



Pennsylvania Archaeological Site Survey Annual Site Reporting Activity in 2021



Pennsylvania Archaeological Site Survey Annual Site Reporting Activity in 2021

Contents

Summary	2
What’s New with PASS in 2021?	2
PASS & PA-SHARE.....	3
Important Changes to Note	3
Site Recording Sources.....	4
2021 Project Highlights	5
Little Round Top Archeology.....	5
Pennsylvania River Weir Recording Project.....	10
Steps toward Better Stewardship in Pennsylvania’s State Parks and Forests	13
Documenting Pennsylvania’s Submerged Vessels.....	15
SHPO Survey Activities	19
Data Summary and Maps.....	20

Summary

In 2021, 316 new archaeological sites were added to the Pennsylvania Archaeological Site Survey (PASS) files, bringing the statewide total to 26,338 recorded sites. This represents an increase in site recording from 2020 which saw a lower number of recorded sites likely due to challenges related to the COVID-19 pandemic. The majority of new sites were recorded through cultural resources management (CRM) projects. Though the pandemic continued to present challenges in 2021, we continued to see contributions from independent research projects, university research, Society of Pennsylvania Archaeology (SPA) members, and long-time avocational archaeologists.

What’s New with PASS in 2021?

In February of 2021, the Pennsylvania State Historic Preservation Office (PA SHPO) launched a new online data management and cultural resources system called Pennsylvania’s State Historic and Archaeological Resource Exchange (PA-SHARE). PA-SHARE substantially changed how archaeological sites are recorded in the Commonwealth. PASS-related changes are briefly discussed below.

Pennsylvania Archaeological Site Survey Annual Site Reporting Activity in 2021

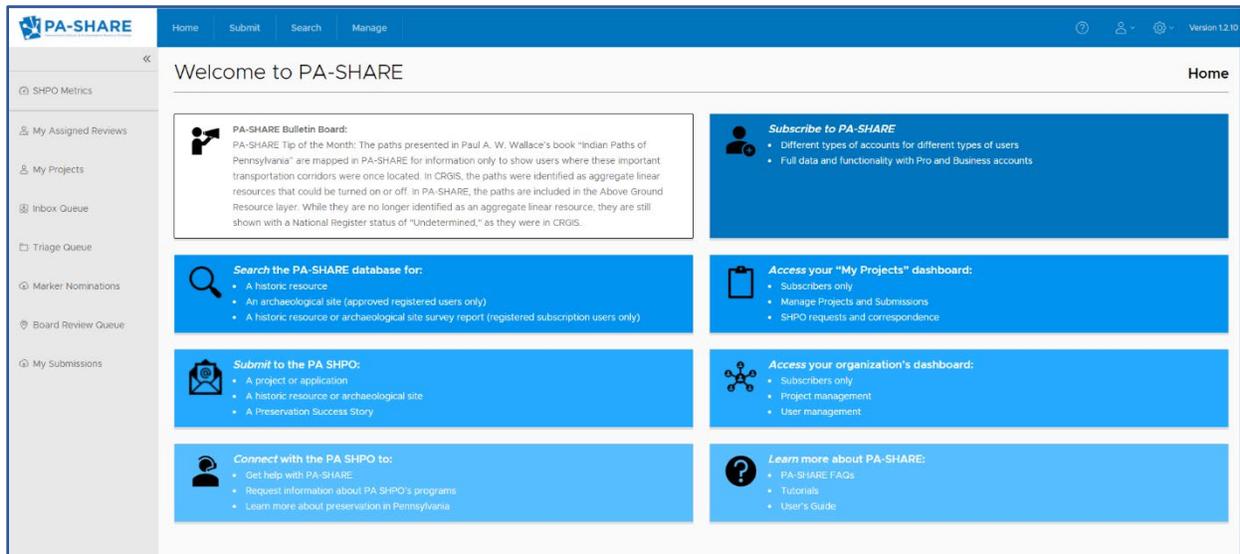


Figure 1: PA-SHARE homepage.

PASS & PA-SHARE

All archaeological sites are now registered and updated directly through PA-SHARE. The PASS form and abbreviated PASS form are no longer available on the PA SHPO's website. In lieu of the old forms, PA-SHARE has one standard resource details page for entering archaeological site information. The archaeological resource details page can be accessed through the initiation of an archaeological survey or through the inventory form. Though the resource details page in PA-SHARE follows a different format than the previous PASS form, the types of information recorded are the same with additional documentation such as maps, artifact catalogs, and photographs uploaded to the record as attachments. The switch to a completely online process allows site information to remain as accurate as possible and for new sites and site updates to be available to view immediately after processing. For detailed instructions on how to register a site via PA-SHARE, please see [Adding an Archaeological Resource to PA-SHARE](#).

Important Changes to Note

Below are some important changes to be aware of pertaining to the site recording process:

- 1) Archaeological site submissions are required to include a site narrative, site map, and artifact catalog (if applicable). These documents will be uploaded as attachments to the archaeological resource details page in PA-SHARE.

Pennsylvania Archaeological Site Survey
Annual Site Reporting Activity in 2021

- 2) PA-SHARE allows for four different types of archaeological sites to be recorded: archaeological resource, isolated find, submerged resource, and submerged vessel. The addition of submerged resource and submerged vessel allows for information specific to those resource types to be recorded including water depth, submerged setting, and specific vessel information such as vessel type, name, length, tonnage etc.

- 3) Isolated finds are no longer assigned isolated find numbers. Only isolated **diagnostic** Pre-Contact period artifacts are recorded in PA-SHARE and are assigned official PASS site numbers.

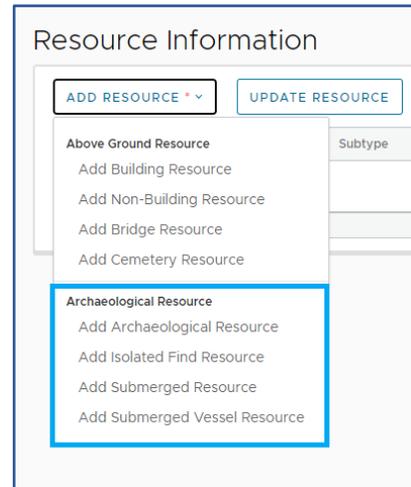


Figure 2. Types of archaeological resources that can be recorded in PA-SHARE

Site Recording Sources

As was true in preceding years, the most significant source of new sites in 2021 were CRM projects, accounting for almost 80% of all new recorded sites. The second highest source for new site recordation came from research projects undertaken by individuals working for the Pennsylvania Historical and Museum Commission (PHMC). A total of 30 sites were recorded in Dauphin, Lancaster, and Cumberland counties as part of an ongoing fish weir research project. An additional 18 new sites were recorded in various counties as a result of research focusing on previously unrecorded submerged vessels. Together, CRM projects and PHMC research projects accounted for approximately 94% of all newly recorded sites in 2021.

