

A Digital Multi-tool: Using Storymaps for Education and Public Outreach

Thomas Kurt Knoerl Ph.D. R.P.A. (Georgia Southern University, Associate Professor of History)

ABSTRACT

In 2022, undergraduate students from Georgia Southern University in Savannah, Georgia, U.S.A. conducted one day visual surveys and mapping exercises on five sites related to African American maritime history. As part of their maritime archaeology class, the students conducted historical background research on site, worked with members of the local community and governments, and produced a digital storymap of an African American maritime cultural landscape. By creating the storymap, which shows the sites in relation to each other, students gained a better understanding of the concept of a cultural landscape. Projects like this one can raise public awareness not only on important individual sites but, through a digital storymap, teaches the public that sites such as these are all connected and together, can tell a deeper story. This paper discusses how the project was organized, software alternatives that are available for similar projects, and the educational and public outreach benefits that cultural resource managers from any area can use to both educate students and build community support.

Keywords: Storymap, Education, Public Outreach, Digital

INTRODUCTION

The discovery of a previously unknown shipwreck site can grab headlines and stir the public's imagination. "Was there any gold onboard? Were there any cannons? Was it a pirate ship?" are among the questions asked by the public. Rarely, if ever, does anyone ask, "is this site part of a larger maritime cultural landscape that can add to our understanding of past maritime communities?" Seeing shipwrecks or other maritime related archaeological sites as part of a larger narrative would demonstrate to the public that there is more to the story here than the potential monetary value of an individual site. This could, in turn, potentially generate public support for historic preservation which is a common goal for cultural resource managers. Shifting the focus from questions about one wreck to questions about an entire community's past is a useful exercise but how does one do that? The short answer is, by looking at multiple sites at the same time.

A MARITIME CULTURAL LANDSCAPE IN COASTAL GEORGIA

During the spring 2022 semester at Georgia Southern University, I offered a course on maritime archaeology for undergraduate students. I had taught it once before as a non-diving class that visited five sights around the Savannah, Georgia area. I wanted the students to experience different types of maritime archaeological sites such as an abandoned wharf, a steam engine, a small boat, etc. While the students gained a lot from the different experiences, the most common critique I received was that the students felt the sites were unrelated to each other, which, apart from them all being maritime related, was true. For the 2022 semester, I decided it would be a stronger learning experience if the five sites were related. To do that I selected sites all connected to African American maritime history. They were still different types of sites requiring different recording techniques because I wanted to teach different fieldwork skills. They included a canal lock built with enslaved labor, a Gullah Geechee (African American communities with strong ties to coastal sea islands in the southeast United States) built oyster bateau, an African American owned marina, an island temporarily given to Freedmen in 1865, and a Gullah Geechee oystering community. The common thread of African American relationships to water added a layer of significance in the students' eyes not just because of topical coherence, but because the students now saw all five of the sites as being part of a much larger story. This made explaining the concept of the maritime cultural landscape far easier than I had experienced in other classes I taught. I was used to dealing with the confusion that accompanied undergraduates after reading the classic, but somewhat complex, work on the topic, *The*

Maritime Cultural Landscape, written by Christer Westerdahl.¹ Seeing the concept laid out before them in the real world made it much clearer. The students viewed the topic of the African American maritime cultural landscape as a regional issue rather than as a collection of independent sites even though the five locations we visited were not connected in terms of their previous owners. They saw the sites as evidence of a wider culture. As a teacher, I was quite gratified by this and affirmed in my decision to use this approach to teaching the class. As a public historian, though, it made me wonder how we as a class could pass the same lesson on to the general public. I could not, after all, transport everyone in the Savannah metro area to each individual site so that they could see them the way my students did, or could I?

While I couldn't physically transport members of the public to each of my sites, I could show them where they were located on a map of the region. This provided a sense of the scale of the landscape. The sites were spread out over approximately 1,300 square miles. The second part needed to appreciate the relationship between the locations meant telling the stories behind each site. Finally, I needed a way to do this on demand. A digital storymap accomplishes all of these goals and more. By placing an interactive map online that contains information about each archaeological location, visitors could both "see" the spatial relationship between each site and read the stories that connected them as well. An additional benefit that comes with using a digital platform is the ability to attach different types of media including text, images, videos, timelines, photographic overlays, three dimensional models, etc.

