperatives related to education, popular culture, and curiosity from the general population.

#### *Introducing the Collection archéologique de référence du Québec (CARQ)*

The creation of an archaeological reference collection in digital format is a structuring project that holds the potential of improving knowledge of the province's archaeological collections and acknowledgement of its cultural heritage.

This digital collection carries a global vision of Québec's cultural past. Many of the artifacts, documented by specialists in material culture, are selected from the provincial collection curated by the Laboratoire et Réserve d'archéologie du Québec (LRAQ). It also incorporates a body of objects housed in a variety of other institutions: museums, universities, and regional and municipal administrations, as well as private collections, insofar as their archaeological origins are known. Therefore, it brings together, in a single digital location, collections hitherto decentralized and difficult to access. The data and contexts associated with these objects are also verified and updated according to the contemporary state of knowledge.

The artifacts selected to constitute the CARQ are assembled thematically, whether by typological groupings (glass bottles, Euro-Canadian earthenware, projectile points, etc.) or coherent contextual groupings (Fort Ville-Marie, Elizabeth and Mary shipwreck, the Basques in North America, etc.), appropriate for browsing. The entire collection is supported by a powerful and flexible search engine that transcends the different groups.

#### *What is the platform Archeolab.quebec?*

Archeolab.quebec's basic objective is the promotion of knowledge of Québec's archaeological collections. In addition, it constitutes a tool that fosters education and professional development in archaeology. Thanks to the online availability of the reference collection, professionals in cultural resource management and the public at-large have access to artifact data, their detailed descriptions,

and their contexts, as well as to high-quality photographs.

The province's cultural chronology and diversity of contexts are highlighted by features such as video clips, thematic chronicles, and an interactive cultural timeline (in development). Media documents, produced in collaboration with professionals from the Centre de Conservation du Québec (CCQ), also promote preventative conservation of artifacts. In addition to practical tutorials on field or laboratory archaeological work (artifact photography, manipulation, etc.), other little-known but essential aspects of the discipline are addressed (collaboration with Indigenous peoples, legal issues in heritage conservation and archaeological work, etc.).

Archeolab.quebec also features a playful "favorites" section, an expanding thematic bibliography, and a pedagogical tool kit soon to be available to educators for effective use of the collection in the classroom. In sum, the dissemination platform broadcasts Québec's archaeological collections nationally and internationally, contributing to the exchange of knowledge and networks between students and research professionals across nations.

#### *Who is Archeolab.quebec's audience?*

The platform's diverse and exclusive original features and its reference collection will be useful for heritage professionals (researchers, technicians, professors, students, museum curators, managers, and civil servants), or simply for anyone interested in history, archaeology, and material culture. It is simultaneously a rigorously documented database and a portal highlighting artifacts as well as diverse components of Québec archaeology. Although it is at this point only in French, we hope the collection becomes an essential comparative resource for the archaeology of northeastern North America and of the European colonies.

In Québec, as in other regions, archaeology is still a young discipline. As it gains in maturity, it is essential to take advantage of the fantastic technological tools at our disposal and engage in widespread diffusion of the knowledge constructed over the last decades.

Archeolab.quebec and the Collection de référence du Québec are constantly evolving, collaborative products. Hundreds of additional artifacts and exclusive features will be regularly uploaded through the fall of 2020.

Follow us on <https://www.facebook.com/archeolab.quebec/>!

#### **Archéolab.québec: Fenêtre Ouverte sur une Collection Archéologique de Référence et sur L'archéologie au Québec**

Projet réalisé par Pointe-à-Callière, cité d'archéologie et d'histoire de Montréal en collaboration avec le Ministère de





FIGURE 3. *Faïence vessels conserved at the Laboratoire et Réserve d'archéologie du Québec (LRAQ). Faïences conservées au Laboratoire et Réserve d'archéologie du Québec (LRAQ).* © Pointe-à-Callière 2018, Aurélie Desgens 2018.

la culture et des communications du Québec (MCC).

Depuis les cinquante dernières années, la place de l'archéologie a grandement évolué. L'intensification des interventions et des connaissances amène une augmentation sans précédent d'informations et une accumulation importante des collections. Celles-ci ont une grande valeur patrimoniale, scientifique et documentaire, mais elles demeurent difficilement accessibles, sous-exploitées et méconnues. Ce patrimoine qui nous renseigne sur 12 000 ans d'occupation humaine du territoire québécois mérite d'être mieux compris et valorisé à l'échelle nationale et internationale. C'est pourquoi Pointe-à-Callière, cité d'archéologie et d'histoire de Montréal en partenariat avec le ministère de la Culture et des Communications du Québec (MCC), pilote la création d'une collection archéologique de référence et d'une plateforme de diffusion, afin de mettre en valeur le patrimoine et la discipline archéologique du Québec. Cette entreprise, financée dans le cadre du Plan culturel numérique du

Québec, met à contribution les forces vives de l'archéologie québécoise et favorise le développement de nouvelles expertises. La collection, disponible virtuellement, rassemble des corpus représentatifs de l'ensemble des occupations culturelles du Québec et de ses variantes régionales. La plateforme Archéolab.québec ([www archeolab.quebec](http://www archeolab.quebec)) permet à l'archéologie québécoise de s'inscrire dans l'ère numérique et ainsi de contribuer à la qualité des contenus culturels disponibles en ligne. Cette initiative répond aux besoins d'information, de recherche et de diffusion des acteurs de l'archéologie, mais aussi aux besoins d'éducation, de culture et de loisir des Québécois.

*Qu'est-ce que la Collection archéologique de référence du Québec (CARQ)?*

La création d'une collection archéologique de référence et sa mise en ligne sur Archéolab.québec est un projet structurant qui a tout le potentiel d'améliorer la connaissance et la reconnaissance des collections archéologiques du Québec.

Cette collection numérique apporte une vision globale du passé culturel du Québec. Les objets sélectionnés et documentés par les spécialistes sont issus principalement des collections de l'État conservées au Laboratoire et à la Réserve d'archéologie du Québec (LRAQ). Elle incorpore également des corpus d'objets conservés dans les musées, dans les universités et au sein des administrations régionales ou municipales du Québec de même que des collections privées. Nous regroupons ainsi à une même enseigne des collections auparavant décentralisées et difficiles d'accès. Les informations liées à ces objets sont aussi vérifiées et mises à jour dans un effort de renouvellement des connaissances.

Les artefacts sélectionnés pour constituer la CARQ sont présentés sous forme de corpus thématiques, qu'il s'agisse de regroupements typologiques (Bouteilles à boissons alcoolisées, Céramiques euro-américaines, Pipes en pierre, Pipes en terre cuite fine, Monnaies et jetons, Pointes de projectiles, Céramiques du Sylvicole, Perles de verre, Faïences, Bagues dites « jésuites ») ou de regroupements



FIGURE 4. *Glass beads conserved at the Laboratoire et Réserve d'archéologie du Québec (LRAQ). Perles de verre conservées au Laboratoire et Réserve d'archéologie du Québec (LRAQ).* © Pointe-à-Callière, Julie Toupin et Émilie Deschênes 2018.





FIGURE 5. Create your own personalized selection with this page. Save your favorite artifacts and create thematic lists. <https://www.archeolab.quebec/>.

contextuels (Fort de Ville-Marie, Palais de l'intendant à Québec, Épave de l'Élisabeth & Mary, Basques en Amérique du Nord). L'ensemble est soutenu par un moteur de recherche flexible et efficace permettant de transcender les différents corpus.

*En quoi consiste la plateforme Archéolab.québec?*

Archéolab.québec vise à promouvoir le développement des connaissances sur les collections archéologiques du Québec, en plus de constituer un outil qui puisse favoriser l'émulation, la formation de la relève en archéologie et le développement des compétences professionnelles. Grâce à la mise en ligne de la collection de référence, les intervenants du milieu professionnel ainsi que le grand public ont maintenant accès à des artefacts à distance, accompagnés de fiches techniques et de photographies de haute qualité.

La séquence et les contextes d'occupations culturelles du Québec sont aussi mis en valeur avec des capsules vidéo, des chroniques écrites et une ligne du temps interactive (à venir). Des documents visuels et écrits, produits en collaboration avec les experts du Centre de Conservation du Québec (CCQ), visent également à promouvoir la conservation préventive (La conservation des artefacts : une question d'équilibre ; Le nettoyage des artefacts : une opération délicate ; Comment retrouver un artefact dans une concrétion métallique, etc.). En plus de tutoriels pratiques pour l'archéologue sur le terrain ou en laboratoire (Comment réussir ses photographies d'artefacts ; Comment manipuler les artefacts, etc.), différents aspects méconnus, mais essentiels de la discipline sont abordés (Comment collaborer avec les communautés autochtones ; Comment protéger le patrimoine archéologique : l'éthique du collectionneur).

Archéolab.québec c'est aussi des Coups de cœurs amusants, une bibliographie scientifique évolutive ainsi que des outils pédagogiques qui seront bientôt offerts aux enseignants pour une utilisation efficace de la collection archéologique en classe. En somme, la plateforme de diffusion favorise le rayonnement des collections archéologiques du Québec à l'échelle nationale et internationale, ce qui contribue à encourager les échanges de connaissances entre les chercheurs d'ici et de l'étranger.

*À qui s'adresse Archéolab.québec ?*

Les divers contenus inédits de la plateforme ainsi que la collection de référence seront utiles aux usagers professionnels (chercheurs, techniciens, professeurs,

étudiants, muséologues, gestionnaires et autres acteurs concernés par le patrimoine archéologique à l'échelle nationale et internationale), aux passionnés d'histoire et d'archéologie, aux étudiants ainsi qu'au grand public. Il s'agit à la fois d'une base de données rigoureusement documentée et d'un portail de mise en valeur des artefacts et de l'archéologie du Québec. La collection peut devenir une ressource comparative essentielle pour l'archéologie du Nord-est nord-américain et de l'univers colonial européen.

Au Québec, comme dans bien d'autres régions, l'archéologie est une discipline jeune. Alors qu'elle atteint sa maturité, il est impératif de tirer avantage des extraordinaires moyens technologiques mis à notre portée pour se pencher sur la diffusion des connaissances acquises au cours du dernier demi-siècle.

Archéolab.québec et la Collection archéologique de référence du Québec sont des produits collaboratifs, en constante évolution. Des centaines d'artefacts et des contenus inédits seront régulièrement ajoutés jusqu'à l'automne 2020!

Suivez-nous sur <https://www.facebook.com/archeolab.quebec/>!

## Latin America

### Argentina

**Nineteenth-Century Shipwrecks and Marine-Resource Exploitation along the Coast of Patagonia, Argentina** (submitted by Mónica Grosso and Cristian Murray, Programa de Arqueología Subacuática (PROAS), Instituto Nacional de Antropología, Argentina): More than a decade ago some shipwreck remains were found on the intertidal zone of a beach in Puerto Madryn, Chubut province, Argentine Patagonia. The first surface surveys were carried out in two areas with wooden structural remains—BG1 and BG2—located 100 m apart from each other. They were named "Bahía Galenses" (BG)—Welsh Bay—according to an old place name, since this is the inlet where Welsh settlers landed in 1865.

These discoveries were possible due to the erosion of the beach, probably caused by the progressive removal of the dunes as a result of urban development in the area. Sometime later more remains—BG3—were located in shallow water, 150 m from BG1.

Partial excavations carried out on BG1 and BG2 revealed that they were part of the hull of the same wooden vessel. Based on the type and dimensions of structural components and fasteners and building characteristics, it was suggested that this was a sailing vessel, 30 m in length and between



FIGURE 1. Recording of structural features on BG1.



FIGURE 2. A trench excavated in the middle sector of BG2 allowed for a detailed record of construction characteristics. Afterwards, a scale model was made in order to study some construction features and understand the building sequence.



FIGURE 3. Underwater excavations on BG3. One of the try-pots can be seen clearly next to the archaeologist.

300 and 500 tons, built in the 19th century. Anatomical analysis of wood samples showed the use of *Quercus* sp. (oak) for frames, *Pinus caribaea* (Caribbean pine) for ceiling and planking, and *Robinia pseudoacacia* (black locust), for treenails.

Until that moment, BG3 was just a convex iron object partially buried in the sediment. It was not long before we thought that it could be a try-pot, one of the large cauldrons used aboard whaling ships to render oil from the blubber.

At the end of 2018, archaeological excavations began on BG3 and this hypothesis was confirmed. The try-pot is upside down, and seems to be in good condition. Its largest diameter is of 125 cm, with one side flat. Next to it was found another pot, which was partially broken and buried. The excavation area also revealed a number of bricks, some with mortar attached to them, iron concretions (x-ray examination revealed nails and bolts inside), rope fragments, a wooden block with rope, and a probable mooring hawsepipe. This evidence is consistent with the presence of a tryworks, the furnace built of bricks where the try-pots were placed, which was located on the main deck of whaling ships. Nearby the excavation area, a 5 m long segment of a wooden keel was also identified.

Taking into account the dispersion that BG1–2–3 reached, and the local tidal range (5 m), it is highly probable that more remains of the shipwreck are scattered in the area and are still buried below the sediment.

So far the only known historical data on the wreck of a ship with these characteristics in the area concerns the American bark *Dolphin*, of 325 tons, built in Warren, Rhode Island, USA. She was a whaling ship that sank in this area in 1859. Future research will allow us to confirm this identification and also obtain further information about

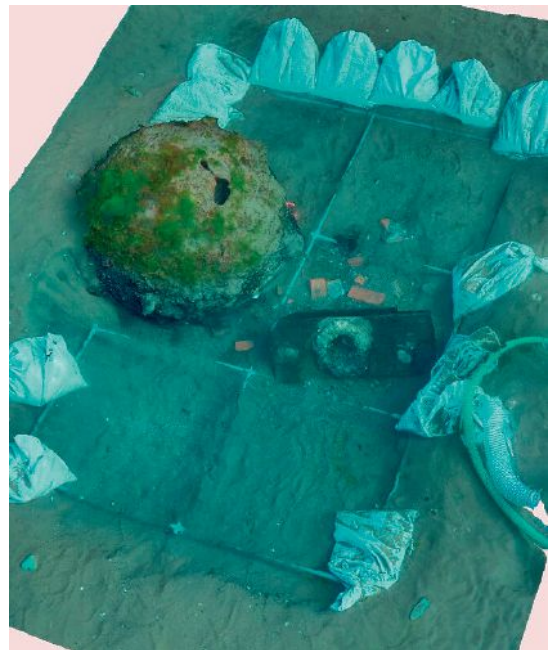


FIGURE 4. Three-dimensional reconstruction model of BG3 excavation with Agisoft PhotoScan© (full 3-D model available at <https://sketchfab.com/models/208241aea25546d99a3a73338c00188c/embed>).



whaling activity in the 19th century in Patagonia, about which very little is known.