Source	Sites Recorded	%
CRM	250	79.11%
PHMC Research	48	15.19%
University Research	6	1.90%
SPA	5	1.58%
Individuals	7	2.22%

SPA members from Chapters 22 (Ohio Valley), 23 (Westmoreland), and 30 (Venango) recorded 5 sites in Butler, Crawford, and Westmoreland counties. These included historic domestic sites, a rockshelter, lithic scatters, and a paleontological site. The PASS files also saw contributions by several universities including Gettysburg College, Binghamton University, Immaculata University, Mansfield University, and Towson University.

Pennsylvania Archaeological Site Survey

Annual Site Reporting Activity in 2021

In general, there were a lesser number of sites recorded through non-CRM sources than in previous years. We understand that people need time to acclimate to a new system of recording and we are here to provide assistance throughout the site recording process. We are hopeful that with increasingly familiarity of PA-SHARE, we will see an increase in new sites from other recording sources in 2022!

If you have questions about the site recording process, need assistance or would like additional information, please contact Taylor Napoleon at tnapoleon@pa.gov.

2021 Project Highlights

Various projects that contributed to the PASS files in 2021 as well as efforts pertaining to the overall stewardship of archaeological sites in the Commonwealth are highlight below. These articles were provided by guest authors and represent both work that was completed over several years and ongoing efforts.

Little Round Top Archeology

Erik Kreusch, Archeologist, Gettysburg National Military Park

Introduction

The historical documentation of battlefields, including maps, personal accounts, and military reports combined with the understood and widespread knowledge of the end result of these conflicts seem to suggest that archeologists studying battlefield sites would only serve to restate prevailing historical narratives. However, several projects including recent archeological work at Little Round Top in Gettysburg National Park offers a re- evaluation and refinement of our current understanding of the preservation of the battlefield as well as its overall integrity.

Rehabilitation of Little Round Top

Gettysburg National Military Park (the park) has completed design for the rehabilitation of the Little Round Top visitor use area. The work is the culmination of over a decade of planning. The design will improve visitor services and access through the rehabilitation of the existing trail system and parking facilities and the addition of curbing, proper drainage structures, and interpretative signing. Social or unauthorized trails will be removed from the landscape by revegetating these trail sections. Plans are to begin construction this Spring. The site will be closed to visitation for approximately 18 months while the construction work is being undertaken.

In order to evaluate and provide constructive input on individual design elements of the proposal and their potential effects on archeological materials, systematic archeological metal detection and limited shovel testing was undertaken. Archeological investigations were restricted to a strip along each side of all roads, trails, and parking areas within the design proposal. Systematic shovel testing was employed in previously undisturbed areas and areas with substantial soil depth, such as a proposed bus parking area along the eastern shoulder of Sykes Avenue, north of Little Round Top proper.

Pennsylvania Archaeological Site Survey
Annual Site Reporting Activity in 2021

Additional archeological metal detection was undertaken late in the year to assess the impacts of social trail revegetation.



Figure 1: Crew investigating metal detector hits atop Little Round Top, facing Southwest. Devils Den in background.

The Battle for Little Round Top

Little Round Top is a small, rocky hill two miles south of Gettysburg in Adams County, Pennsylvania. Historical events beginning on July 2, 1863 forever shaped the importance of the hill in the annals of the Battle of Gettysburg. On the morning of July 2nd, 1863, Union troops extending their line southward from Cemetery Hill took up positions on the hill.

Little Round Top saw heavy fighting in the late afternoon of July 2, when Confederate Major General Longstreet's Corps attacked the southern end of the Federal position on Cemetery Ridge. Men from the Confederate Brigades of Robertson and Laws, specifically the 4th, 15th, 44th, 47th and 48th Alabama and the 4th and 5th Texas, attempted to seize the hill, hoping to turn it into an artillery position that

Pennsylvania Archaeological Site Survey Annual Site Reporting Activity in 2021

would flank the whole Union line. Federal troops from Colonel Strong Vincent's Brigade took position on the hill only minutes before the attack began, guided there by Gouverneur Warren, a staff brigadier. The regiments were the 16th Michigan, 44th New York, 83rd Pennsylvania, and 20th Maine. The defenders were supported by 6 guns of the 5th US artillery. The attacking and defending forces were of roughly equal numbers, and the Confederates had to advance up the steep sides of the hill.

The Federal defenders were crowded into a tight space and exposed to enemy fire. Their casualties were heavy, especially among officers. Any chance the Confederates had of taking the hill was blocked by the timely arrival of additional Union troops most notably the Pennsylvania Reserves under the command of Brigadier General Samuel Crawford. Exhausted by a long day of marching and fighting, the Confederates withdrew, hurried along their way by a bayonet charge by the 20th Maine and a withering fire from the Pennsylvania Reserves. The hill was defended, and the Confederates' Day 2 attack eventually faded with the evening light.

On July 3, Little Round Top was not attacked, but artillery positioned there had a part in stopping the Confederates' frontal assault on Cemetery Hill. That night, thinking they might be attacked the next day, the troops on the hill stacked stones to form breastworks. But the Confederates instead withdrew and began a long march back to Virginia.

Commemoration

Stewardship of Little Round Top as a commemorative landscape began soon after the battle. This preservation, though, did involve significant alterations to the landscape, including the construction of roads and trails and the installation of monuments. Portions of the stone breastworks were restacked in the 1880s. In response to the growth of tourism a railway spur was built to nearby Round Top Park. David Weikert, a disabled veteran, opened a small relic shop (36AD396) between the two Round Tops. In 1893 the Gettysburg Electric Railway graded a tourist trolley line across the project area next to Plum Run (36AD282).

Previous Work

Three previous archaeological surveys have been conducted at Little Round Top. Two surveys (Alterman 1991; Resnick 1999) took place near the summit and both found no cultural resources. Survey methodology/ sampling strategies employed and/or visitor impacts may have affected the negative findings.

Despite the importance of battlefield sites to archeological inquiry and understanding, to date little work has been directed at understanding specific details of the Battle of Gettysburg or in reshaping our understanding of the battle through archeological narratives, as well as, historical ones. Data from recent systematic metal detection surveys has established a window into previously unknown details and facets of the battle for Little Round Top and its subsequent memorialization.

In 2017 an archaeological survey was performed by the National Park Service Northeast Region Archaeology Program and volunteers in support of NHPA Section 106 compliance for the Little

Pennsylvania Archaeological Site Survey
Annual Site Reporting Activity in 2021

Round Top prescribed burn (Dukes 2019). The study utilized shovel testing, and pre and post burn metal detection surveys within a 4% sample of the 52-acre burn. Rather than devoid of battlefield materials, the survey indicated that a wide diversity of materials associated with the battle for Little Round Top are present and retain integrity. The findings indicate that prescription burning had no effect on archeological materials associated with the battle and burning can aid in the recovery of battlefield materials.