I explained to my students that as responsible archaeologists, we had an ethical duty to provide site reports on our work to the stakeholders involved for each site. Without meaning to, I had selected a federal, state, and municipal site along with two owned by private individuals. The students prepared reports for each of these groups but I also taught them that we had an additional responsibility to include public outreach in our project. I informed them that we would create a digital storymap for this project as one of the ways we would share our findings with a wider audience. As a class we discussed why this was important, how it created a shared sense of community and thus an interest in historic preservation. We talked about how writing for the general public, as opposed to an academic audience, meant using less professional jargon, using concise prose, and having teaching as our main objective. The students kept these goals in mind as they recorded our work in photographs and videos. I asked them to consider what images would help explain the stories related to each location. Unfortunately, as the semester came to a close, there was not enough time for the students to work directly on constructing the digital storymap but their text and images were included in the site that I eventually launched on their behalf: <http://www.themua.org/aamcl>.²

Visitors to the site will find an introduction section that explains the project and its goals. After that, there are two content sections. The first is the storymap based on my students' work while the second includes data gathered by my colleague, Dr. Julie de Chantal, who conducted research on United States census data related to African Americans working in the maritime industries for six counties in coastal Georgia. The two sections together were funded in part by small grants.³ The maritime archaeology portion of the storymap steps through each of the five sites while simultaneously showing a map of the region with all five locations indicated. This is a constant reminder of the geographic ties between the project locations. The text that accompanies each site provides its background history. Each location contains up to five images or videos which illustrate both the history and the work conducted by the students. A variety of historic newspaper clippings, videos, and photographs provide deeper context for the visitor. Taken all together: the map, site descriptions, and census data are more than just the sum of their individual parts.

¹ Christer Westerdahl, "The Maritime Cultural Landscape," *The International Journal of Nautical Archaeology* 21, no. 1 (1992): 5–14.

² T. Kurt Knoerl et al. "The African American Maritime Cultural Landscape: Field Work in Coastal Georgia," *The Museum of Underwater Archaeology*, September 27, 2022. <http://www.themua.org/aamcl>

³ Funding for this project was provided in part by generous donations from Georgia Sea Grant, Americana Corner, and the Museum of Underwater Archaeology.

For example, while the historic African American marina on Wilmington Island is of interest in its own right, as they all are, together, the five locations, each with their own story, illustrate the broad diversity of African American maritime communities across the nineteenth and twentieth centuries, thus painting a more complete picture. The five individual sites become one community spread over the Georgia coast.

CIVIL RIGHTS EDUCATION

In previous classes, I have used storymaps for different purposes although always in an effort to educate not only the students but the public as well. The first example, the spring 2022 storymap, displayed the spatial relationships between archaeological sites. A second use for storymaps is illustrated by a project created in 2020 in which my digital history class recreated a historic African American walking trail of Savannah, Georgia created and led by the late Civil Rights leader W. W. Law.⁴ The tour was extensive, highlighting sites of famous African Americans as well as those who were representative of the working classes. Law's tour helped teach the public that while the individuals may be gone, much of their physical world is still with us. He transformed what might otherwise be just another antique home, into evidence of Black entrepreneurship and of a community's perseverance in the face of persistent discrimination. As one walks the tour, it becomes apparent just how widespread and vibrant the African American community was in Savannah. This was the end goal I wanted my students to recreate digitally.

Students worked with the city archives to review Law's tour notes. They relocated and photographed the tour stops and conducted additional background historical research to supplement Law's comments. The storymap currently contains twenty-seven sites and includes photos and videos. Unlike the African American maritime cultural landscape storymap, the W. W. Law storymap's main focus is on a map of Savannah. Viewers are more likely to actually visit several of the sites. Having the map emphasized makes it easier to select specific sites to see and to plan a walking route. A QR code was used on a flyer that was distributed to numerous places around Savannah to encourage the public to take advantage of the free tour. In 2023, the storymap was updated by a new group of students who recorded an audio version of the tour so that visitors can listen to both Law's comments and the students' research.