These investigations are part of an ongoing project on the exploitation of marine and coastal resources (whales, sea lions, penguins, and guano) along the central Atlantic coast of Argentine Patagonia.

We wish to thank Aluar (the sponsor of the BG3 research), Agisoft PhotoScan®, CC CENPAT CONICET, Victor Mastone (Massachusetts Board of Underwater Archaeological Resources), Paul O'Pecko (Mystic Seaport Museum), Mark D. Procknik (New Bedford Whaling Museum), Graham McKay (Lowell's Boat Shop), Fernando Coronato (Museo del Desembarco), Paul Mardikian (Terra Mare Conservation), Warren Preservation Society, and PROAS archaeologists and volunteers who took part in the fieldwork.

## References

Murray, C., M. Grosso, D. Elkin, F. Coronato, H. De Rosa, María A. Castro, R. Bastida, and N. Ciarlo  
2009 Un Sitio Costero Vulnerable: El Naufragio de "Bahía Galenses" (Puerto Madryn, Chubut, Argentina). In *Arqueología de la Patagonia. Una Mirada desde el Último Confín, Tomo 2*, M. Salemme, F. Santiago, M. Alvarez, E. Piana, M. Vázquez, y E. Mansur, editores, pp. 1093–1108. Utopías, Ushuaia, Argentina.

Murray, C., F. Coronato, M. Paniquelli and H. Ezcurra.  
2015 Protección in situ de sitios arqueológicos de naufragio: El caso de Bahía Galenses (Puerto Madryn, Chubut). In: *Patrimonio Cultural: la gestión, el arte, la arqueología y las ciencias exactas aplicadas*, O. M. Palacios, C. Vázquez y N. Ciarlo, editores, pp. 201-211, Conicet-CNEA-Foncyt.

Murray, C.  
2019 Sitio Bahía Galenses (Puerto Madryn, Chubut): Nuevos aportes al estudio de las prácticas de construcción naval en el siglo XIX. *Actas de las X Jornadas de Arqueología de la Patagonia*. Puerto Madryn. In Press.

## Brazil

**The Brazilian Navy's Campaign on Behalf of Underwater Cultural Heritage** (submitted by Ricardo dos Santos Guimarães, Lieutenant-commander, Underwater Archaeologist, Brazilian Navy, Member of the Brazilian Archeology Society (SAB); and Daniel Martins Gusmão, Lieutenant-commander, Underwater Archaeologist, Brazilian Navy, Member of the Brazilian Archeology Society and the Laboratory of Archeology of Aquatic Environments, Federal University of Sergipe (LAAA/UFS)): At the end of 2017 the Brazilian Navy launched a major campaign for awareness and protection of underwater cultural heritage located within the jurisdictional waters of Brazil. This campaign intends to share with Brazilian society the need to preserve and protect submerged archaeological sites, mainly shipwrecks, which in the past have been subject to looting and improper exploitation. With the



FIGURE 1. Panel from an exhibit sponsored by the Brazilian Navy titled "Brazilian Underwater Cultural Heritage Historic Shipwrecks."

motto "A deep dive to respect the country," the campaign is highlighting the fact that preserving history is everybody's responsibility, emphasizing that "shipwrecks constitute archaeological testimonies which are protected by the Federal Constitution" and that "damage to or appropriation of such heritage is a crime." Initially this campaign began with dissemination through social media of footage produced by the institution, available: (1) at the Brazilian Navy's website, <https://www.marinha.mil.br/content/patrimonio-subaquatico-cultural-brasileiro>; (2) on Youtube, [https://www.youtube.com/watch?v=Zqw\\_2oucBO8](https://www.youtube.com/watch?v=Zqw_2oucBO8); and (3) on Facebook, <https://www.facebook.com/marinhaoficial/photos/a.121850657885914/1803309109740052/?type=3&theater>. The inauguration of an exhibition on Brazilian Underwater Cultural Heritage in the Naval Museum (<https://www.youtube.com/watch?v=MDS4K3dOn9I>), in the city of Rio de Janeiro, was expanded by a travelling exhibit that



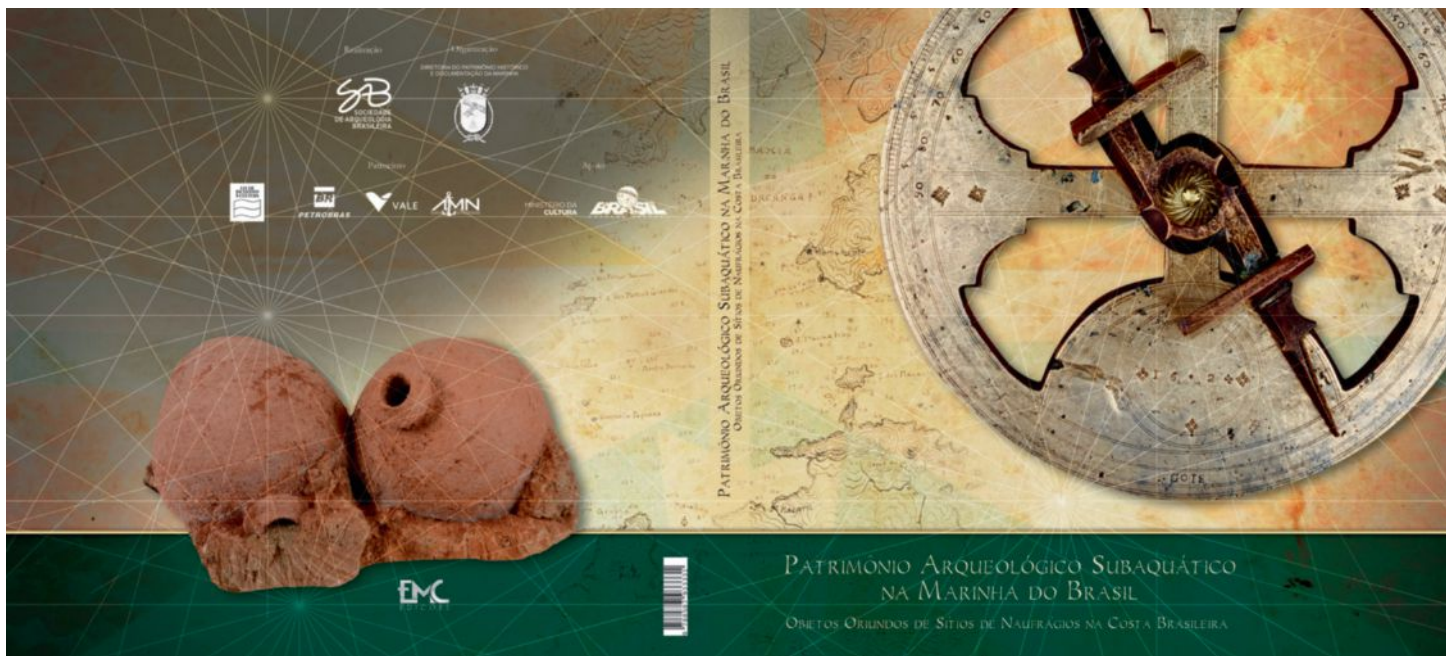


FIGURE 2. Book cover of Underwater Cultural Heritage in the Brazilian Navy: Objects from Shipwreck Sites on the Brazilian Coast.

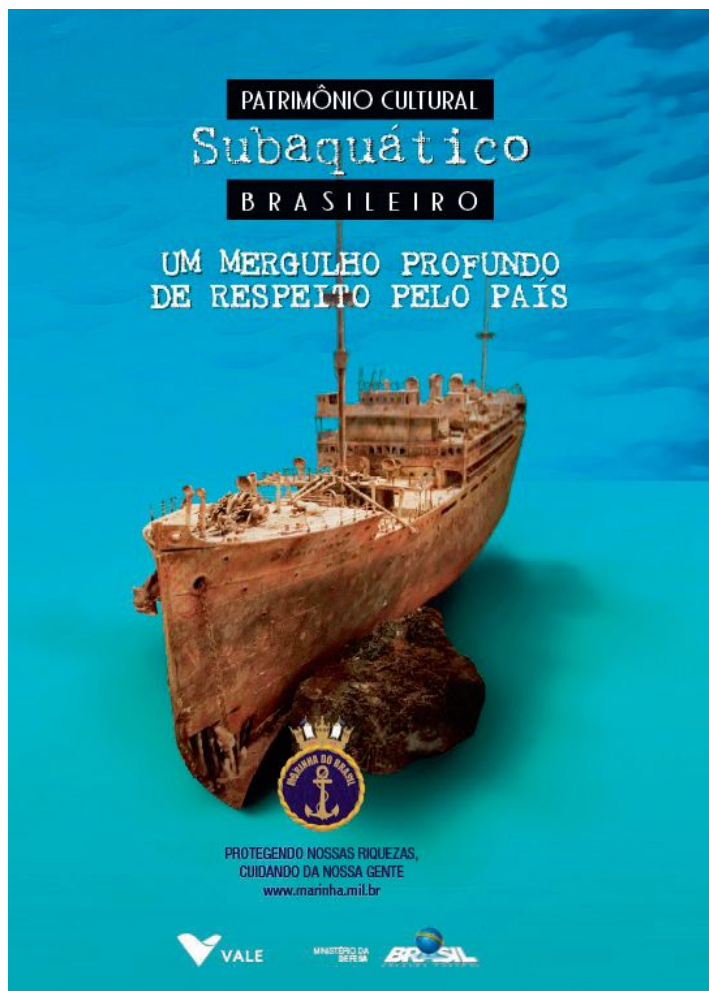


FIGURE 3. The cover of a folder on Brazilian “Underwater Cultural Heritage” bears the motto “A deep dive to respect the country.” (Image courtesy of the Navy of Brazil).

can be displayed all over Brazil, being able to be shown in universities, museums, and military facilities.

The publication of the book *Underwater Cultural Heritage in the Brazilian Navy: Objects from Shipwreck Sites on the Brazilian Coast*, in a bilingual edition in Portuguese and English was another action of this awareness campaign (<https://www.marinha.mil.br/dphdm/lancamento-do-livro-patrimonio-arqueologico-subaquatico-na-marinha-do-brasil>). This new work presents part of the archaeological heritage related to shipwrecks that have taken place along the Brazilian coast, which are under the care and custody of the Brazilian Navy’s Historical and Documentation Heritage Directorate (the DPHDM in Portuguese). The publication is divided into two main parts; the first consists of contributions by different specialists that deal with topics such as the challenge and the awakening of underwater archaeology in Brazil, shipwreck sites, and information on artifacts such as coins, porcelain, objects used on board, and armament. The second part presents the main artifacts associated with the 14 shipwreck sites described in the book. It is a “must read” for everyone interested in Brazilian underwater cultural heritage.

As part of the effort to maintain a technical team specializing in this subject, the Brazilian Navy has three officers who are underwater archaeologists and who work in the management of this heritage. They represent the Underwater Archaeology Division of the DPHDM of the Navy. The first stage of the project, “Atlas of Shipwrecks of Historic Interest in Brazil,” has recently concluded. This is a large database with information on the more-than-2,000 shipwrecks located off the Brazilian maritime coast. The development of this source of research and information will be a valuable tool for the institution in terms of knowledge of the potential of archaeological shipwrecks off the Brazilian coast, as it will help authorities in the protection and supervision of such heritage.

**Underwater Archaeology in the São Francisco River, Sergipe (2016–2018)** (submitted by Paulo Fernando Bava-de-Camargo, Universidade Federal de Sergipe, [pfbavac@gmail.com](mailto:pfbavac@gmail.com); Leandro Domingues Duran, Universidade Federal de Sergipe, [duran.arque@gmail.com](mailto:duran.arque@gmail.com); and Gilson Rambelli, Universidade Federal de Sergipe, [gil.rambelli@gmail.com](mailto:gil.rambelli@gmail.com); translation from Portuguese by Dolores Elkin): Archaeological surveys in the São Francisco River have been conducted since 2016 by the Archaeological Museum of Xangó/Laboratory of Archaeology of Aquatic Environments (Museu de Arqueologia de Xangó (MAX)/ Laboratório de Arqueologia de Ambientes Aquáticos (LAAA) of the Universidade Federal de Sergipe (UFS), together with the Peixe Vivo Foundation, the State Public Ministry, the Public Federal Ministry in Sergipe, and the Diving Group of the Firefighters Corps of Sergipe. Such archaeological survey actions are part of a broad technical-scientific program, which also involves environmental supervision/monitoring action along the river, grouped under the Integrated Preventive Auditing (Fiscalização Preventiva Integrada or FPI) program. A total of 56 institutions participate in the FPI, both at the federal and state levels.

The rationale for the development of such activities of archaeological reconnaissance together with educational, monitoring, and enforcement actions is related to the fact that it is necessary to know and to record the archaeological heritage in order to ensure its preservation and use by the citizens of today and the future. Of the 18 submerged and intertidal archaeological sites identified in the lower São Francisco River (from the hydroelectric dam of Xingó, in Canindé do São Francisco, up to its mouth at Brejo Grande), we highlight sites with indigenous, potentially precolonial materials, as well as historical artifacts discarded during the anchoring of ships, and also wreck sites of traditional wooden vessels, a small warship attributed to the 18th–19th centuries, and steamers of the early 20th century. Figures 1 and 2 show details of these operations.

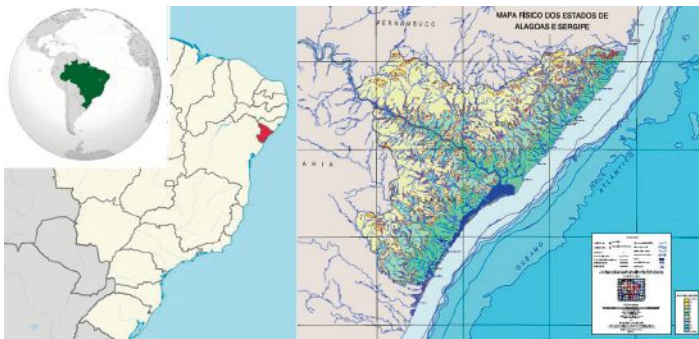


FIGURE 1. Left to right: Brasil, State of Sergipe, and the lower São Francisco River. (Images courtesy of Wikipedia and Instituto Brasileiro de Geografia e Estatística [IBGE].) Slideshow of the São Francisco River Archaeology. Slideshow only available in original digital edition.