Little Round Top Archaeological Survey

In 2021, the park conducted a Phase I archeological survey of Little Round Top area. Metal detection was employed along each side of the existing asphalt trails and other hardened surfaces such as the park's main thoroughfare through Little Round Top, Sykes Avenue. As surface ground conditions indicated the more developed portions at the summit of Little Round Top had been subjected to years of trampling and soil loss and metal detector finds were limited to modern trash and chain links associated with a previous post and chain fence that bordered the trails during the park's commemorative period. Very few items related to battle remain. The development of the paved trails and heavy visitor use has likely contributed to the overall disturbance and removal of any battle related artifacts.



Figure 2: Various types of minie balls recovered during 2021 survey.

Pennsylvania Archaeological Site Survey Annual Site Reporting Activity in 2021

Metal detection in areas outside of the more developed areas including to the south and southwest of Little Round Top, however showed higher degrees of site integrity. These areas were wooded and intact A soil horizons were present, despite the presence of numerous social or unauthorized social trails. Several 2m metal detector transects were surveyed across this area resulting in the recovery of significant amounts of artifacts relating to the battle. Artifacts were recovered from this area included fired and dropped minie balls of various types; artillery shell fragments; canister shot; clothing items such as grommets, backpack hooks, and buckles; and other miscellaneous items such as horseshoes and unidentified lead. Each of the detector finds were recovered and mapped utilizing a sub meter GPS unit and the points and corresponding artifact mapped in GIS. The archeological signature on this portion of the battlefield shows a high degree of integrity.

Further metal detection work was employed following these findings and a 100% survey was initiated of the area south of Little Round Top, to better assess potential impacts from the revegetation proposal. Among the findings was a large cache of unfired .69 caliber bullets along a breastwork formed on the 3rd of July, 1863. Adjacent to the present road, it was assumed that this area had been impacted by the development of the park during the 1890s and into the 1930s.

At twilight on the 2nd of July, 1863, Major General George Sykes Federal V Corps brought his Third Division under the command of Brigadier General Samuel Crawford forward to repulse the Confederate assault on Little Round Top. His two brigades of hometown boys, Pennsylvania Reserves, had seen little action in the previous months and years guarding the defenses of Washington, D.C. They would prove up to the task and their coordinated fire repulsed the Confederate efforts at Little Round Top.

The Pennsylvania Reserves, among them the “Bucktails” (42nd Regiment), favored the large bore .69 caliber rifled and smooth bore ammunition. The cache of dropped .69 caliber minie balls and .69 caliber round balls can be attributed to the Pennsylvania Reserves, most notably elements of Col. Fisher’s 3rd Brigade who took up positions on the far left flank.

The Future

The recovery of battlefield materials along with associated locational information through GIS mapping, continues to provide insights into the interpretation of battlefield. Remote sensing technologies such as metal detection provide the best method for recovering the archeological signature of battlefields.

The archeological expression recovered at Little Round Top allows for insights into the defense of the Federal position, how it was attacked, and individual and unit level actions taken during the battle for the hill that are not often documented in such detail through historical narratives. This work also serves to guide how project designs are implemented and in the measures that must be taken in order to preserve these remains for future generations.

Pennsylvania Archaeological Site Survey Annual Site Reporting Activity in 2021

Pennsylvania River Weir Recording Project

Melanie Mayhew, Curator of Archaeology, The State Museum of Pennsylvania

The V-shaped fish weirs that dot Pennsylvania’s waterways are part of its rich cultural landscape. Sometimes plainly visible (Figure 1), they are largely absent from the archaeological record. Used by both the native inhabitants and European settlers, the identification and recording of these sites offer a path towards improving the understanding of Pennsylvania’s past. The goal of this project is to identify fish weirs in Pennsylvania’s waterways and record them in PA-SHARE.

To date, 240 weirs have been identified in the Susquehanna River drainage using Google Earth and historic aerial imagery. In 2021, this project recorded 30 sites in the Commonwealth’s PASS files bringing the total number of recorded weirs to 39.



Figure 1. PARW017 (36DA0283) as seen from a bridge during an October sunrise. Three Mile Island is visible in the background. (Photo by Frederick Mayhew)

These sites exhibit several configurations of “V”-shaped stone weirs (Figure 2). A brief survey of aerial imagery confirms the existence of additional weirs on the Lehigh, Schuylkill, and Delaware Rivers; however, they have not yet been recorded as part of this project and are not reflected in the 240 identified weirs. The results of this project continue to exceed expectations.