COLLABORATIVE EXHIBITS

A third use for digital storymaps includes uniting independent organizations across a far broader scale. Students in my Native American history course were tasked with discovering which museums in North America contained birch-bark canoes in their collections. This Native American technological invention was broadly produced in northern North America from the pre-contact period up to the present day. At first glance there may not seem to be much variation between canoes but a closer examination of the canoes in museum collections shows the incredible diversity that is largely a product of the individual Native cultural groups spread across the continent. The stem and stern of an Algonquin built birch-bark canoe in Musée Huron-Wendat museum outside of Quebec, Canada, is very distinct from one created by the Dena'ina Athabascan culture on display in the Alaska State Museum in Juneau.⁵

The birch-bark canoe storymap contains, at the time of this writing, sixty-three canoes in thirty-six museums. The storymap allows all of the independent organizations to bring their canoe collections together digitally in a way that would be impossible physically. National borders do not hinder this sharing.

⁴ T. Kurt Knoerl et al. "The W. W. Law African American Heritage Trail," The Museum of Underwater Archaeology, March 6, 2023. <http://www.themua.org/wwlawtrail>.

⁵ See tour stops 13 and 36 in Bark Canoes: A Digital Canoe Collection. T. Kurt Knoerl et al., "Bark Canoes: A Digital Canoe Collection," The Museum of Underwater Archaeology, May 10, 2023. <http://www.themua.org/barkcanoes>

Numerous Native communities can view the canoe style variations attributed to their cultures which is especially important for those groups who no longer possess any examples of canoes built by members of their culture. Researchers can view the canoes to see similarities and differences in not only design, but in builders and across time. The large map interface also lets viewers see the broad geographic range of museum owned canoes as well as highlighting those areas that are under-represented. This may encourage organizations to volunteer to participate in the project and to gain recognition for their collections. Participation in the bark-canoe storymap is free of charge to the participating institutions. Although far broader in scale than the African American maritime cultural landscape of Georgia storymap, the two sites are similar in that by placing each location, be it an archaeological site or an individual museum, into the context of the larger cultural landscape, the sites do not diminish in their importance but in fact gain from it because of the additional context attributed to them. In some respects, this mirrors the Asia Pacific Regional Conference on Underwater Cultural Heritage. As numerous cultural resource managers from across the Asia Pacific region gather at their triannual conference, each participant can see that they are not alone, but rather, a part of a much larger movement. They learn about and from each other noting similarities and also new viewpoints. Examining disparate birch-bark canoes can demonstrate how Native cultures were both similar to, and independent of, each other. The transnational and transcontinental example of the birch-bark canoes storymap could be a model for Asia Pacific cultural resource managers to bring their sites and collections together digitally, thereby raising awareness and appreciation of their work.

The mention of digital technology may be intimidating to some, however, all three examples discussed were created with the assistance of undergraduate students using ArcGIS software. While this may seem like an expensive option, it can be quite affordable if not free. The nonprofit educational organization The Museum of Underwater Archaeology applied for and received a significantly discounted priced account from ESRI, the maker of ArcGIS storymap software. ESRI also provides free accounts to qualified applicants that may be a good alternative for underfunded organizations. Options, such as StoryMapJS by Knight Lab, allow for free accounts and can provide an affordable option.

Many storymap software options operate in a similar manner. Users select a geographic location and upload text and images about the site. How best to tell the story is what requires the most thought, especially as the number of storymap software options increases. As mentioned earlier in this paper, my original maritime archaeology class visited five unrelated sites which, when viewed together, lacked a cohesive story. There was little to draw the viewer from one site to the next. The key is to understand why a collection of sites have been grouped together. One must be able to answer the spatial version of the “so what” or “why do we care” questions.

When considering creating a storymap one should give serious consideration to whether or not examining a data set’s spatial relationship has any significance. Does it matter if one archaeological site, for instance, is located in Perth, Australia, while a second is located in Buffalo, New York, if there is nothing else tying them together? In this instance, the spatial relationship between the two sites is insignificant or goes no further than mere curiosity. The best area to assess for significance is, unsurprisingly for those working in the humanities, the human story. Because most storymaps allow a viewer to follow a preset path from one location to another, it is very similar to laying out a narrative in a written story. The author should guide the viewer so that each site builds upon the next or at least offers a suggested direction of physical travel should the viewer be interested in visiting some or all of your sites. For those visitors who wish to resist the constraints of a traditional linear path, they can ignore the storymap’s creator and click on the map where they will. These rebels can rest easy knowing that even if they throw caution to the wind and select site number five before visiting site four, they will always have the overall map to guide them back to the suggested order.⁶

⁶ As you might have guessed, the author is not a fan of non-linear storytelling. To each their own.