Among the archaeological sites that were located and are related to anchorages worth noting are: Banho dos Homens, in the town of Bonsucesso (municipality of Poço Redondo); Porto do Mocambo; and Porto da Aldeia Xocó, the last two located in the municipality of Porto da Folha. The first one is associated with activities related to the anchoring of ships that carried goods and people from the maritime ports of Northwestern Brazil to the port of Piranhas, in Alagoas. The second mostly consists of discarded materials from the fugitive slave population who gathered there. The last consists of the wrecks of vessels that transported cargoes of indigenous pottery for trade with urban settlements. Regarding this latter site, it is worth noting that the submerged pottery that was found represents an interesting paradigm for studies in Brazilian archaeology. The village of Xocó on the island of São Pedro has its origins in a settlement established by the Portuguese crown for indigenous peoples who belonged to the Tupi and Guarani language group.

Those indigenous villages, aside from having served as a war-related force for the defense of the land by the São Francisco River, also established commercial relationships with the surrounding populations, especially the urban ones. Among the types of products manufactured in the villages were ceramic utensils, the remains of which are now being found underwater.

These ceramic goods, in an excellent state of preservation, clash with a direct association commonly made both by archaeologists and laypersons. The indigenous pottery found on archaeological sites is usually attributed to the precolonial indigenous people, who would have made them for their own community's use. In reality, however, these submerged materials that we now have in focus is indigenous historical pottery, made for trading and not for the consumption of the community. They speak to the little-understood production and trade networks established among the different populations of the fluvial region through time.

In terms of the shipwreck sites, the following are worth noting: the barge of Cajueiros, the canoe *Paladina*, and the boat *Moxotó*, in the municipality of Poço Redondo; the canoe with cover that sank between the indigenous villages of Caiçara and Ilha de São Pedro (the Caiçara/ Xocó shipwreck) in Porto da Folha; the canoe with cover of Propriá; and the wreck of Neópolis, that of a small vessel with copper sheathing and with armament for combat. The barge of Cajueiros, the remains of the canoe *Paladina*, the Caiçara/ Xocó shipwreck, and the canoe with cover of Propriá are representative of a nautical period prior to the use of motor engines in the lower São Francisco River, of which very few examples survive to date.

The steam-powered boat *Moxotó*, today partially submerged, sank in 1917 during a storm. This was a tragedy in which several passengers died, therefore representing a significant memory for the villagers for many years. It is interesting to note that the shipwreck site is formed not only by the vessel itself but also by a rocky pier, which was built around it and which enabled the salvage of the engine.

With regard to the Neópolis shipwreck, a vessel in a good



state of preservation slightly over 20 m long, its wooden hull is still covered by copper sheets, which protected it from the wood borers present in tropical waters. It is believed that it could be a small warship or an armored merchant vessel, built between the late 18th and the early 19th centuries. Iron cannons of different geographical and chronological provenience were looted from this site a few years ago, and they were sold to a collector from Aracaju, the capital of Sergipe.

For 2019, new searching and surveying activities have been confirmed for the sites that have been located in previous years. In addition, there will be more educational activities, once there are graduate and postgraduate archaeology students with scientific diving qualifications who need experience with complex submerged archaeological sites that are in quite shallow water, have reasonable visibility, and are accessible from the riverbank.

Furthermore, those submerged and semisubmerged sites await postgraduate students wishing to conduct extensive research on them. The Post-Graduate in Archaeology Program (PROARQ) of the Universidad Federal de Sergipe has a research line called Archaeology of Aquatic Environments, which can provide full immersion not just in underwater archaeology but also in fields such as maritime, coastal, and nautical archaeology, and the like.

in 1935. The gondola was exhibited as an open-air tourist attraction for 25 years, first on a barge and later in a shed on the Lake Champlain shore. The ship's green-wood construction and the cold, fresh waters of Lake Champlain slowed deterioration, but decay quickened once it was raised. When exposed to the air, the boat's timbers shrank and corrosion accelerated on its iron fittings. The armaments were boiled in linseed oil, a common method used at the time to stop corrosion.

Prior to its arrival at the museum in 1961, conservators and curators sprayed Philadelphia's timbers with PEG and a soluble nylon solution to help protect and preserve it. An internal wooden-and-metal structure was added to stabilize the gunboat's structure. In 2005, the NMAH conducted a detailed condition assessment.

The conservation, preservation, and display of the Gunboat *Philadelphia* will be the NMAH's cornerstone contribution to the Smithsonian's celebration of our nation's 250th anniversary in 2026. Our plan is to conserve the gunboat in public view and create a state-of-the-art exhibition presenting artifacts from the vessel, the Battle of Valcour Island, and the American Revolutionary War.

National Museum of American History/Smithsonian  
Paul F. Johnston, Ph.D., Curator of Maritime History  
Office +1.202.633.3909 | Fax +1.202.633.3427  
Email [johnstonpf@si.edu](mailto:johnstonpf@si.edu)  
[www.americanhistory.si.edu](http://www.americanhistory.si.edu)

## USA - Mid-Atlantic

### District of Columbia

**America's Oldest Warship:** The Smithsonian's National Museum of American History (NMAH) is convening a Technical Advisory Group (TAG) 30 April–2 May 2019. The purpose of the 3-day TAG is to bring together international experts in shipwreck-timber conservation to consult and advise on the long-term stabilization and preservation of the American Revolutionary War Gunboat *Philadelphia* on public exhibit in the NMAH since its opening in 1964. The gunboat *Philadelphia* is the oldest surviving American warship. It has been designated a National Historic Landmark and is listed on the National Register of Historic Places.

In July 1776 the Continental Congress authorized the building of a fleet of vessels under Brigadier General Benedict Arnold for the defense of the Champlain Valley—the northern frontier of the colonies, considered the key to the success or failure of the fledgling American Revolution. In just two short months at Skenesborough (now Whitehall, New York), Arnold built eight 54-foot gunboats and four 72-foot rowing galleys. On 11 October 1776, the Americans met the British in the Battle of Valcour Island on Lake Champlain. An hour after the initial engagement ended, a badly damaged *Philadelphia* sank near Valcour Island.

*Philadelphia's* wreck lay 60 feet underwater on Lake Champlain's muddy bottom for 159 years, until raised



FIGURE 1. Gunboat Philadelphia on display at the Smithsonian.



## Maryland

**News from Historic St. Mary's City (St. Mary's City):** Historic St. Mary's City is pleased to announce the addition of a new member to the Research and Collections staff. Stephanie Whitehead joined the staff on 1 November as Conservator. Ms. Whitehead has recently completed her MSc in conservation practice at Cardiff University, Wales, during which she completed an internship at Bolton Library and Museum in Bolton, England. She had previously completed a B.A. in classical studies with a minor in philosophy at Christopher Newport University. Ms. Whitehead's training at Cardiff included extensive work with archaeological iron storage assessment, in addition to other conservation and environmental monitoring work. Her master's dissertation, "Comparison of Current Practices in the Storage of Archaeological Metals," has defined the need for standardized guidelines to be used in the fields of archaeology and conservation. Alongside her studies she has volunteered at multiple museums and historic sites, including James Madison's Montpelier. Currently, she is a member of the American Institute for Conservation and Washington Conservation Guild and attends conferences and events to stay up-to-date with the latest research. She brings a sense of enthusiasm to her new role and looks forward to fully using the new archaeological facility and dedicated conservation lab at Historic St. Mary's City.



FIGURE 1. Stephanie Whitehead working on pottery.



FIGURE 2. Student in field school with tobacco pipe bowl.

Historic St. Mary's City (HSMC), in association with St. Mary's College of Maryland (SMCM), has announced its 2019 field school in historical archaeology. The 2019 field season will be focused on the Calvert House site. Located in Town Center at the heart of the colonial capital, the Calvert House site takes its name from its earliest resident, colonial governor Leonard Calvert, who commissioned its construction soon after the colony was founded in 1634. As a site that during the 17th century served as a home, a fort, a statehouse, and an inn, the Calvert House site offers the opportunity to study many aspects of early colonial life. Excavations in the yards immediately adjacent to the Calvert House will explore the many postholes, fences, and other cultural features associated with the structure, as well as provide a plethora of artifacts to contribute to the understanding of this critically important site.

HSMC is a state-supported, outdoor museum located at the site of Maryland's first capital (1634–1694). The HSMC field school is the longest-running historical archaeology field school in the United States. Participants engage in an intensive, 10-week program that teaches the foundational principles of historical archaeology through hands-on excavation, laboratory work, and artifact analysis. Students learn artifact identification by working with one of the best archaeological collections of colonial and postcolonial material in the country. Throughout the program, students attend lectures by leading Chesapeake scholars and take



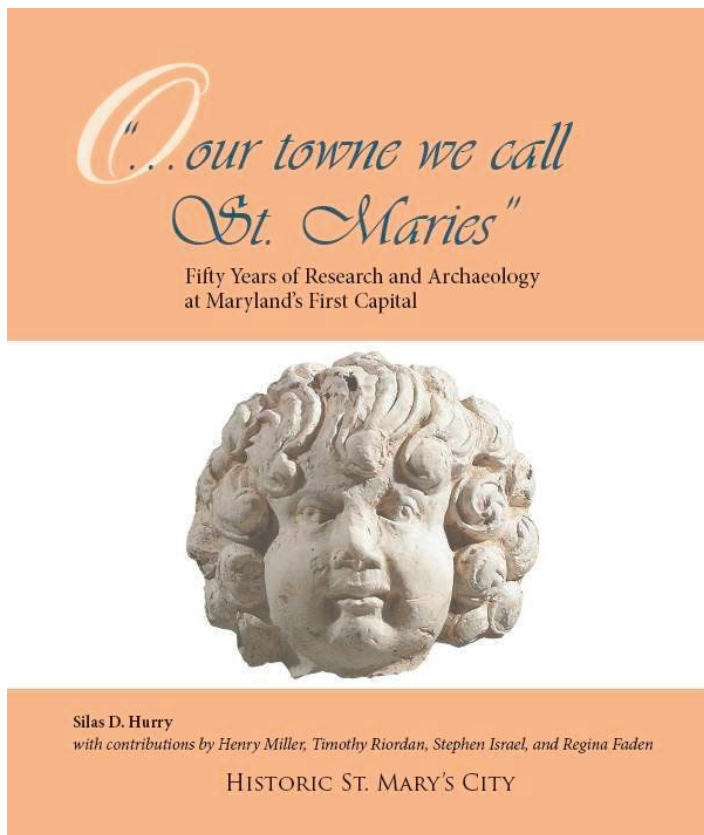


FIGURE 3. Cover of new publication from Historic St. Mary's City.

field trips to area archaeological sites. Students also receive the rare opportunity to learn about 17th-century sailing firsthand aboard the *Maryland Dove*, a replica of a square-rigged tobacco ship.

The Historical Archaeology Field School is an ideal experience for undergraduate or graduate students concentrating in anthropology, archaeology, history, museum studies, or American studies, or for any student with an interest in learning about the past through archaeology. The field school is scheduled for 28 May to 3 August 2019. Eight credit hours can be earned (anthropology or history) through St. Mary's College of Maryland or exchange equivalent. The entire program costs are \$1600 for tuition, plus a \$75 fee (housing and meal plans available at an additional cost). For more information, including on the application process, visit the Field School homepage (<http://hsmcdigshistory.org/research/field-school/>).

Historic St. Mary's City is pleased to announce the publication of *“Our towne we call St. Maries”*: *Fifty Years of Research and Archaeology at Maryland's First Capital* by Silas Hurry with contributions by Henry Miller, Tim Riordan, Stephen Israel, and Regina Faden. This volume, which runs 52 pages and features many handsome illustrations, includes essays penned by HSMC staff and collaborating scholars over the years. The chapters describe many of the significant sites in St. Mary's City including St. John's, Van Sweringen's, the Leonard Calvert House, Cordea's Hope, Smith's Ordinary, the Printhouse, and the Chapel. It incorporates essays on topics such as the history of archaeology at HSMC, American Indian material culture

from the National Historic Landmark, new ways of deciphering the past through archaeology, exploration of a colonial cemetery, and a history written in 10 objects. “Our town we call St. Maries” was produced as a Morrison Fund Publication. Copies are available through the Historic St. Mary's City museum shop (<https://hsmcdigshistory.org/shop/>).

(*Lexington Park*): After retiring from a long career with the Maryland Historical Trust as director of Jefferson Patterson Park and Museum and the MAC Lab, Michael A. Smolek Sr. recently retired again from a second career, after an 8-year stint with the U.S. Navy. Mike worked as the Cultural Resources Manager at Patuxent River Naval Air Station and as the Regional Archaeologist for Naval District Washington. He was responsible for cultural resource management on 19 Naval properties in 5 Maryland counties, totaling approximately 15,000 acres and including over 200 known archaeological sites, dozens of historic structures, and several historic districts. Before retiring, Mike was instrumental in documenting the history and evolution of aircraft catapults at Pax River, as well as the identification and future recovery of numerous underwater resources, including U.S. Navy aircraft lost in mishaps, among many other accomplishments. He assisted with protection and management of significant archaeological



FIGURE 1. Michael A. Smolek Sr., at stabilized building remains at Webster Field, St. Inigoes, Maryland.



resources throughout the greater Washington Area, from the U.S. Naval Academy and NSF Indian Head to NSF Dahlgren, the Washington Navy Yard, and Camp David. Mike was selected for the Chief of Naval Operations (CNO) Cultural Resources Management Award—Individual, as the U. S. Navy’s most outstanding CR professional, in 2015. Craig Lukezic has been selected to replace Smolek in the job to support the cultural resource efforts of the U.S. Navy.

## Virginia

**Chief Otho S. Nelson House, Indian Neck** (submitted by Julia A. King, *St. Mary’s College of Maryland*): Archaeologists from St. Mary’s College of Maryland recently completed archaeological and architectural investigations at the Chief Otho S. Nelson House, located near Indian Neck, Virginia. Chief Nelson served as the leader of the Rappahannock Indian Tribe from 1921 until his death in 1967. Tribal meetings were held regularly at the house, many focused on the right of the Rappahannock members to self-identify as Indian. The passage in 1924 of Virginia’s Racial Integrity Act maintained that no Indians remained in the Commonwealth and “Indian” was no longer an acceptable category for birth certificates, censuses, and other legal documents. The struggle for the right to self-identify lasted for decades. Chief Nelson was assisted by his wife, Susie P. Nelson, who served as the tribal secretary and



FIGURE 2. The Chief Otho S. Nelson House, Indian Neck, Virginia, February 2018.

operated a school for Indian children and an apothecary from the house.

The architectural analysis of the house was completed by architectural historian Willie Graham. In its present form, the Chief Nelson House is a frame two-level “T”-shaped vernacular building with a metal roof. The house was built in three campaigns beginning sometime in the late 19th century and exhibits a blend of conservative construction techniques, traditional planning, and old-fashioned technology with newer architectural construction methods.