Pennsylvania Archaeological Site Survey
Annual Site Reporting Activity in 2021

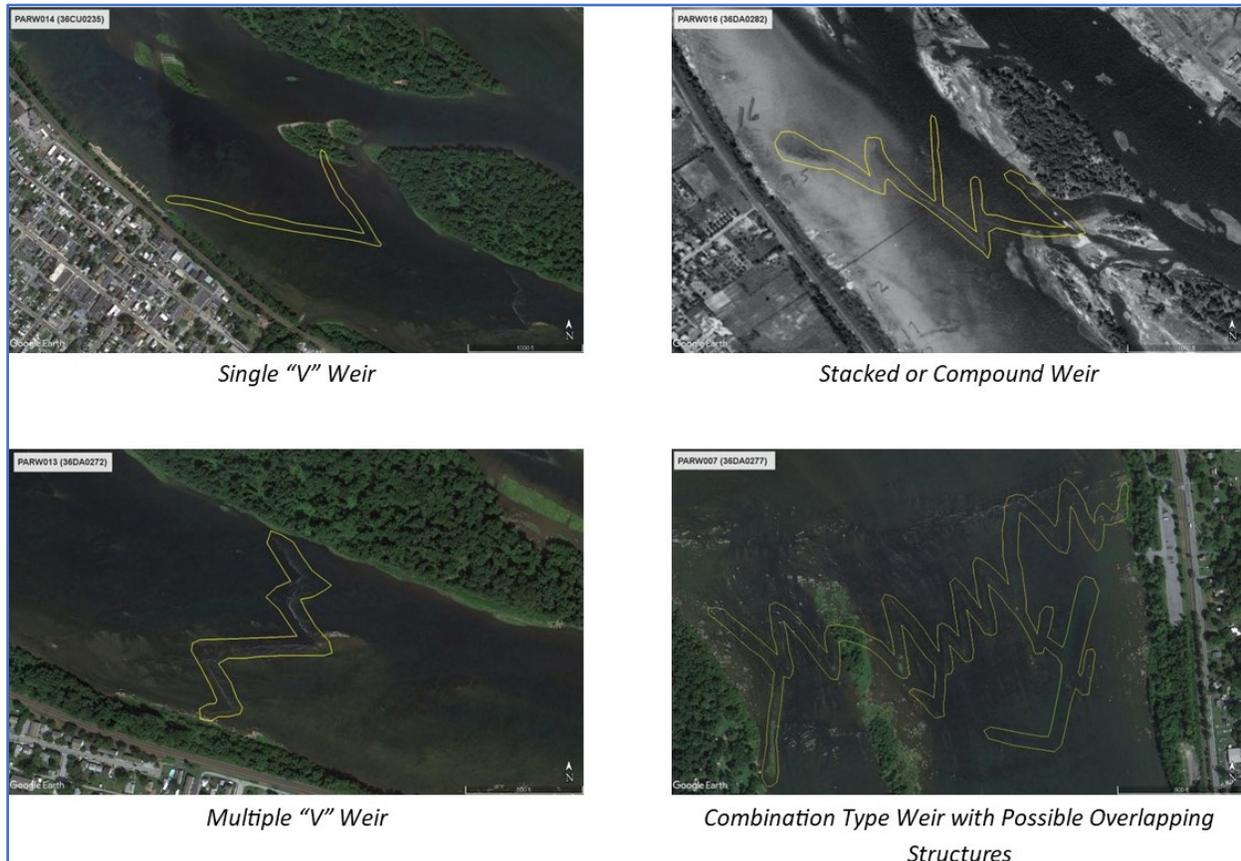


Figure 2. An assortment of arrangements displayed by Pennsylvania's "V"-shaped fish weirs.

One of the first tasks of this project was developing a systematic method for creating records of the weirs. To track weirs more easily, a consistent naming convention was developed. PARW001, PARW002, etc. (Pennsylvania River Weir) was adopted as a logical and neutral naming system that avoids infringing upon indigenous place names. Because this project relies upon aerial imagery for the identification of weirs, a set of suitable images is uploaded to PA-SHARE with each record. This image set includes both historic and modern imagery to illustrate change over time. Historic imagery is obtained through the [PASDA Imagery Navigator](#) and overlaid in Google Earth (Figure 3). An image showing the site boundary (drawn as a GIS point buffer) is also included in the image set (Figure 2).

The distribution of identified weirs in the Susquehanna River drainage was categorized by sub-location (Figure 4). Unsurprisingly the largest concentrations of weirs are in the lower portion of the drainage. Documenting these features is the best way to create a lasting record of their existence and prevent their accidental destruction by major construction projects.

Pennsylvania Archaeological Site Survey
Annual Site Reporting Activity in 2021

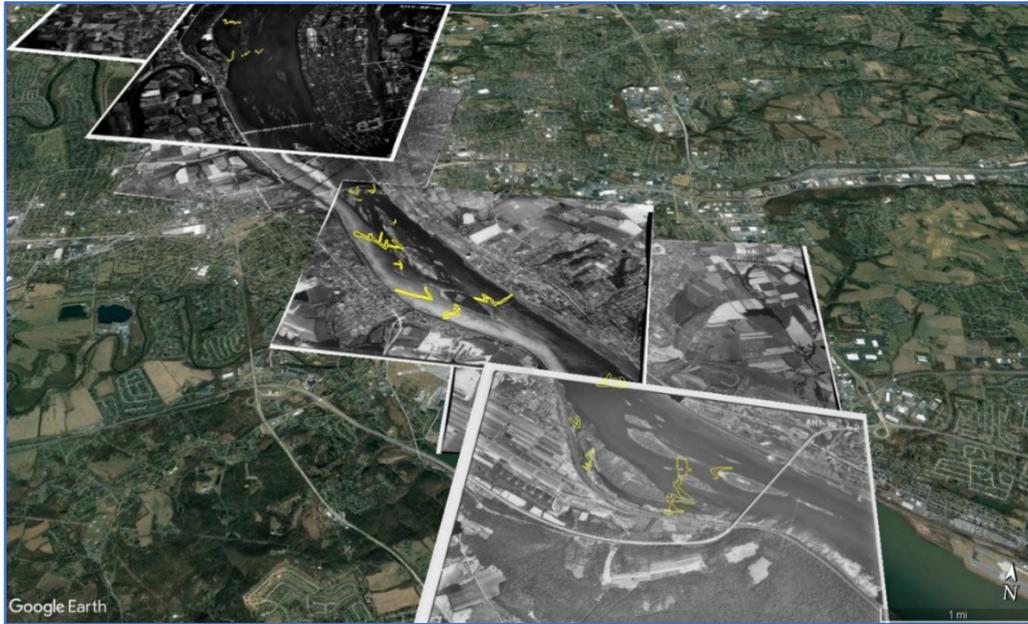


Figure 3. Historic aerial images are overlaid in Google Earth and the weir boundaries are traced using the polygon tool. These polygons are then saved and converted to Shapefiles for import into PA-SHARE.

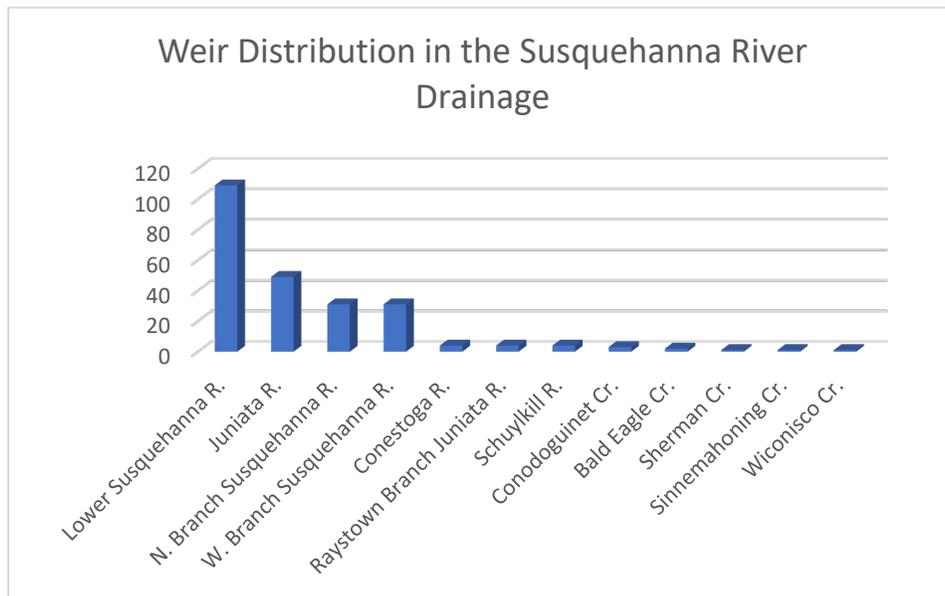


Figure 4. Graph showing the distribution of Pennsylvania's fish weirs within the Susquehanna River drainage.