Another suggestion for the beginning storymap maker is to consider, depending on the software platform, taking full advantage of the various media at the researcher's disposal. Concise, informative text is an absolute necessity but images and video can provide an opportunity to explore the site in greater depth, to draw attention to the relationship between sites, or to describe the threats to their preservation. The stories within the storymap can explore numerous facets of the collection. It all comes down to the overall purpose behind the storymap and, as discussed earlier, there are numerous options.

CONCLUSIONS?

The African American maritime cultural landscape based on my spring 2022 maritime archaeology class sought to teach both my students and the general public about the variety of maritime experiences of African Americans in coastal Georgia over the past two hundred years. The W. W. Law storymap resurrected a physical tour that was, in its own way, an analog version of a storymap. Law led his guests through the historic spaces in Savannah based on his own experiences and following paper maps. The bark-canoe storymap used the digital realm to shrink the physical space that separates museums and their canoes, thereby allowing visitors to view Native American maritime material culture in the context of their shared North American experience.

Regardless of the model one might choose, it is important that cultural resource managers, wherever they are, view storymaps as a way to overcome obstacles to teaching, research, and education that high cost and distance can impose. When interviewed about their experience in creating storymaps for both classes and personal projects, students acknowledged the challenges and opportunities this type of project presents. One student wrote, "I believe, the earlier historians... get into this expanding field, the better. It allows us to expand our range of influences beyond the university or the museum grounds onto a truly international stage."⁷ Another student noted the benefit they received from working on a publicly viewable storymap, "Having something other than words on paper to prove your academic abilities solidifies your goals and makes you think of other projects and applications that await you in the future."⁸ If it is true that water unites humanity, and the global distribution of shipwrecks around the world can attest to that (there is even a shipwreck in Lake Erie that was built in Asian waters), then cultural resource managers, working jointly, can use storymaps to show the ties that bind their underwater cultural heritage. With each node added to the storymap the story becomes richer in meaning and more effective in what it can teach us about our shared past. What lays at the heart of storymaps, is to put it plainly, the story. The map shows us not that we are disconnected by space, but in truth, connected by it. In the end, it's just a matter of scale.

⁷ Dalton Blackmon, email message to author, August 18, 2020.

⁸ Alyssa Saldivar, email message to author, August 18, 2020.

BIBLIOGRAPHY

- Knoerl, T. Kurt, Robert Carpenter, Bertram Cedola, Abby Anderson, Mary Anne Gojdics, Donna Sanders, Kaz Green, et al., "Bark Canoes: A Digital Canoe Collection," The Museum of Underwater Archaeology, May 10, 2023. <http://www.themua.org/barkcanoes>
- Knoerl, T. Kurt, Julie de Chantal, Sarah Fulford, Ozalynn Davis, Ann Grace Bazemore, Marchello Graddy, Zach Graham, et al., "The African American Maritime Cultural Landscape: Field Work in Coastal Georgia," The Museum of Underwater Archaeology, September 27, 2022. <http://www.themua.org/aamcl>
- Knoerl, T. Kurt, Julie de Chantal, Luciana Spracher, Harlie Bagley, Ana Beasley, Doug Carol, William White, et al., "The W. W. Law African American Heritage Trail," The Museum of Underwater Archaeology, March 6, 2023. <http://www.themua.org/wwlawtrail>
- Saldivar, Alyssa. "Story Map Article." Received by T. Kurt Knoerl, August 18, 2020.
- Blackmon, Dalton. "Story Map Article." Received by T. Kurt Knoerl, August 18, 2020.
- Westerdahl, Christer. "The Maritime Cultural Landscape." The International Journal of Nautical Archaeology 21, no. 1 (1992): 5–14.