Archaeological investigations in the yard surrounding the house revealed evidence for a swept yard. Surprisingly few artifacts were recovered, almost exclusively from the dwelling’s backyard. Two fragments of colonoware were found in an area west of the kitchen and may represent evidence of the Rappahannock’s effort in the 20th century to revitalize their ceramic tradition. The archaeological investigations were conducted by Nicholas Lecorchick, Catherine Dye, and Travis Hanson under the direction of Julia A. King and Scott M. Strickland.

An oral history conducted with Chief G. Anne Richardson and her sister, Mrs. Susan Johnson, provided additional information about the house’s use by the Rappahannock.

Funding for the project was provided by the Virginia Department of Historic Resources, using grant funds from the National Park Service’s Under-Represented Communities Grant Program. SMCM is grateful to Jim Hare and Elizabeth Lipford for their assistance with the project.

The Chief Otho S. Nelson House will be nominated to the National Register of Historic Places.

**Archaeological Explorations for Historic Warwicktowne at the Former City Farm, Newport News, Virginia** (submitted by Rebecca Shepherd and Natalie Adams Pope, *New South Associates, Inc.*): The City of Newport News, Virginia selected New South Associates to conduct archaeological investigations at



FIGURE 1. Two fragments of colonoware were recovered during archaeological testing of the Chief’s House.



three sites (44NN278, 44NN280, and 44NN281) thought to be associated with the historic settlement of Warwicktowne, established around 1680 and occupied until about 1813. These sites are located at the former City Farm, a prison complex dating to the 1930s. While later occupations existed on the property, the primary focus of the research was on the town. However, as excavations were underway, a significant U.S. Civil War encampment was also identified.

The earliest European owner of the property was Colonel Samuel Mathews, who began acquiring land in 1625. By 1630 he had erected a house less than one mile northwest of the property. His extensive land holdings became known as Denbigh Plantation. In June 1680 the House of Burgesses passed the first of three acts creating official ports of the Virginia Colony. Of the 15 port sites identified, 1 was to be “in Warwick county at the mouth of Deep creek on Mr. Mathewes land” (Henning 1823 II:471). This spot was to become known as Warwicktowne.

The act stipulated uniform standards for the layout of the port towns. Each was specified to be 50 acres in size, with streets laid out at right angles and lined with half-acre building lots. Larger lots, or commons, would accommodate public uses such as churches, courthouses, and waterside landings with warehouses and wharves. The text of a subsequent act in 1691 indicated that development had already begun at Warwicktowne: it described “several houses there built, together with a brick courthouse and prison” (Henning 1823 II:508). Other known facilities included a least one tavern and a mercantile establishment. A wharf, shipbuilding facility, tobacco warehouses, and a boatyard were located in the vicinity of nearby Denbigh Plantation, and in 1748, a ferry travelled the James River from Warwicktowne to the land of Thomas Moseley. Unfortunately, there are no known maps showing the layout of the town.

Warwicktowne’s peninsular location proved inconvenient, as interior roads were built and the county’s population shifted inland. In 1807, a group of local citizens petitioned the Virginia General Assembly to move the

deteriorating courthouse to a more convenient location. The courthouse remained at Warwicktowne until 1809 and is shown on the Madison 1807 Map of Virginia. It was then moved east to a location on a main road. An 1813 act revoked Warwicktowne’s charter, and the land was returned to agricultural use.

After the county seat was moved, the property became part of a larger 296-acre farm owned by the Young family from about 1816 to 1856. Richard Young had been a tavern keeper and merchant in Warwicktowne. After its demise, he shifted to agriculture, for which tax rolls and U.S. Census records indicate he enslaved between six and nine people. The exact types of activities that took place at the site during Young’s ownership are unknown. Tax records show that farm buildings had been removed from the site by 1856.

During the U.S. Civil War, both the Confederate and Union Armies occupied the Young Farm. The earthworks that remain along the Warwick River shoreline are from this time. In 1869, the Youngs sold their 300-acre farm to Hudson and Sallie Mench. Hudson Mench was a lumber manufacturer and farmer, and the couple owned the land for over 50 years. In 1931, the land became the Newport News City Farm Correctional Facility.

Archaeological projects conducted throughout the 1990s identified and further tested the three sites on the City Farm property that could be associated with Warwicktowne (Higgins et al. 1992; McSherry and McCartney 1993; McDonald and McCartney 1996; McLearn 1999). During these investigations, site 44NN278 was found to contain 18th- and 19th-century components, including two probable 18th-century features, a cellar with a brick wall, and a refuse midden, providing the clearest evidence for the location of Warwicktowne (Higgins et al. 1992; McSherry and McCartney 1993). Site 44NN280 contained 19th- to early-20th-century domestic components and site 44NN281, located in a pasture northeast of site 44NN278, contained 18th- and 19th-century components and was believed to be associated with Warwicktowne (Higgins et al. 1992).

The current investigations consisted of monitoring during the demolition of the prison building to identify and protect any Warwicktowne-related features that may be found, geophysical surveys to identify possible feature locations, mechanical stripping of plowzone to expose features identified by the geophysical surveys, and excavation of the exposed features. In addition, a public archaeology component was included. This consisted of a webpage, Facebook page, and an onsite Public Archaeologist leading tours.

Ground-penetrating radar (GPR) and magnetometry surveys indicated the presence of multiple anomalies that appeared to be historic features located at sites 44NN278 and 44NN281. However, site 44NN280 showed significant disturbance from modern utilities and little potential for intact features. Based on these results and consultation with the City of Newport News, it was decided that excavation efforts would focus only on sites 44NN278 and 44NN281.

Although remote sensing indicated that much of 44NN278 had been significantly disturbed by the development of the



FIGURE 1. Archaeologist Andrew Holloway excavates a portion of a brick foundation at Warwicktowne. (Photo by Rebecca Shepherd.)





FIGURE 2. Archaeologist Neal Sexton excavates the Warwicktowne well. (Photo by Rebecca Shepherd.)

prison complex and associated utilities, several locations appeared to be relatively well-preserved. This included a knoll in the southeastern portion of the site as well as areas along Deep Creek. Most of the excavation focused on the knoll, which contained the majority of geophysical anomalies that appeared to be historic. In fact, all of the anomalies that could be solidly dated to the Warwicktowne era were located on the knoll.

These features include a brick building foundation and associated cellar fill identified during previous studies, a well, a large pit that may represent an unfinished well, and several pits and posts. While artifact analysis is still underway and comparative information is still being collected, it is thought that the building may either represent the courthouse or a tavern operated by the Young family (Figure 1). Historical records indicate that the courthouse was brick. Nothing specific has been found about the construction materials used in the tavern. However, excavation of units within the cellar recovered a significant amount of food bone and a number of eating utensils, suggesting the possibility that the building may have served as the tavern. The well contained a variety of artifacts, including delft, pipe stems, window glass, nails, onion bottles and bottle fragments, and a small amount of animal bone and shell. The well was

unlined and was more than 12 feet deep (Figure 2).

In addition to Warwicktowne-era features, there were four features that dated to the U.S. Civil War era, including a double-chambered shelter pit, a cooking pit, a large refuse pit, and another pit of an undetermined function. A Virginia regimental button, part of a domino, and a Federal minié ball were a few of the artifacts recovered from these features. The portion of 44NN281 that was examined with remote sensing indicated that there were a number of well-preserved features. However, historic 20th-century maps and aerial photographs indicated that portions of the site once contained much later buildings and that the anomalies in those locations were likely related to those buildings.

Upon excavation, none of the features identified at 44NN281 dated to the Warwicktowne era. All dated to the U.S. Civil War and included several large shelter pits and several pits of currently unknown functions (Figure 3). Because the archaeological research was focused on the Warwicktowne component, most of these features were bisected. The remaining portion was covered with plastic and the excavated half backfilled with sand. Artifacts that were clearly U.S. Civil War related included a Louisiana regimental button, a cannon ball, a Confederate canteen, and several projectiles and lead shot. Other artifacts included a hard plastic comb, Sarsaparilla bottles, beer bottles, buckles, and a stoneware inkwell.

Analysis and research is currently underway. A report of the finding will be delivered to the City of Newport News, Virginia at the end of 2019. In the meantime, the project's Facebook page "Exploring Historic Warwicktowne" continues to be updated as analysis, research, and reporting continue. It can be found at <https://www.facebook.com/historicwarwicktowne/>.

#### References

Henning, William W.  
1823 *The Statutes at Large; Being a Collection of all the Laws*



FIGURE 3. Archaeologist Justin Byrnes works on a large shelter pit dating to the U.S. Civil War period. (Photo by Rebecca Shepherd.)



of Virginia from the First Session of the Legislature in the Year 1619. General Assembly of Virginia, Richmond.

Higgins, Thomas F., III, Charles M. Downing, Leslie McFaden, and Scott M. Hudlow

1992 *A Phase I Cultural Resource Survey of the Proposed Riverview Farm Park Property, City of Newport News, Virginia*. William and Mary Center for Archaeological Research, Williamsburg, Virginia.

McDonald, Bradley M. and Martha M. McCartney

1996 *Phase III Plowzone Sampling of the Footprint of a Temporary Gymnasium at Site 44NN278, Newport News City Farm, Newport News, Virginia*. James River Institute for Archaeology, Inc., Williamsburg, Virginia.

McLearen, Douglas C.

1999 *Summary of Archaeological Testing at 44NN281, Newport News, Virginia*. Cultural Resources, Inc., Williamsburg, Virginia.

McSherry, Perry and Martha McCartney

1993 *Phase II Archaeological Significance Evaluation of Site 44NN278, Riverview Farm Park, Newport News City Farm, Newport News Virginia*. James River Institute for Archaeology, Inc., Williamsburg, Virginia.



FIGURE 1. Items related to Fort St. Joseph are displayed in the Fort St. Joseph Museum, a department of the Niles History Center. The exhibit is in the process of being updated to reflect contemporary ideas about life at the fort. (Photo by Crystal DeRoo.)

direction of Dr. Michael Nassaney, the Project's principal investigator.

Collection management is a task that many repositories, large and small, struggle with, as resources required for routine updates and full-time curation staffing can be difficult to obtain. As a result, various aspects of collection management take a back seat to other more-pressing needs identified by museum and repository personnel, such as building improvements and public outreach initiatives. The Fort St. Joseph collection has been no exception to this scenario.

The mission of the Niles History Center is to "connect the past, present, and future, focusing on Niles and the surrounding region," and the Fort St. Joseph collection plays a critical role in that goal. Thus, it was determined that in order to continue to preserve this collection for the future, the curation practices must be assessed and improved as needed. The Fort St. Joseph Curation Fellowship was developed for this purpose. The fellowship is a 12-month (potentially renewable) appointment designed to study, develop, and implement policies and practices to enhance the preservation and accessibility of the collection. The hope is that the fellowship will initiate and carry out a plan that can serve as a model for other small repositories storing important archaeological collections.

This exciting venture is one that I am proud to say I am a part of, as I have been selected for this opportunity by members of the Project and Niles History Center. To begin this endeavor, I have been exploring new and proven practices regarding collection management at similar repositories that I intend to visit to help define how to best curate the collection. The intended outcome of these visits is to identify steps that will improve the collection's organization, cataloging system, digitization efforts, and accessibility to interested scholars and the public.

## USA - Midwest

### Michigan

**Preservation and Curation at Fort St. Joseph, Niles** (submitted by Erika Hartley, Jackson College): Over the past few months the Fort St. Joseph Archaeological Project (hereafter, "the Project"), a partnership between Western Michigan University and the City of Niles, has been reflecting on the curation practices used for the Fort St. Joseph collection. Currently held and displayed at the Niles History Center in Niles, Michigan, the collection is comprised of archaeological materials relating to Fort St. Joseph, an 18th-century French mission, trading post, and garrison complex located in present-day Niles (Figure 1). Specifically, the collection consists of artifacts, geophysical data, maps, historical documents and translations, field notes, photographs (B&W film, digital color), soil samples, carbon-14 samples, and numerous publications. Most of the material is the outcome of 20 years of archaeological work conducted under the



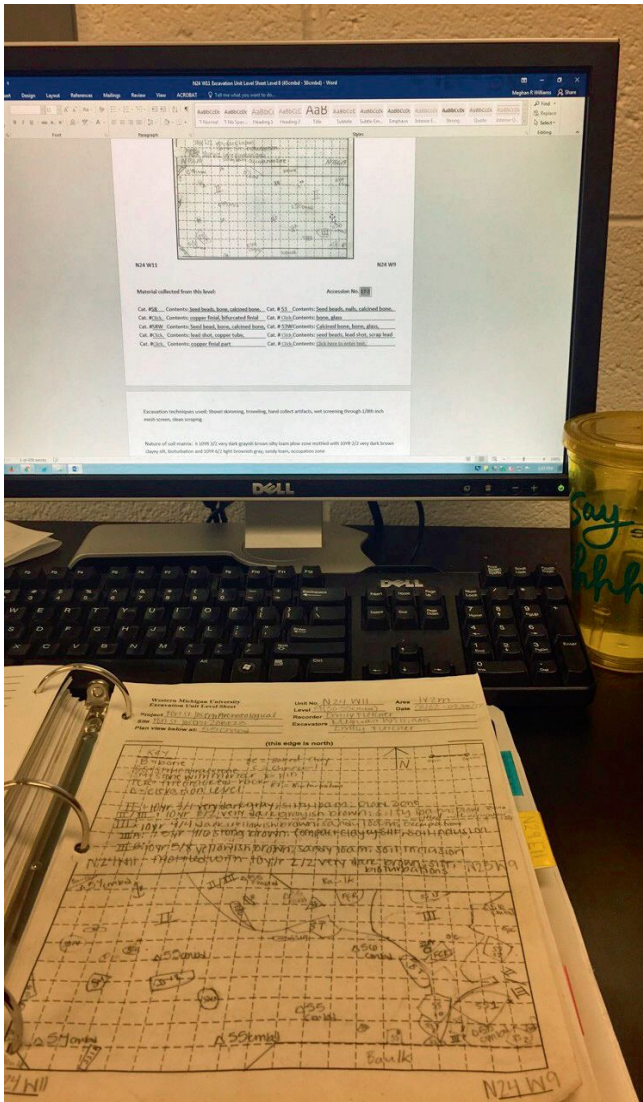


FIGURE 2. The Project began digitizing field notes in 2015 and has continued to implement this task at the end of each field season. (Photo by Genevieve Perry.)

Beyond ensuring the collection's preservation for the future, we also aim to promote a greater awareness of and access to the collection. We live in a fast-paced, digital world that calls for the collection's easy accessibility. While the Project has begun digitizing its field notes and has in the past uploaded some data to tDAR, it has been difficult to keep up-to-date without funding and staffing dedicated to that task (Figure 2). This reflection highlights the importance of not only identifying best curation practices, but also assessing the feasibility of these practices given available resources.