Pennsylvania Archaeological Site Survey Annual Site Reporting Activity in 2021

The Susquehanna River was once hailed as a superb fishing ground, and evidence of this past can be plainly seen in its remaining fish weirs. Over the coming years I will continue identifying features and recording them in PA-SHARE. If you are interested in assisting with this endeavor, please contact me at memayhew@pa.gov.

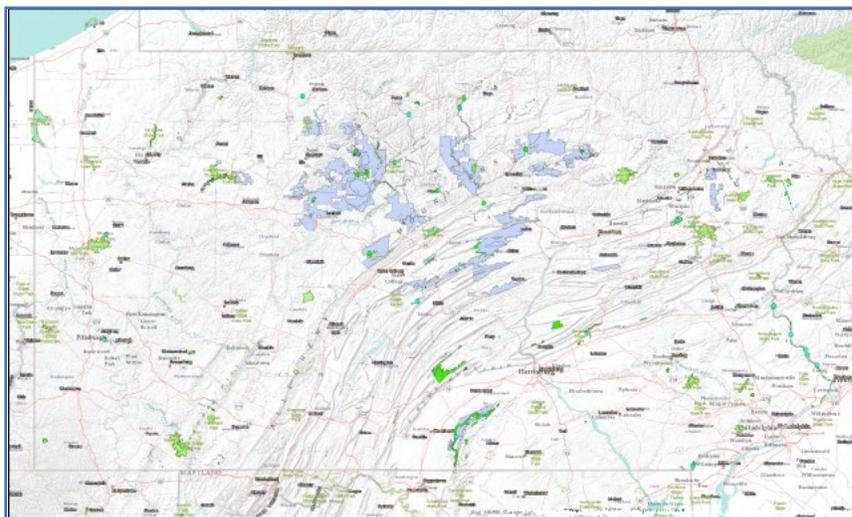
Steps toward Better Stewardship in Pennsylvania’s State Parks and Forests

Angela Jaillet-Wentling, M.A., RPA, DCNR Cultural Resources Program Coordinator

On May 18, 1971, Pennsylvania’s Environmental Rights Amendment was added to the state constitution. It reads, “The people have a right to clean air, pure water, and to the preservation of the natural, *scenic, historic and esthetic* values of the environment [Italics for emphasis]. Pennsylvania’s public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.”

With that and Section 106 of the National Historic Preservation and State History Code compliance in mind, we have our marching orders here at the Department of Conservation and Natural Resources (DCNR). In April 2021, nearly 50 years following the passage of this amendment, DCNR expanded their ongoing stewardship efforts to consider cultural and historic resources on the Commonwealth’s 121 state parks and 20 state forests more comprehensively by establishing the Cultural Resources Program coordinator position (held by myself). While currently a program of one supported by many, we are committed to development of a program that will include additional Secretary of Interior-qualified professionals in archaeology and architectural history. The program will seek to preserve, contextualize, and manage our shared public heritage and cultural resources for the benefit of present and future generations.

In the first year of the program, over 70 projects were reviewed with over 30 submissions to the PA-



SHARE system. As a knock-and-talk approach, I visited, met with, and field viewed historic and archaeological resources in approximately 25% of the state parks and forests. A data request from the SHPO identified the following previously recorded resources in the state parks and forests: 1,376

Figure 1. Cultural Resources Geographic Information Systems Data in the DCNR State Parks and Forests.

Pennsylvania Archaeological Site Survey Annual Site Reporting Activity in 2021

above-ground historic structures, 827 above-ground historic districts, 644 archaeological sites, and 35 historic markers. Many of our cultural resources do not appear in that current inventory, but we hope to change that.

By and large, what I encountered in the state parks and forests is not only a wealth of resources, but a sincere will to preserve and interpret our heritage for the public. It became apparent early on in my tenure at DCNR that the program needed to provide guidance and tools to the agency's staff. One way to do this was to develop an agency-wide programmatic agreement to guide Section 106 and State History Code reviews between DCNR and SHPO. As of writing this and following meetings and the involvement of DCNR's many bureaus, the two agencies are meeting at the end of January to begin discussions and drafting of this document.

Another integral tool was to get the Student Conservation Association (SCA) administered Pennsylvania Outdoor Corps (PAOC) Cultural Resources Crew (CRC) from the idea stage to a reality. As a dual annuitant to DCNR and PennDOT, Joe Baker began discussions about developing a cultural resources-focused crew with the SCA and PAOC several years ago. This past year, we hired the CRC field director, Kate Peresolak, M.A., RPA, in October 2021, and, in November/December, Kate and her two crew members (SCA employees, Reed Hertzler and River Missal) completed two Phase I archaeological surveys for campground expansions at Moraine and Ohiopyle State Parks. In January 2022, Kate and I completed a Phase I archaeological survey of a parking lot area and bus turnaround for the Jennings Environmental Education Center's Folz Schoolhouse. In total, the CRC excavated over 300 shovel test pits, identified two archaeological sites, and saved over \$200,000 for the Commonwealth's taxpayers.



Figure 2. From Right to Left: CRC Lead Kate Peresolak and Crew Members: Reed Hertzler and River Missal.

Beyond the recently completed archaeological surveys, the hope is that the CRC can provide support to the program, while also providing training and mentorship opportunities to aspiring archaeologists, architectural historians, and preservationists helping them to build successful careers in land and resources management. The project types that the program will undertake include: research, compliance, and inventory. Research-oriented investigations will be conducted in support of agency initiatives and interpretation efforts (i.e. Untold Stories, Penn's Parks for All) in collaboration with state parks and state forests. Compliance type projects such as Phase I (identification) and II (evaluation)-level archaeological and historic building surveys will also be part of their purview. The third component of the program will focus on the agency's inventory efforts allowing survey, recordation, assessment, and maintenance to become a priority.

Pennsylvania Archaeological Site Survey Annual Site Reporting Activity in 2021

Other large-scale and ongoing efforts for the DCNR's CR program included consultation with and as consulting parties. Initial tribal consultation with Federally-Recognized Tribes and Nations was undertaken for several projects and will continue as we develop both the relationships with ancestral stewards and internal policy to guide our efforts. The resolution of adverse effects was undertaken for Multiple Land and Water Conservation Fund Conversions on State Forest Land (after the fact) (2020PR01184), the Raccoon Creek State Park Dam Improvements Project (2018PR11549), and the Canoe Creek Connector Trail Project (2021PR06807). As consulting parties, DCNR commented on two Memorandum of Agreements (MOA), the Duke Low MOA (2019-2214-042) and the New Kernsville Dam Removal on the Schulykill River (2019PR01671).



Figure 3. On-Site Field Views at Camp Michaux with the Friends of Michaux, Local Stakeholders, and DCNR Staff (shown left to right: Roy Brubaker, Angie Jailliet-Wentling, and Anthony Kessler).

Volunteers and concerned citizens from around the Commonwealth have reached out in regards to numerous resources. One group in particular, Team Rhyolite (John Wah, Paul Marr, Bob Bodnar, and more), focuses their attention on the rhyolite quarries of the South Mountain area. While research and investigation of these resources is a prime objective of the group, in collaboration with Joe Baker, Casey Hanson, and Friends of the Michaux (State Forest), they have developed signage and a monitoring program to deter looting of the resources. They have also spent a good deal of time working with the forestry and parks professionals to help them understand and better preserve our cultural resources. Efforts like these predate the CR program, but we're happy to support them and develop them in other parts of the state. DCNR owes a vast debt to our tireless volunteers and we hope to assist and support them in their labors moving forward. I personally thank all those who have reached out with their concerns and stepped up as partners in preservation.

Documenting Pennsylvania's Submerged Vessels

Amanda Filmeyer, Indiana University of Pennsylvania

In March 2021, Pennsylvania SHPO replaced CRGIS with its new online GIS and cultural resources management system, PA-SHARE. This past summer, I was one of two graduate students from Indiana University of Pennsylvania who assisted the SHPO team in finalizing PA-SHARE. Although I was responsible for many assignments this summer, the most interesting one I undertook was the research of Pennsylvania's shipwrecks and dugout canoes, which are recorded in PA-SHARE as "submerged vessel" resources. Most of Pennsylvania's known shipwreck sites are in the waters of Lake Erie. My research for SHPO, however, identified 17 shipwrecks that were previously unrecorded in PASS files,

Pennsylvania Archaeological Site Survey Annual Site Reporting Activity in 2021

the majority of which are in the Monongahela and Delaware rivers. As a result of this research, there are now currently 38 historic shipwreck sites, and three dugout canoes present in PA-SHARE.

As a native of Philadelphia, I was excited to discover that three of these unrecorded vessels were in my own backyard. In the late 1910s, A.D. Cummins and Co., a ship broker company, commissioned three four-masted schooners as lumber barges. Delays from World War I resulted in the vessels not being launched until 1920, making them among the last four-masted schooners ever constructed in the United States (Cox 1986). These ships, called the *Albert Cummins*, *Marie Cummins*, and the *Francis McDonald*, had extremely short careers. Each ship sailed no more than two voyages before being permanently docked at the Philadelphia Ship Repair dock at the Mifflin Street Wharf. The vessels were in ownership limbo until they were abandoned in 1932, earning them the title of the “Dead Fleet” by locals. On August 27, 1947, all three ships were set ablaze on the orders of the state Bureau of Navigation, in the interest of safer navigation and a sightlier waterfront (Cox 1986). The “Dead Fleet” has been relatively undisturbed since their destruction and are still visible during low tide on the Delaware River, along with the remains of a paddle wheel steamer ship that was abandoned at an unknown time (Figure 1). Although records on the *Albert Cummins* were present in PASS files, there was no information on her sister ships or the nearby steamer ship.

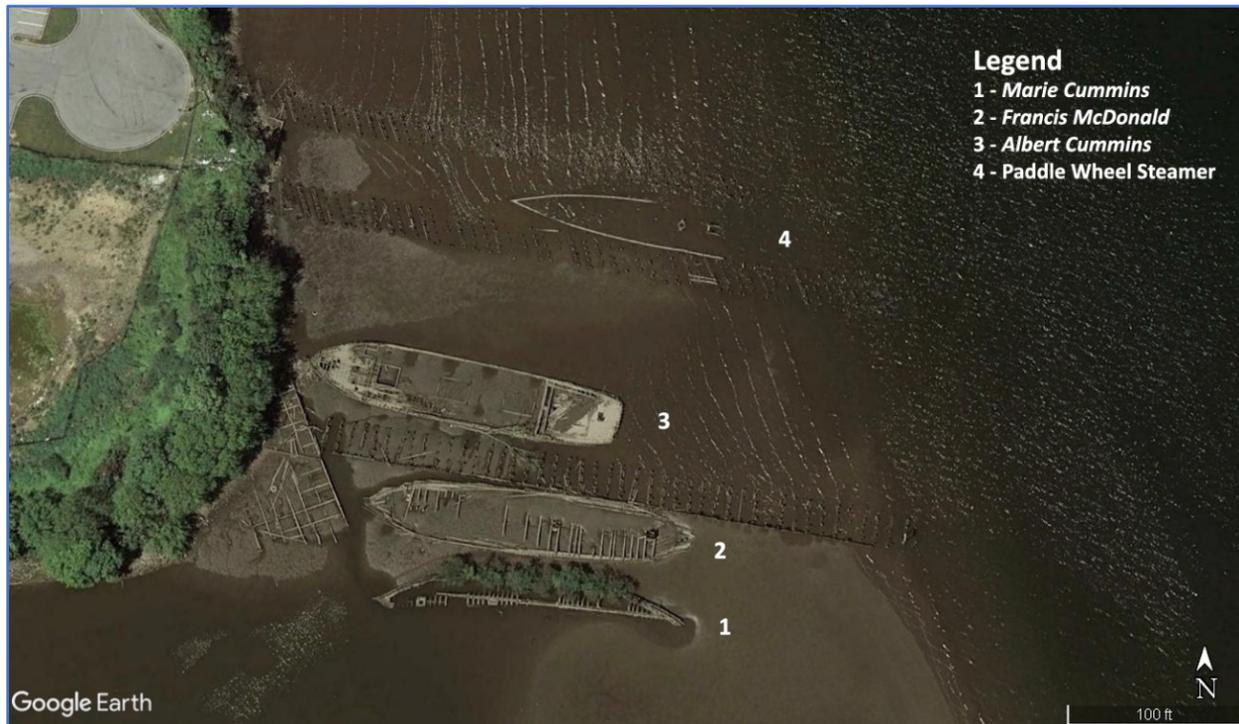


Figure 1: Aerial photograph of the Dead Fleet and the abandoned steamer ship, still docked along their derelict piers in the banks of the Delaware River. The wreckages are approximately 100-200 feet north of Pier 78.

Pennsylvania Archaeological Site Survey Annual Site Reporting Activity in 2021

One of the more unique features of PA-SHARE is its ability to provide unique information depending on the nature of the cultural resource. The system has separated historic shipwrecks and dugout canoes under the archaeological resource subtype “submerged vessels,” allowing the user to enter information concerning submerged setting, water depth and clarity, vessel loss cause, remains present, and more (Figure 2). Some submerged vessels, like the Dead Fleet, were easy to record into PA-SHARE because they were well-documented by both archaeological and historical reports. Other submerged vessels, however, proved to be more difficult to research. Despite their abundance, the shipwrecks in Lake Erie proved surprisingly difficult to research. Although the Pennsylvania Archeology Shipwreck and Survey Team (PASST) has contributed greatly to the identification of Lake Erie shipwrecks (e.g., Regional Science Consortium 2021), there were still major documentation gaps regarding field survey information and vessel information for both newly recorded shipwreck sites, and the shipwreck sites already present in PASS files. Much of the information therefore came from online diver communities and maritime historians (e.g., Swayze 2019).