As this venture continues to unfold, I plan to post updates on the Project's Facebook, Instagram, and blog at <http://fortstjosepharchaeology.blogspot.com/>. If you are interested in learning more about the collection or have questions and comments, feel free to contact me at [hartleyerikak@jccmi.edu](mailto:hartleyerikak@jccmi.edu). I would also like to say thank-you to those repositories that have already agreed to assist us in this task and ask that any other repositories contact me if they would be willing to let me visit or set up a phone interview.

**Michilimackinac, Mackinaw City** (submitted by Lynn Evans, Mackinac State Historic Parks): The 2018 Michilimackinac field season was a continuation of excavations begun in 2007 on House E of the Southeast Row House within the palisade wall of Fort Michilimackinac. This row house was constructed during the 1730s expansion of the fort for the use of French traders and demolished in 1781 as part of the move of the fort and settlement to Mackinac Island. A 1765 map of the fort, housed at the University of Michigan William L. Clements Library, lists House E as an English trader's house. Few English traders' houses have been excavated at Michilimackinac. The goal for this season was to better understand previously exposed features and complete some of the southern quadrants. This was only partially accomplished.

By the end of the season the northwest and southwest corners of the cellar, the west wall, and portions of the north and south walls were all defined, and some of the wood-plank lining was visible. The most unusual artifact of the summer, the handle from a small sword, came from the cellar and testifies to the fashionable lifestyle of the English trader residing in this house. While swords continued to be a weapon of choice for dueling for decades after they ceased to have practical military function, by the late 18th century they had been relegated to a stylish accessory.



FIGURE 1. Handle from a small sword, Mackinac State Historic Parks.



FIGURE 2. White tinglazed earthenware jar, Mackinac State Historic Parks.



One of the notable aspects of the artifact assemblage from this house has been the quantity and variety of ceramics. We did not find any new types this season, but the cellar contained numerous sherds large enough to partially reconstruct the vessels, which is unusual given the small sherd size typical of the assemblage. Identifiable vessels included portions of a plain white tinglazed earthenware jar, feather-edged creamware plates, and a blue and white Chinese export porcelain saucer.

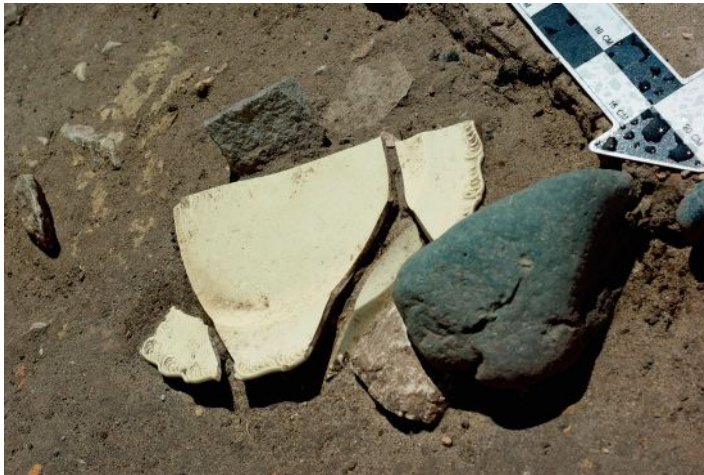


FIGURE 3. Creamware plate, Mackinac State Historic Parks.

The second deep area to the west of cellar noted during the 2017 season has begun to assume a rectangular shape. It contains artifacts typical of 1781 demolition rubble, including fragments of a bone-handled table knife, a clasp knife blade, and a drawer pull.

Several posts and trenches were uncovered in the middle of the house during the 2017 season. In 2018 most of these were fully excavated. They compared well in their relation to the fireplace to similar features near the fireplace of the easternmost house of this row house. They are currently being interpreted as joist supports.



FIGURE 4. Chinese export porcelain saucer, Mackinac State Historic Parks.



FIGURE 5. Bone-handled knife, Mackinac State Historic Parks.



FIGURE 6. Brass ramrod pipe, Mackinac State Historic Parks.

We also opened two new quads along the north edge of the excavation this summer in the interior of the house. They are currently in transition between 1930s rubble and 1781 demolition rubble. The quad between the two new quads is well into the 1781 demolition rubble. It yielded a brass ramrod pipe, one of the few gun parts found in this house.

Excavation of this house will continue for several more summers. The project is sponsored by Mackinac State Historic Parks (MSHP) and directed by Curator of Archaeology Dr. Lynn Evans, with field supervision by Michigan State University doctoral candidate Alexandra Conell. The artifacts and records are housed at MSHP's Petersen Center in Mackinaw City.

## Minnesota

**Landscape Archaeology and Knapped Glass in West-Central Minnesota** (submitted by David Maki and Sigrid Arnott): A recent archaeological survey of Pope County, Minnesota has documented large-scale indigenous settlement and circulation patterns that persisted into the historic period and continue to shape the modern landscape. More than 50% of all the archaeological sites thus far documented in Pope County are located within 1 mile of the Wadsworth Trail. History books say that the Wadsworth Trail was constructed by the U.S. Army to connect forts after the U.S.-Dakota War of 1862.



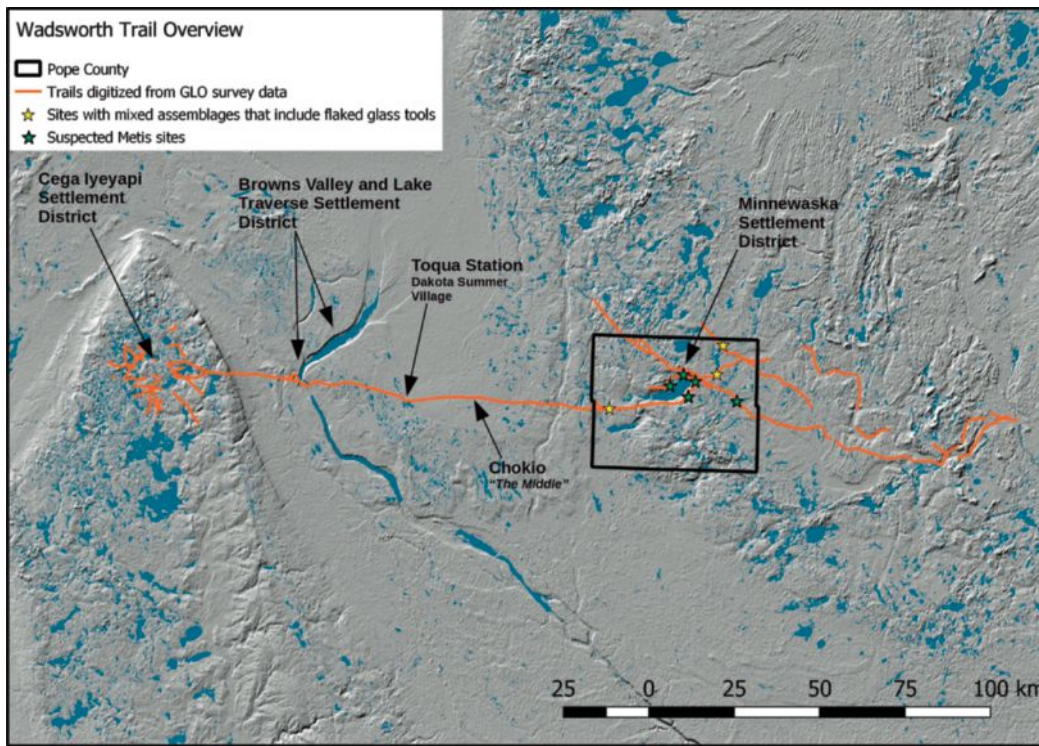


FIGURE 1. The Minnewaska settlement district is located at the intersection of the east–west trending Wadsworth Trail and the northwest–southeast trending Red River ox-cart trails.

By mapping the trail using 19th-century General Land Office survey data in GIS and comparing it to recorded site locations, it is apparent that the Wadsworth Trail connects a dense archaeological settlement district centered around Lake Minnewaska in Pope County to a significant cultural landscape at Cega Iyeyapi, where the U.S. military located Fort Wadsworth near the Dakota Sisseton-Wahpeton Oyate in Marshall County, South Dakota. Significantly, most of the sites identified in proximity to the military route date to much earlier cultural periods—from the Archaic to the pre-U.S. Civil War era. There are also archaeological remains of a Dakota summer camp near the halfway point just a few miles from the modern city of Chokio (meaning “the middle” in the Dakota language), Minnesota. Based on the archaeological evidence, the Wadsworth Trail predates the U.S.–Dakota War of 1862 by thousands of years.

Several sites along the trail had mixed assemblages of historic artifacts and lithic materials. Typically, we would attribute the lithic and the historic artifacts to cultural components separated by at least hundreds of years. However, closer examination of the glass showed that at three sites, bottle-glass fragments from the early to late 19th century were shaped into scrapers using lithic-tool production methods. For example, at one plowed site that consisted of a large lithic scatter with a concentration of historic artifacts (21PO68), two of the bottle-glass fragments collected were later determined to be sharpened by pressure flaking. One came from a pictorial whisky flask and the other from an older alcohol bottle. The presence of the same indigenous technology used on both glass and stone requires us to rethink the context of all the lithic technology tools at this site.

Where the Wadsworth Trail crosses the Chippewa

River, someone lost a glass tool fabricated from the side of a decolorized panel bottle (21PO72). The bottle-manufacture technology suggests a later-19th-century date, perhaps as late as the 1890s. The lithic technology evidences at least two scraping edges, an abraded platform, and a notched edge to create a multi-tool that has considerable use wear. The late date is interesting because it appears to have been made and used by American Indians who were using the trail well after land cessations, when they had been expelled from the area and were restricted to reservations. At another site, a glass tool was found near a similarly shaped lithic tool fabricated from Knife River Flint from the Dakotas to the west.

Several suspected Métis sites likely associated with the Red River ox-cart trails were also identified during the survey. One of these sites contained lithic tools and artifacts, glass fragments, forge-modified iron stock, elk bones, and burned daub fragments from a chimney, all associated with four

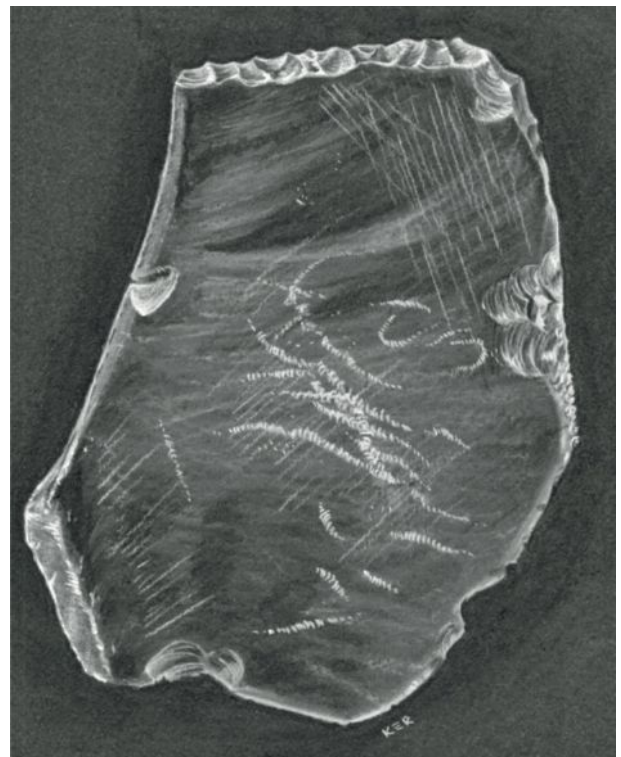


FIGURE 2. A scraper constructed from a clear bottle-glass fragment was discovered at the intersection of the Wadsworth Trail and the Chippewa River in Pope County, Minnesota. (Illustration by Kate Ratkovich, 2018.)



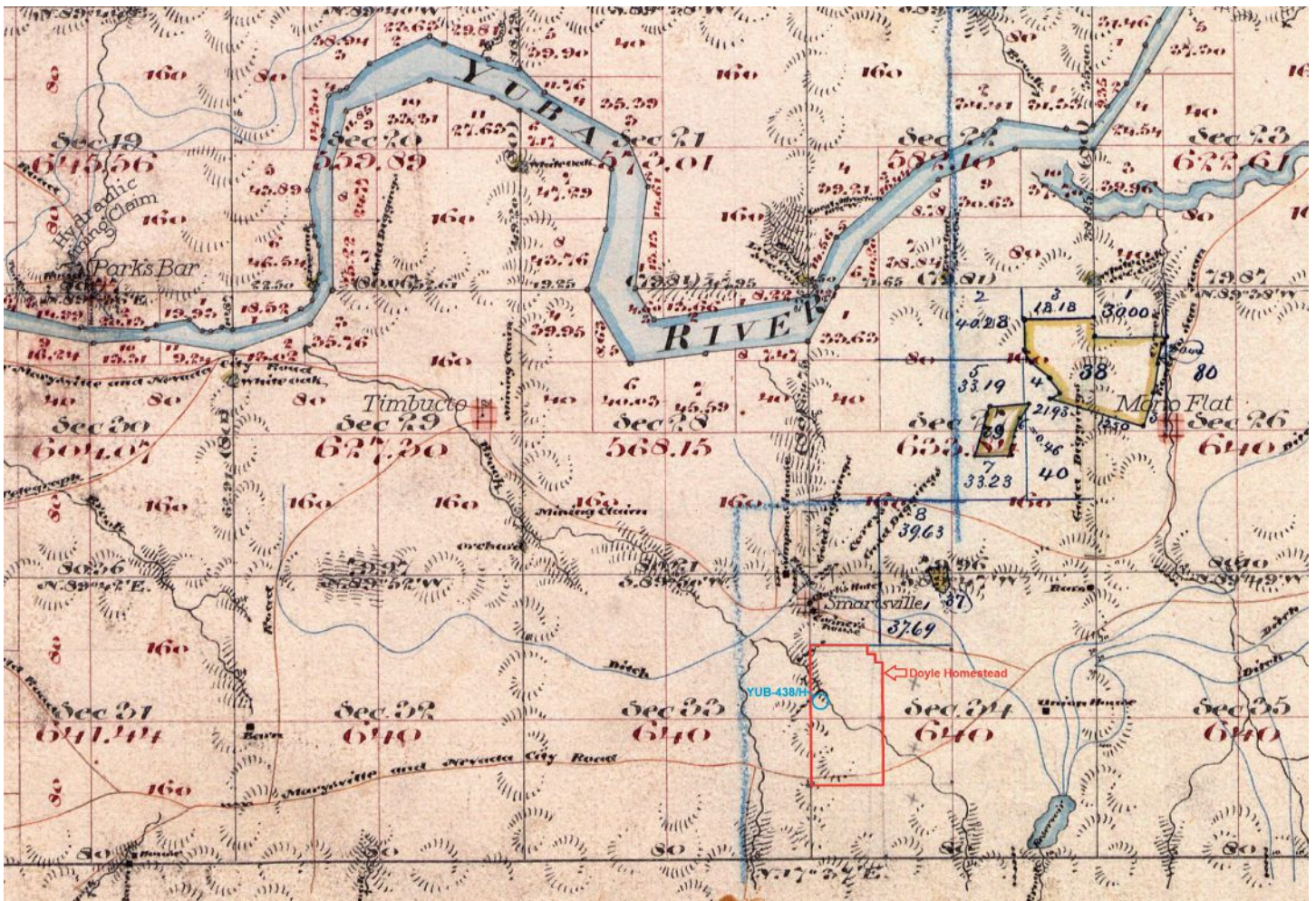


FIGURE 1. Map from 1867 showing the Doyle homestead and site.

small depressions. This assemblage is very similar to Métis winter-cabin sites that have been previously documented across the border in Canada. At another suspected Métis site, a mixed assemblage of historic artifacts, lithic flakes and tools, cellar pits, and a large bone midden were found at the location of what GLO surveyors in 1857 called an “abandoned city.” Several of these sites were identified as surface scatters or through limited shovel testing and had limited numbers of diagnostic artifacts. While the historic artifacts might normally be considered intrusive, a closer look reveals the persistence of lithic technologies well into the historic period, and a persistence of Dakota, Métis, or Anishinaabe presence into the late modern period in west-central Minnesota.