RESOURCE		36PH0253 : Marie Cummins	2021RE01169: Undetermined Archaeological - Submerged Vessel
Submerged Vessel Resource Information			
Submerged Vessel Detail			
Submerged Vessel Type Lake Schooner	Vessel Name Marie Cummins	Vessel Narrative Originally ordered before WWI to be a lumber schooner. Sailed two voyages to Sweden with cargoes of crude sulfur. Returned to the Philadelphia Ship Repair Yard and never sailed again after September 29, 1921. Vessel was abandoned in 1932, and was burned on August 27, 1947 after the wrecks were deemed unsafe for navigation.	
Built Date 1920	Built Place Beaumont, Texas	Builder Beaumont Shipbuilding Company	
Length 189.5'	Breadth 41.1'	Depth Of Hold	
Draft 19.7'	Tonnage 1,167	Rig Propulsion	
Home Port Philadelphia, PA	Owners A. D. Cummins and Co.	Master None	
Crew None	Loss Date 08/27/1947	Reported Deaths None	
Cargo None			

Figure 2: Submerged vessel detail information for the wreckage site of the Marie Cummins (36PH253). This section is unique to submerged vessel archaeological resources in PA-SHARE.

Dugout canoes also proved challenging to research for a variety of reasons. Dugouts have been found preserved in lakes and bogs all along the eastern seaboard and into Ohio. In Pennsylvania they have been uncovered primarily in the glacial ponds of the Pocono Highlands. Although approximately 20 dugout canoes are known to exist in Pennsylvania, only three are currently documented in PA-SHARE. The reason for this gap in documentation is the lack of anthropological context for these

Pennsylvania Archaeological Site Survey

Annual Site Reporting Activity in 2021

vessels within the state. Only two dugouts from Pennsylvania have been reported within archaeological literature, and the Curtis Pond Canoe (36WY309) is the only one of the two to have been systematically recovered and documented within its in-situ environment (Baker 1998). The remaining vessels have never been published and were uncovered by locals who either donated the vessels to historical societies or kept them as family heirlooms. Since such finds attract public attention, newspaper clippings proved to be useful for gathering general information on ownership history and the general environment of the unpublished dugout canoes. Unfortunately, not enough information could be collected to enter additional dugout canoes into PA-SHARE, and it is unlikely that these vessels can or will be properly documented unless informant interviews or in-depth research for these unique objects are conducted.

Working at the PA SHPO this summer was one of the most interesting and educationally enjoyable experiences I ever had. As someone who has worked in cultural resource management for seven years, it was incredibly fulfilling to both learn PA-SHARE and to help improve it for its userbase. As a result of this experience, I assisted in training several IUP archaeology graduate students on how to use the platform, a skill that will undoubtedly prove useful in their future careers. In addition to gaining new skills, it was an incredible privilege to work with the SHPO team and learn from their vast range of knowledge and expertise.

References

Baker, Joe

1998 *The Curtis Pond Canoe: The Identification, Recovery, and Context of a Dugout Vessel from the Pocono Highlands*. PHMC/BHP, The Commonwealth Archaeology Program, Report #2.

Cox Jr., J. Lee

1986 *A Historical and Archaeological Assessment of Three Submerged Cultural Resources in Pennsylvania*. Prepared for the PHMC, ER# 1986-R002-042-A.

Regional Science Consortium

2021 Lake Erie Shipwrecks Information by PASST. Electronic Document.
<https://www.regsciconsort.com/lake-erie-shipwrecks/>, accessed June 10, 2021.

Swayze, David D.

2019 Great Lakes Shipwreck Files: Info and Data on More than 5,000 Shipwreck Losses on the Great Lakes. Electronic Document. <https://greatlakesrex.wordpress.com/>, accessed June 30, 2021

Pennsylvania Archaeological Site Survey Annual Site Reporting Activity in 2021

SHPO Survey Activities

Most of the PASS program's survey activities were suspended in 2021 due to staffing changes and the launch of PA-SHARE. Currently, 2022 is looking to be an exciting year as we resume our internship program and have incorporated archaeological survey into our Baseline survey program which focuses on identifying underrepresented historic resources across Pennsylvania. We are also looking forward to continuing our outreach efforts, and various survey and documentation projects.

For more information on site registration and survey, please contact Taylor Napoleon at tnapoleon@pa.gov.

Pennsylvania Archaeological Site Survey
Annual Site Reporting Activity in 2021

Data Summary and Maps

County	1/1/2022	1/1/2021	New	Deletions**	Density*
Adams	592	591	1	-	1.13 sites / sq. mile
Allegheny	772	763	9	-	1.06 sites / sq. mile
Armstrong	591	591	-	-	0.91 sites / sq. mile
Beaver	414	413	1	-	0.94 sites / sq. mile
Bedford	348	349	-	1	0.34 sites / sq. mile
Berks	998	992	6	-	1.16 sites / sq. mile
Blair	130	130	-	-	0.25 sites / sq. mile
Bradford	360	357	3	-	0.31 sites / sq. mile
Bucks	490	473	17	-	0.80 sites / sq. mile
Butler	544	539	5	-	0.69 sites / sq. mile
Cambria	219	219	-	-	0.32 sites / sq. mile
Cameron	72	72	-	-	0.18 sites / sq. mile
Carbon	177	177	-	-	0.44 sites / sq. mile
Centre	571	570	1	-	0.51 sites / sq. mile
Chester	1082	1072	10	-	1.42 sites / sq. mile
Clarion	212	212	-	-	0.36 sites / sq. mile
Clearfield	118	116	2	-	0.10 sites / sq. mile
Clinton	230	229	1	-	0.26 sites / sq. mile
Columbia	59	59	-	-	0.12 sites / sq. mile
Crawford	502	494	8	-	0.50 sites / sq. mile
Cumberland	236	234	2	-	0.43 sites / sq. mile
Dauphin	296	271	25	-	0.57 sites / sq. mile
Delaware	188	188	-	-	1.02 sites / sq. mile
Elk	440	440	-	-	0.55 sites / sq. mile
Erie	358	349	9	-	0.44 sites / sq. mile
Fayette	594	591	3	-	0.74 sites / sq. mile
Forest	457	398	59	-	1.09 sites / sq. mile
Franklin	455	454	1	-	0.60 sites / sq. mile
Fulton	80	80	-	-	0.18 sites / sq. mile
Greene	502	501	1	-	0.87 sites / sq. mile
Huntingdon	235	234	1	-	0.26 sites / sq. mile
Indiana	493	492	1	-	0.60 sites / sq. mile
Jefferson	202	200	2	-	0.31 sites / sq. mile
Juniata	132	132	-	-	0.34 sites / sq. mile
Lackawanna	86	86	-	-	0.19 sites / sq. mile