This landscape-level survey provided an opportunity to connect site-specific historic-period artifacts, specifically knapped glass, to the larger cultural landscape, through GIS analysis of trails. We acknowledge the funding provided by the Arts and Cultural Heritage Fund of the Minnesota Clean Water, Land, and Legacy Amendment as part of the Statewide Survey of Historical and Archaeological Sites, for allowing us to identify macrolevel archaeological patterning.

## USA - Pacific West

### California

**Doyle Homestead Data Recovery** (submitted by Thad M. Van Bueren): Data recovery investigations took place in 2018 at the Doyle Homestead and prehistoric site (CA-YUB-438/H) near Smartsville in Yuba County, California. The work was carried out by Pacific Legacy, Inc. for the California Department of Transportation to mitigate adverse effects of the Smartsville Curve Correction Project on State Route 20. The site was determined eligible for the National Register of Historic Places in 2015 under Criterion D for the potential to yield important information in history, while an ephemeral prehistoric component was judged noncontributing.

The limited prehistoric assemblage appears to be associated with the Mesilla Phase of the Martis Complex between 3000 to 2000 years BP. Transitory hunting and gathering activities focused around a bedrock mortar outcrop with five mortar cups. The recovered materials include 5 ground- and pecked-stone tools, 2 bifaces, 3 cryptocrystalline silicate (CCS) cores, and 30 debitage flakes



of CCS, metavolcanic, basalt, other igneous stone, and quartz. The provisional dating is based on a single basalt Martis Corner-notched projectile point.

Site CA-YUB-438/H comprises about 5 acres within a larger 78-acre homestead where the activities of Alexander and Elizabeth Doyle's family were concentrated from 1865 to 1882 or perhaps slightly later. The homestead lies just south of the unincorporated town of Smartsville, the location of Mr. Doyle's tinsmith shop. The town serviced nearby hydraulic gold-mining operations until the Sawyer decision led to the cessation of those activities in the late 1880s. The data recovery concentrated on the historic component at CA-YUB-438/H using a combination of historical research, a ground-penetrating radar survey, metal detection, controlled manual sampling, and mechanical scraping.

Twenty-two features within the project impact zone were explored. The site revealed spatial patterning in the form of structural footprints, sheet refuse deposits, and other remains such as refuse pits that offered clues about how activities were organized on the landscape, what economic strategies were employed, and various challenges that arose over the course of the occupation. The absence of privies and



FIGURE 2. Fieldwork in progress, 2018. (Photo by author.)

a well in the investigated area suggest additional deposits survive outside of the impact area. Abundant time-sensitive materials confirm occupation during the known period of use, but most deposits were shallow and stratigraphic analysis could not meaningfully separate earlier from later use.

Alexander Doyle was an Irish immigrant who married a native-born woman named Elizabeth Carnahan, also of Irish descent. Elizabeth's family were slave owners in Kentucky before they moved to New Harmony, Illinois in



FIGURE 3. Alcohol bottles from Feature 15.

1844 and they remained staunch Democrats who opposed the Abolitionist position. The Carnahans were locally prominent, a background that appears to be reflected in the consumption patterns at CA-YUB-438/H. Evidence of fine women's clothing and accoutrements and expensive imported European alcohol stand in marked contrast to the Doyle family's declining economic circumstances over time.

The Doyles arrived in Smartsville in 1865 after a brief stint farming in nearby Yuba City. They successfully proved their homestead claim and relied on a combination of subsistence agriculture, income from Alexander's tinsmith shop, and the wage labor contributed by other family members. The family grew to include nine children, many of them dying prematurely. Several were victims of tuberculosis. Alexander's death in 1876 contributed to a further reduction in the family's circumstances, with the adult children remaining in the household working as teachers and agricultural laborers for low wages.

Despite these stresses, there is no evidence of investments in food preservation such as canning or pickling as Elizabeth struggled on with help from her surviving children. Orchards were planted, but provided only modest yields. The homestead was sold in 1882 to a prominent Smartsville Irishman. It is likely the family was allowed to remain on the property until the late 1880s. By that time both parents were dead and only two of the children had survived. The eldest son moved away in 1890 when he married, the only child who ever wedded. The story that is told in artifacts and documents reveals adjustment to declining family circumstances linked to disease and injury. The sharp economic decline of the town in the 1880s only exacerbated this trend.

CA-YUB-438/H offers a case study useful for comparison with other homesteads and agrarian sites. The story of this family is compared to other rural Irish immigrants in a report entitled *Data Recovery at the Doyle Homestead (CA-YUB-438/H) near Smartsville in Yuba County, California* by Thad M. Van Bueren (2019). Copies may be obtained by contacting Lisa Machado at [Lisa.Machado@dot.ca.gov](mailto:Lisa.Machado@dot.ca.gov).



## USA - Southeast

### Kentucky

**Camp Nelson, Kentucky Designated a National Monument** (submitted by Dr. W. Stephen McBride): On 26 October 2018 Secretary of the Interior Ryan Zinke announced that President Trump had signed into law a proclamation to create Camp Nelson National Monument. This act was the culmination of a number of years of hard work by Congressman Andy Barr, Jessamine County Judge Executive David West, and Camp Nelson Civil War Heritage Park staff Dr. W. Stephen McBride, Mary Kozak, Wayne Hayden, and Peggy McClintock. A bill establishing the Camp Nelson National Monument was passed by the U.S. House of Representatives in 2018 and by the U.S. Senate in February 2019. The Camp Nelson Civil War Heritage Park property has been transferred to the National Park Service and is presently administered by Abraham Lincoln Birthplace National Historic Site and Jessamine County Fiscal Court via a cooperative agreement. Current staff will continue for a 1 to 3 year transition period.

Camp Nelson was a large Union supply depot and hospital, and one of the nation's largest recruitment and training centers for United States Colored Troops during the American Civil War, as well as a large refugee camp for the wives and children of these soldiers. The site has been the focus of years of archaeological investigation under Section 106, archaeological field schools, and grant-funded research. The park was designated the Camp Nelson Archeological District National Historic Landmark in 2013.

Check out what we are doing at [campnelson.org](http://campnelson.org).



FIGURE 2. Archaeological work at Fort Nelson has revealed data about the lives of the fort's residents.

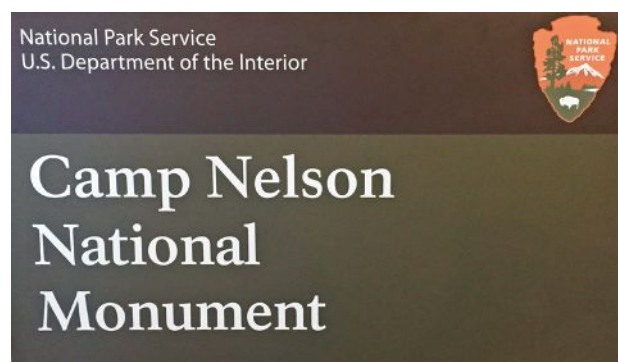


FIGURE 3. National Park Service sign for Camp Nelson National Monument.

### Tennessee

**Impact of Sanitation at Historical Archaeological Sites** (submitted by New South Associates): In 2018, New South Associates conducted archaeological testing at the site of the new U.S. Courthouse in downtown Nashville, Tennessee. The work was completed prior to construction, on behalf of the U.S. General Services Administration (GSA). At the time of excavation, the site was mostly surface parking, and a backhoe was used to excavate the historic deposits below the asphalt and historic brick-paved alley. New South excavated five trenches, three blocks, and three test units to determine the site's potential to answer archaeological research questions about 19th- and early-20th-century Nashville.

The site is located within the boundary of the original town of Nashville as platted in the late 18th century. Development began in earnest on the block in the second quarter of the 19th

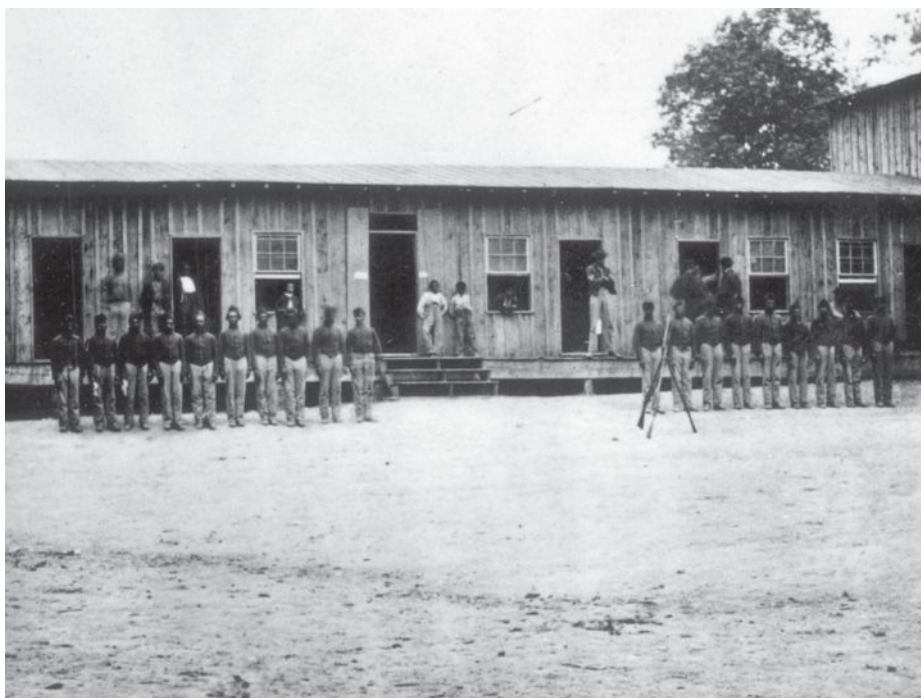


FIGURE 1. African American soldiers standing in front of the Colored Barracks at Camp Nelson in 1864.

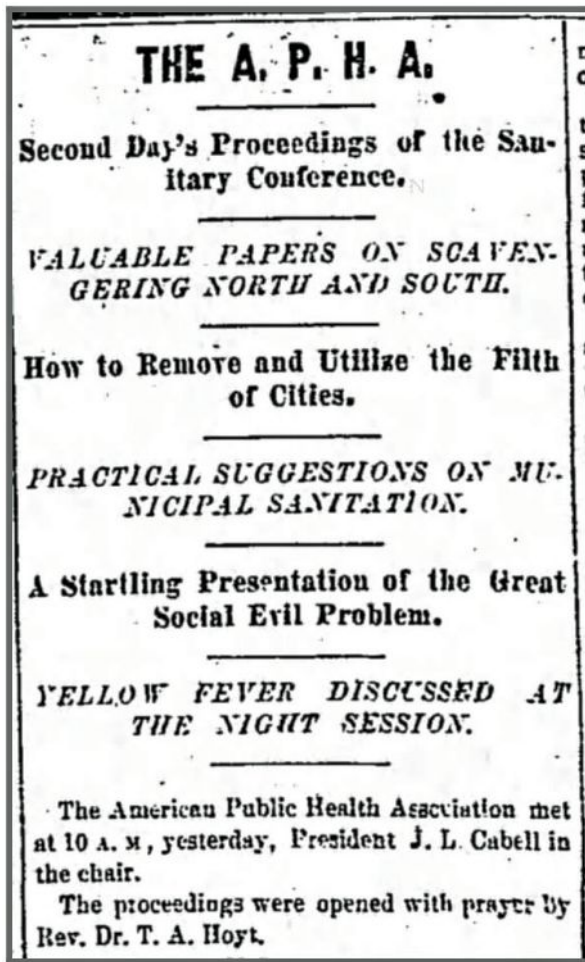


FIGURE 1. Sanitary Conference Notice (The Tennessean, November 20, 1879).

century with the construction of large urban townhouses and associated outbuildings for wealthy and prominent Nashvillians. Substantial one- and two-story brick slave quarters and other outbuildings were located along an alley at the rear of the townhouses. By the 1880s, many of the townhouses had been converted into multifamily residences and boardinghouses, and offices and commercial businesses were common on the block. The neighborhood housed a diverse mix of ethnic groups, including recent immigrants from Austria, Canada, Germany, Greece, Hungary, Italy, and Russia, as well as numerous African Americans. The site occupants typically worked in their neighborhood, in a variety of businesses including saloons, restaurants, grocers and markets, various clothing stores, confectioners', a hotel, an orchestra, music stores, doctors' offices, and a funeral parlor. By the mid-20th century, much of the site had been converted to surface parking or had been developed into large-scale commercial buildings.

Historical research influenced research questions and guided the fieldwork. The location of excavation trenches and blocks was determined using historical maps, focused on areas with the highest potential to answer questions about the many occupants of the site throughout history. Excavations were centered on the rear yards of parcel lots in an attempt to recover data that would provide insight into

the lives of the previous occupants of the site, in particular their ethnicity, socioeconomic status, and religion.

Excavations recovered far fewer artifacts than expected for a site that was continuously occupied for over a century. No refuse-related features were present in the excavation areas. A number of masonry foundations were revealed, including the remains of a brick-lined privy vault. Only a minimal number of small artifacts were recovered from the privy context. The apparent lack of refuse at the site inspired New South to conduct additional historical research into the history of sanitation laws in the city of Nashville. The lack of modern sanitation practices in Nashville caused numerous outbreaks of disease throughout the 19th century, including a cholera epidemic that killed nearly 10% of Nashvillians between 1849 and 1850.

The city's health officer, having determined Nashville to have the highest death rate in the country, called for a number of sanitation improvements and public health reform in the late 19th century. The city undertook such measures as constructing a new pumping station and reservoir for potable water, citywide garbage pickup for disposal in landfills, street paving with grates for stormwater, required cleaning (and inspection) of privies in the city, and the passage of strict sanitation laws, the violation of which resulted in fines or hard labor. Similar measures were undertaken in cities throughout the U.S. South, and a convention of the American Public Health Association was held in Nashville, allowing presenters to share different measures taken to clean up cities across the country. After the implementation of sanitation reform, the Auxiliary Sanitary Association was formed, consisting of volunteers to assist in the sanitation work of the city government, ensuring the continuance of the

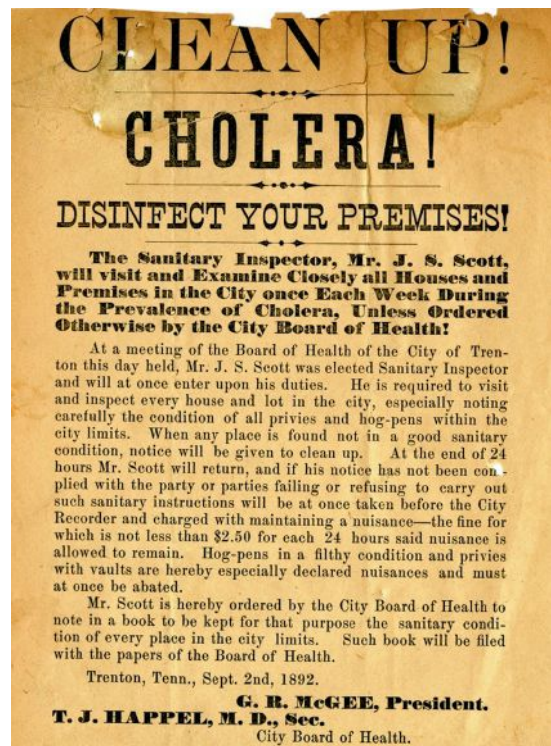


FIGURE 2. Cholera disinfection notice, Trenton, Tennessee, 1892.





FIGURE 3. Brick walkway feature, facing north.

benefits caused by the sanitation improvements.

Archaeologically, the most obvious manifestation of the sanitation reforms was in the surprising lack of artifacts from across the site. Excavations targeted areas that were most likely to produce refuse pits and sheet midden deposits, yet none were identified. The presence of the cleaned privy vault confirms that the previous site occupants were in some accordance with the sanitation laws. Excavations also uncovered what appears to be a brick-lined walkway. There were no city ordinances that required the lining or paving of privately owned alleys and walkways; however, such means could have made it easier to keep yards clean in compliance with the sanitation laws of the 19th century.

Construction of the new federal courthouse is currently underway. The GSA expressed interested in developing an exhibit that presents the history of sanitation in Nashville, incorporating the historical research as well as the excavations at the site. The exhibit is currently planned to be installed at the nearby Nashville Public Library, but may eventually be relocated to the new courthouse once it is completed.

## USA - Southwest

### New Mexico

**Historic Resource Study, Chaco Culture National Historical Park** (submitted by Karen K. Swope, Statistical Research, Inc.): Statistical Research, Inc. and the SRI Foundation recently completed an Historic Resource Study (HRS) for Chaco Culture National Historical Park (Park) (Figure 1). The Park, occupied for at least 8,000 years, has attracted much research devoted to its prehistoric resources. Researchers have devoted less attention to the two or three most recent

centuries of habitation and land use. The HRS and an accompanying geospatial database (Swope et al. 2017) identify and analyze these lesser-recognized historic-period cultural resources located within the Park's bounds.

The HRS is a reference for interpretation, research, and management, and a tool for Park managers in developing and implementing preservation treatment plans, making decisions regarding visitor use, and designing interpretive materials and outreach activities. The investigation included field reconnaissance and an assessment of site conditions, threats, and significance. The report includes discussions of potential cultural landscapes, future research needs, Chetro Kettle land ownership, oral history summaries, and a historical research bibliography.

The earliest Navajo settlement in the Chaco region dates to the 18th century. Following the 1864 incarceration at Bosque Redondo, many Eastern Navajo families returned to the Chaco area by the 1870s. In this period, farming, hunting, and gathering supplemented the formerly predominant sheepherding economy. An influx of Spanish American herders and Anglo-American traders created a market for wool, blankets, and rugs. New jobs in wage work included assistance in archaeological excavations and building construction at Chaco, and supplanted sheepherding when the stock-reduction program was

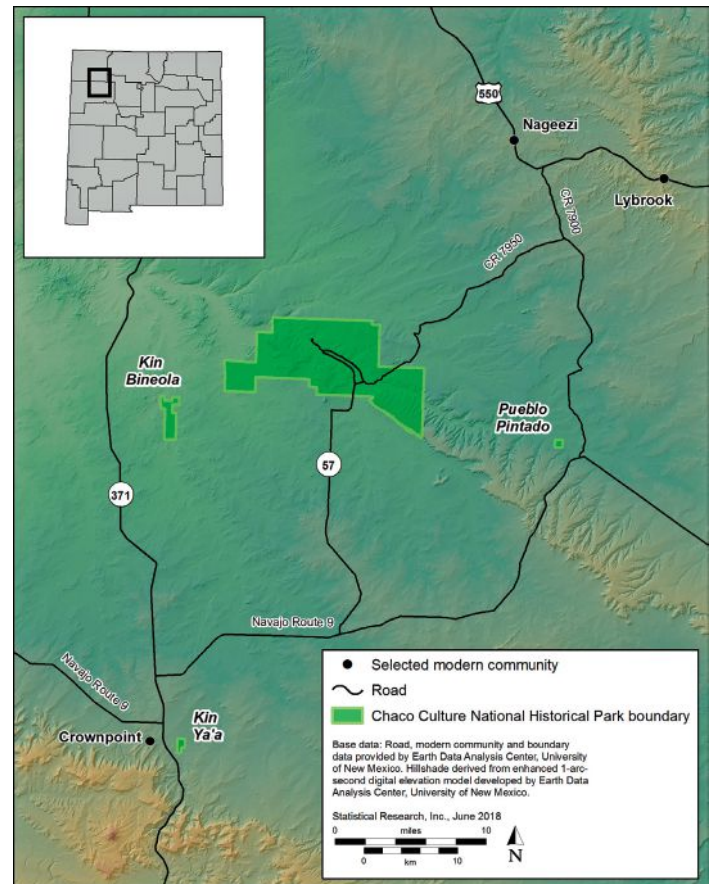


FIGURE 1. Location and boundary of Chaco Culture National Historical Park, New Mexico.





FIGURE 2. Navajo hogan at 29SJ 135. (Photo courtesy of SRI).

enforced. Navajo homesites and sheep camps were removed during the 1930s and 1940s, and the last Navajo family was forced to leave their homesite within the monument boundaries in 1948. Archaeological remains of Navajo settlement include hogans (Figure 2), stone buildings, rock-shelters, corrals, lamb pens, hornos, and rock art.

Between 1849 and 1877, a series of incursions included Lt. Colonel John Macrae Washington's military reconnaissance and Wheeler and Hayden's geographic and geological surveys. The U.S. Bureau of Ethnology prepared photographs and scaled plan maps of ruins in 1884 and 1887. Informal studies of Chaco's archaeological remains began in

1894, when Scott Morris, Richard Wetherill, and the Palmer family made collections. Scientific archaeology followed at Pueblo Bonito with the Hyde Exploring Expedition (1896–1900). Beginning in 1897, Wetherill established a trading post, homestead, and ranch in Chaco Canyon (Figure 3). Wetherill, early archaeologists, and the U.S. National Park Service repurposed several intact prehistoric rooms. Archaeological remains from this period include ruins of Wetherill's constructions, coal mines, a cemetery, some ranch buildings, and graffiti.

U.S. President Theodore Roosevelt created Chaco Canyon National Monument in 1907 through the newly passed Antiquities Act. It was not until 1929, however, that the National Park Service began developing park infrastructure and took a more active role in resource protection, building residences and support buildings and erecting fencing. New Deal programs led to projects by the U.S. Soil Erosion Service and establishment of U.S. Civilian Conservation Corps (CCC) camps for workers engaged in water-control work, soil erosion, and repair of vulnerable prehistoric ruins (Figure 4). The U.S. Public Works Administration funded boundary fencing, cattle guards, road/trail development, water wells, telephone lines, buildings, and entrance markers. Works Progress Administration funds built the Chaco Field Research Station for archaeological crews. Virtually all of these buildings were removed during the 1950s and 1960s. Those decades also saw the development of new visitor and staff facilities, many of which continue to serve their original purposes.

Most historic-period sites at the Park (Figure 5) are in good or fair condition. A number of threats (e.g., vandalism



FIGURE 3. Wetherill's Company Boarding House remodeled as Chaco Canyon Trading Post in the early 1930s. (Courtesy of Chaco Culture National Historical Park, N77446.)



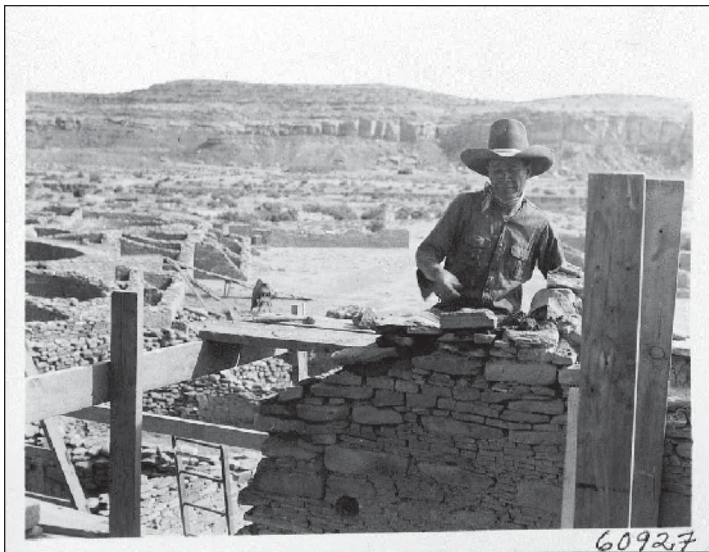


FIGURE 4. Navajo CCC-Indian Division enrollee Francis Norbeto repairing upper story wall, Pueblo Bonito. (Courtesy of Chaco Culture National Historical Park, N60927.)

and erosion) could affect site condition and eligibility for the National Register of Historic Places (NRHP). Site relationships included considerations of reoccupation, reuse of materials, colocation, and intentional removal of features. A potential Navajo community cultural landscape exists in the Park that exemplifies domestic activities, animal husbandry, and farming. The Park contains historic-period sites that appear eligible under NRHP Criterion d, and perhaps also Criteria a, b, and/or c. Study results support future Park planning and management decisions regarding historic-period resources, and provide a starting point for future cultural landscape studies.

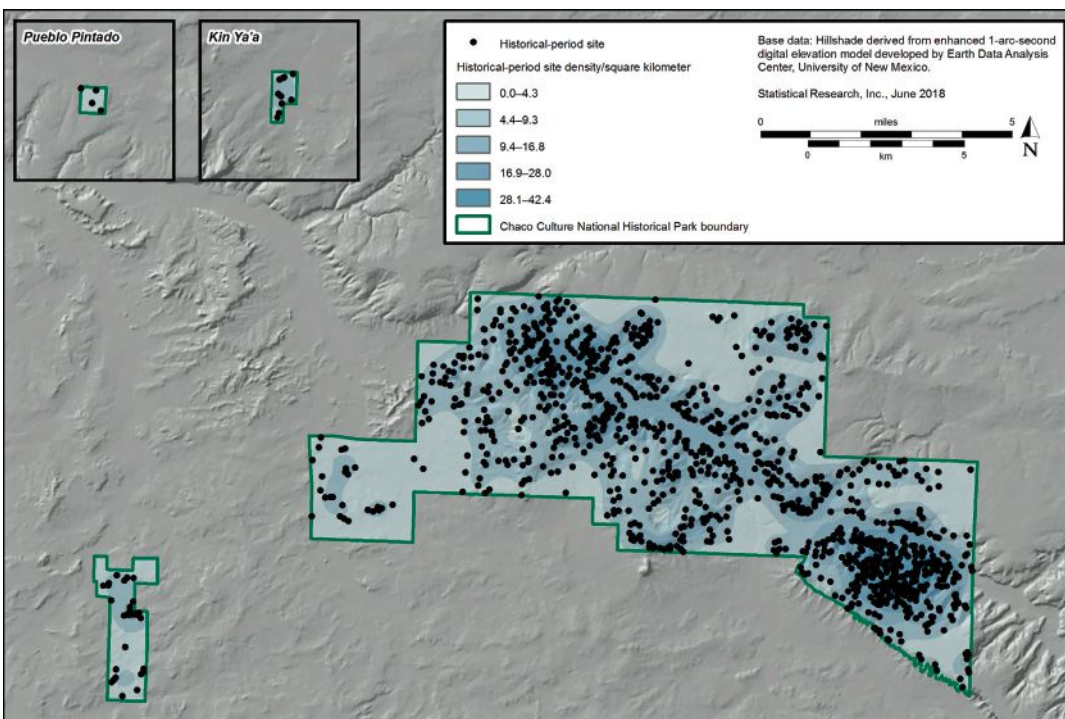


FIGURE 5. General locations and density of recorded historic-period sites at Chaco Culture National Historical Park. (Figure courtesy of SRI.)

## Reference

Swope, Karen K., Carla R. Van West, Carrie J. Gregory, Phillip O. Leckman, and Adam Byrd  
2017 *After the Ancients: Chaco Culture National Historical Park Historic Resource Study*. Report to U.S. Department of the Interior, National Park Service, Chaco Culture National Historical Park, Nageezi, New Mexico.

## Utah

### Central Pacific Railroad Features at 150: An Inventory of Trestles and Culverts in Box Elder County, Utah

(submitted by Kenneth P. Cannon and Houston L. Martin, Cannon Heritage Consultants, Inc., Logan, Utah): On 10 May 2019 the sesquicentennial of the driving of the Golden Spike, the final act in the completion of the world's first transcontinental railroad, will be celebrated. The completion of the Transcontinental Railroad in 1869 bound together a nation recently torn apart by civil war, but more importantly it reflected the age of industrial progress and set the United States on the road to becoming an international economic power (Bain 1999; Ambrose 2002). In the remote northwest corner of Utah, a large portion of that original engineering milestone is preserved among the sagebrush and salt flats (Figure 1). However, time, neglect, and abuse have taken a toll on the remaining structures of the Promontory Branch of the Central Pacific Railroad, a 90-mile segment that currently preserves the longest intact portion of the original grade and 164 architectural features.

The uniqueness of this historic resource and its preservation is a result of circumstance. With the abandonment of the Promontory Branch in 1904 when the Lucin Cutoff was completed, the stage was set for its preservation. While other portions of the line were continually maintained and upgraded, the 19th-century Promontory Branch was preserved, including portions of the original grade, architectural features of the railway, and archaeological components of section stations, historic towns, and cemeteries, leaving a unique and exceptional historic resource to be explored, studied, and interpreted as a rare example of Gilded Age engineering and innovation.

In the fall of 2018 Houston Martin and Jonathan Keith of Cannon Heritage Consultants (CHC), Logan, Utah documented 164 of the remaining features (Figure





FIGURE 1. Watercolor entitled Salt Flats by artist Michelle Nixon ([mmnixon.com](http://mmnixon.com)).



FIGURE 2. CHC archaeologists Houston Martin (left) and Jonathan Keith (right) recording a trestle.



FIGURE 3. Multi-stringer trestle with five bents and girts. Note that many of the railroad ties are no longer in place on the deck.

preserve, and interpret this exceptional resource (Martin et al. 2018).

Trestles, either single or multi stringer (trestlework bridge), were constructed across drainages (Figure 3). A distinction between the two types of trestles is overall length, as standard lumber lengths for stringers were only 32 feet long. Multistringers require multiple segments of lumber to span across larger drainages and therefore often have additional support structures or bents. On average, single-stringer trestles recorded during this project spanned 18 feet with the length ranging from 10 to 33 feet. Contrast this with the 6 multistringers, which averaged just over 50 feet.

Forty-seven stone culverts were documented during the inventory and included stone box and open-deck designs with stone box culverts most common (61%). All culverts were dry-laid stone masonry and comprised stone cobbles illustrating the use of hammer finishing and plug-and-feather splitting. All stone appeared to be sourced from local materials present in the vicinity of the feature (Figure 4).

Fifty-six wooden box culverts of various designs were recorded. Most wooden box culverts roughly matched the Southern Pacific Railroad’s (SPRR) 1896 common standards for creosoted wooden box culverts, as they had vertical-plank side walls within floor and roof timbers running perpendicular to the long axis of the culvert (Raymond and Fike 1994). This type of culvert is relatively uniform in design; however, we documented two variations, including one that has four support beams running the length of the culvert in the inside corners (Figure 5a) that mostly matches the SPRR standards, and another design with the support beams running along the outside corners (Figure 5b).

**TABLE 1**  
**FREQUENCIES OF RECORDED CPRR FEATURES**

Feature Type	Subtotal	Total	Percent
Wood Culvert		<b>63</b>	<b>38.4%</b>
Wooden Box Culvert	56		
Wooden Stave Culvert	7		
Stone Culvert		<b>47</b>	<b>28.7%</b>
Stone Box Culvert	29		
Stone Open/Deck Culvert	18		
Trestle		<b>43</b>	<b>26.2%</b>
Trestlework Bridge/ (Multiple Stringers)	6		
Single-Stringer Trestle	37		
Other		<b>11</b>	<b>6.7%</b>
<b>Grand Total</b>		<b>164</b>	<b>100.0%</b>

2; Table 1). Although the survey was cursory (location mapping, photographing, and condition assessment) important information was collected that will allow for the U.S. Bureau of Land Management (BLM) to better manage,

A major departure from the vertical-plank culvert type was the use of horizontal-plank sidewalls (Figure 6). Instead of the support beams used in the vertical design, internal box frames, equally distributed along the length of the culvert,





FIGURE 4. Feature 117 exceeds the other stone box culverts in terms of its complexity and workmanship.

provided locations to secure the roof and walls and offered support against the compressive forces acting on the culvert from the surrounding fill of the grade. This type of culvert appears to have been more susceptible to failure, largely due to the loss of the top support and subsequent buckling of the walls (Figure 7).

Two dual box culvert types were recorded and consist of simple designs with perpendicular roof planks resting on large timbers stacked on edge (Figure 8). The outside walls were double layered, while the internal wall was only a single timber wide. A small parapet was affixed above the opening.

The wooden stave culverts all featured similar designs and differ primarily in the diameter of the staved pipe, which ranged from 22 to 42 in. (Figure 9). Stave culverts were approximately 30.2 in. in diameter, although often the shape of the openings had deformed slightly, and mean culvert length was 352 in. (29 ft. 4 in.). These culverts consist of several wooden staves with beveled (i.e., trapezoidal) cross sections that form the barrel. The lumber used for the staves typically consisted of 2 or 3 in. thick boards.

Feature condition was also assessed as part of the inventory, with most in fair or moderate condition. Certain types of features appeared to be more susceptible to deterioration than others, with both stone open-deck and box culverts typically exhibiting the lowest degree of integrity. Based on our field assessment, the fair-to-moderate condition of the stone box culverts was largely the result of differential deterioration to the opposing ends of the culverts (Figure 7). Often, the upstream side exhibited relatively little deterioration, while the downstream opening had completely collapsed due to undercutting of the masonry, which can be attributed to head cutting within the erosional channels that had formed beyond the opening. In a few cases, the walls have remained standing, but the lintel stones of the roof have been displaced.

The stone open-deck culverts often had little of their original structure intact beyond the walls, and these were often collapsed into the channel (Figure 10). Indeed, several examples of this feature type have completely lost one of the parallel walls that form the culvert. In the few cases



FIGURE 5. Examples of two variations of wood box culverts with vertical side wall planks: (a) internal support structure; (b) external support structure.



FIGURE 6. Wooden box culvert with separate horizontal strut.

where decking was still in place, it often consisted only of the stringers.

Trestles tended to be in moderate-to-good condition (Figure 3). Most suffer from the loss of decking, as a number have only the stringer assemblies still in place. Structurally, a recurring problem was erosion of the grade behind the bulkhead, which weakened a vital component of the trestle. Other threats to these features was also noted and included vandalism and natural or intentional fire (Figure 11).





FIGURE 7. Overview of a nearly destroyed box culvert with separate strut.



FIGURE 8. Example of a dual wooden box culvert.

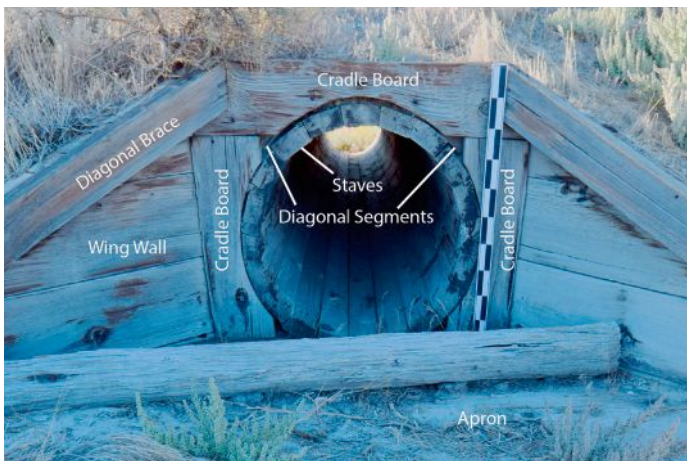


FIGURE 9. Components of a wooden stave culvert.

An unexpected discovery of the project was the presence of inscriptions on two features, which included the names of individuals, dates, or places carved into their wood components. The first was a wooden box culvert within the former town of Terrace, which had multiple inscriptions carved into its face, wings, and the walls and braces (Figure 12). The inscriptions included serif and nonserif fonts and subjectively appear to have taken considerable time to carve. At least 19 carvings are present, and additional examples may be revealed with further investigation. The more-

visible inscriptions include two individuals with the “Shine” surname, “R.D. Shine” and “W.P. Shine”; “W.E. Harding,” “E.B. Stump,” the “Biddle” surname, and “Tice Davis.”

The “Tice Davis” inscription is associated with a “Lex. Ky”, which likely refers to Lexington, Kentucky. A preliminary examination of genealogy records found at least three persons with the name Tice Davis associated with Lexington or Kentucky in the late 19th century (FamilySearch.org). At least one record has a Tice Davis who was born in Kentucky and living in Vacaville, California in 1900. More research of these names was conducted on ancestry.com or with hobo graffiti references.

During this project, many potential research questions arose that were beyond the project scope. Future projects range from clarifying the maintenance history of individual features to identifying temporal and spatial patterns to exploring specific people who once inscribed their names into some of the features. Many additional avenues beyond these could be explored, especially in conjunction with further research at the numerous section stations and siding along the railroad and examination of archival records. Of course, the addition of hundreds of photos of these features will aid in their future management and preservation.

First, it is well established that many of the features were maintained, modified, or replaced over their lifetimes. This was a fact from the very beginning, as the CPRR was rapidly pushing its way into northern Utah, building temporary trestles and culverts and racing the UPRR to claim as much trackage in the state as possible. Later, section gangs replaced expediently framed trestles with more-substantial pile trestles and constructed stable wood and stone culverts. Maintenance of these structures continued into the 1930s, and records regarding the condition of the various trestles and culverts can be found in bridge inspection books. As we now have accurate GPS locations and descriptions from this project, those records could be correlated to the current structures and provide an important view into historic railroad infrastructure maintenance across northern Utah.

The various designs documented during this inventory, especially concerning wooden box culverts, suggest that there is both spatial and temporal patterning among



FIGURE 10. Example of a stone open-deck culvert with intact stringers that has been subjected to erosion.





FIGURE 11. Fire, whether natural or intentional, is another threat to wooden features. This photo illustrates burned stringers on an open-deck stone culvert.

created them. It provides a more human perspective on the lives of the culverts and trestles along the CPRRG.

#### References

Ambrose, Stephen E.

2002 *Nothing Like It in the World: The Men Who Built the Transcontinental Railroad, 1863–1869*. Simon & Schuster, New York.

Bain, David H.

1999 *Empire Express: Building the First Transcontinental Railroad*. Viking Penguin, New York.

FamilySearch.org.

<https://familysearch.org/ark:/61903/1:1:M9GG-WPY>.

Accessed 22 February 2019; page no longer available.



FIGURE 12. Inner east wall of Feature 76 with various signatures, including “W. Pq[?] Shine”, “H. Edwards” (mirrored), and “Portland Tom”.

Martin, Houston, Ron Sladek, and Kenneth P. Cannon

2018 *2018 Central Pacific Railroad Feature Inventory, Box Elder County, Utah*. Report to the Bureau of Land Management, Utah State Project Number U18KP0907, CHC Technical Report Number UT-18-044.

Raymond, Anan S. and Richard E. Fike

1994 *Rails East to Promontory: The Utah Stations*. Bureau of Land Management, Cultural Resource Series No. 8, Special Edition Reprint.

them. In some instances, specific designs show up along spatially constrained sections of the grade and may reflect different work crews, specific periods of repair, or other unknown phenomena. Many of the culverts appear to be temporally significant, such as those that employ square nails in their construction. Various features have numbers or letters applied to their wood components, such as the alphanumeric characters that have been stamped or written with nail heads, which may be meaningful.

Finally, we have the less common, yet intriguing, occurrence of names, places, and dates carved into the wood of some features. The popularity of genealogy websites and ready access to decades of census records could prove helpful in connecting this writing with the people who





## 2020 ACUA George Fischer International Student Travel Award

The Advisory Council on Underwater Archaeology is pleased to announce the 2020 ACUA George Fischer International Student Travel Award. This award of \$1,000.00 (USD) will be offered to help fund travel costs for the upcoming 2020 SHA Conference in Boston, Massachusetts, USA, and will be granted to an international student presenting a paper on an underwater or maritime archaeology topic at this conference. Conference abstracts must be submitted directly to the Conference Organizers as outlined in the Call for Papers. Please refer to <http://sha.org/conferences/> for complete details on abstract submission and deadlines.

To be eligible for consideration, students applying for this award must currently be enrolled, and in good academic standing, in a graduate degree program (includes full-time, part-time, or thesis/dissertation hours only). International students are considered to be those students residing or studying in a country other than the country where the conference is being held.

To apply for this award you must submit the following:

1. Curriculum vitae
2. Short cover letter
3. A copy of your conference abstract, along with confirmation of submission

Submissions will be judged on academic merit and relevance to the field of underwater and maritime archaeology.

All award application materials must be sent to the ACUA at [info@acuaonline.org](mailto:info@acuaonline.org) by 1 October 2019.

## FOUNDATIONS: Women in Historical Archaeology

The *SHA Newsletter* will be introducing a new series, Foundations, focusing on interviews and oral histories with women over the age of 65 who have dedicated a lifetime to the field of historical archaeology. The idea behind Foundations is to capture the stories of the women who began careers at the inception of historical archaeology, laying the foundations for the archaeologists coming after them. Oral histories will allow both the documentation and recognition of their contributions to historical archaeology to reach a wider audience. The series welcomes interviews with professors, agency archaeologists, CRM archaeologists, and field and lab specialists from across the field and around the world. Dr. Judy Tordoff, who received her initial historical archaeological experience at Michigan's Fort Michilimackinac in 1967, was the California Department of Transportation's first historical archaeologist and will be featured in the summer issue of the *SHA Newsletter*.

For more information on Foundations, as well as a list of suggested questions, please contact Kimberly Wooten at [kimberly.wooten@dot.ca.gov](mailto:kimberly.wooten@dot.ca.gov). Ms. Wooten is an historical archaeologist with the California Department of Transportation, Headquarters, Cultural Studies Office, and would welcome your input on this series.





*SHA 2020*

*Boston, Massachusetts, 8-11 January*

**THE SOCIETY FOR HISTORICAL  
ARCHAEOLOGY NEWSLETTER**

**Please note the deadlines for submissions of news  
for UPCOMING ISSUES of the *SHA Newsletter***

Summer 2019 . . . . . 1 June 2019  
Fall 2019 . . . . . 1 September 2019  
Winter 2019 . . . . . 1 December 2019  
Spring 2020 . . . . . 1 March 2020

**Society for Historical Archaeology  
13017 Wisteria Drive #395  
Germantown, MD 20874  
Phone: 301.972.9684  
Fax: 866.285.3512  
Email: [hq@sha.org](mailto:hq@sha.org)**

**Newsletter Editor Patricia Samford:  
[patricia.samford@maryland.gov](mailto:patricia.samford@maryland.gov)**