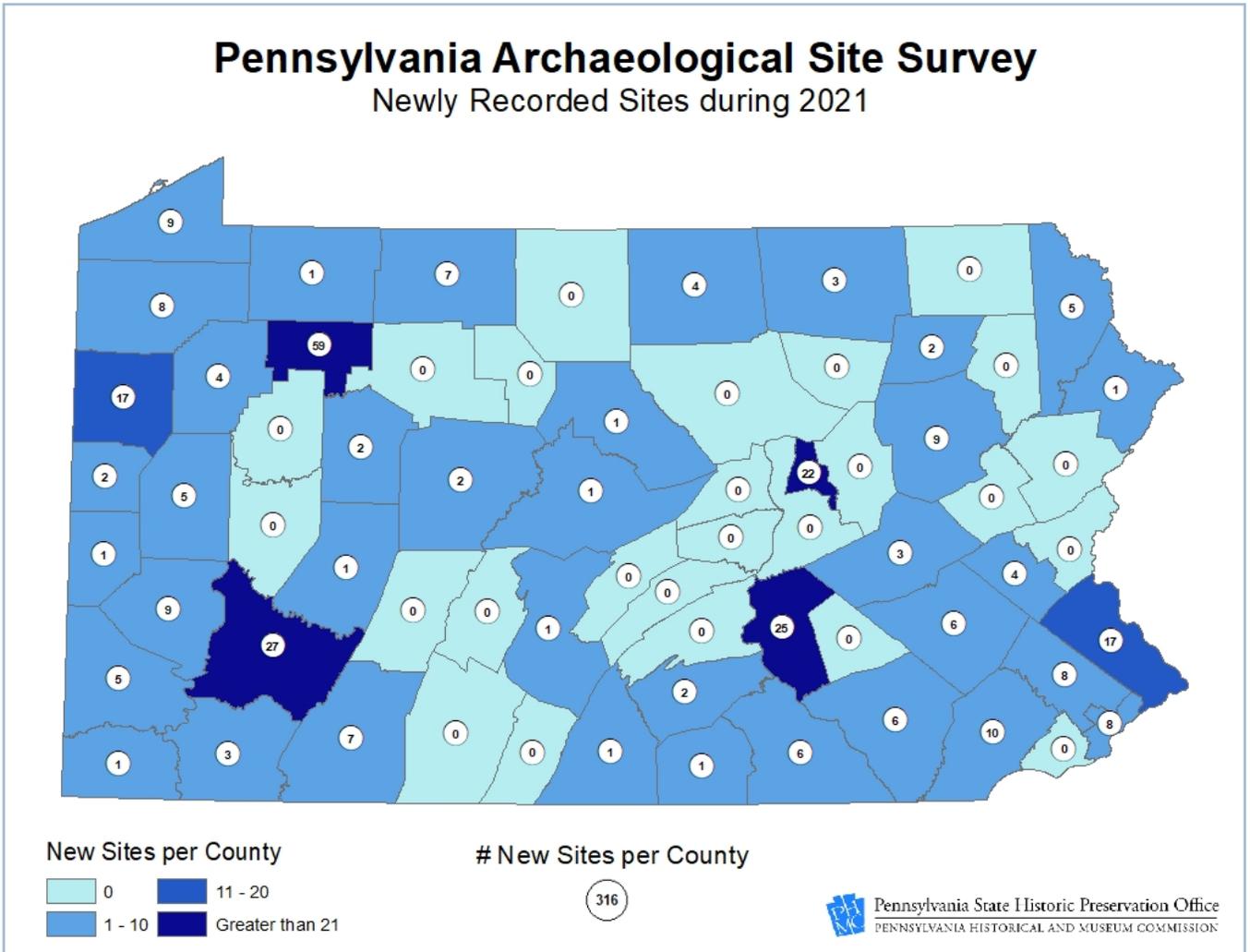
Pennsylvania Archaeological Site Survey
Annual Site Reporting Activity in 2021

County	1/1/2022	1/1/2021	New	Deletions**	Density*
Lancaster	1637	1631	6	-	1.73 sites / sq. mile
Lawrence	362	360	2	-	0.99 sites / sq. mile
Lebanon	567	567	-	-	1.56 sites / sq. mile
Lehigh	381	377	4	-	1.09 sites / sq. mile
Luzerne	362	353	9	-	0.41 sites / sq. mile
Lycoming	354	354	-	-	0.29 sites / sq. mile
McKean	346	339	7	-	0.35 sites / sq. mile
Mercer	293	276	17	-	0.44 sites / sq. mile
Mifflin	121	121	-	-	0.28 sites / sq. mile
Monroe	297	297	-	-	0.49 sites / sq. mile
Montgomery	511	503	8	-	1.03 sites / sq. mile
Montour	116	94	22	-	0.89 sites / sq. mile
Northampton	359	359	-	-	0.95 sites / sq. mile
Northumberland	200	200	-	-	0.44 sites / sq. mile
Perry	90	90	-	-	0.16 sites / sq. mile
Philadelphia	255	247	8	-	1.98 sites / sq. mile
Pike	272	271	1	-	0.50 sites / sq. mile
Potter	53	53	-	-	0.05 sites / sq. mile
Schuylkill	103	100	3	-	0.13 sites / sq. mile
Snyder	299	299	-	-	0.91 sites / sq. mile
Somerset	501	494	7	-	0.46 sites / sq. mile
Sullivan	33	33	-	-	0.07 sites / sq. mile
Susquehanna	229	229	-	-	0.27 sites / sq. mile
Tioga	186	182	4	-	0.16 sites / sq. mile
Union	151	151	-	-	0.47 sites / sq. mile
Venango	331	327	4	-	0.49 sites / sq. mile
Warren	698	697	1	-	0.77 sites / sq. mile
Washington	1838	1833	5	-	2.14 sites / sq. mile
Wayne	314	309	5	-	0.42 sites / sq. mile
Westmoreland	1234	1207	27	-	1.21 sites / sq. mile
Wyoming	132	130	2	-	0.33 sites / sq. mile
York	478	472	6	-	0.53 sites / sq. mile
TOTALS	26,338	26,023	316	1	0.59 sites / sq. mile

*Density is measured as “x sites / 1 square mile.” It is calculated by dividing the number of recorded sites in the county by the area of the county in square miles.

**One site in Bedford County was deleted based on a 2021 survey that determined that two overlapping sites were located on the same landform and contained the same artifact and material types. The sites were merged into a single site.

Pennsylvania Archaeological Site Survey
Annual Site Reporting Activity in 2021



Map displaying the number of new sites recorded in each county last year.

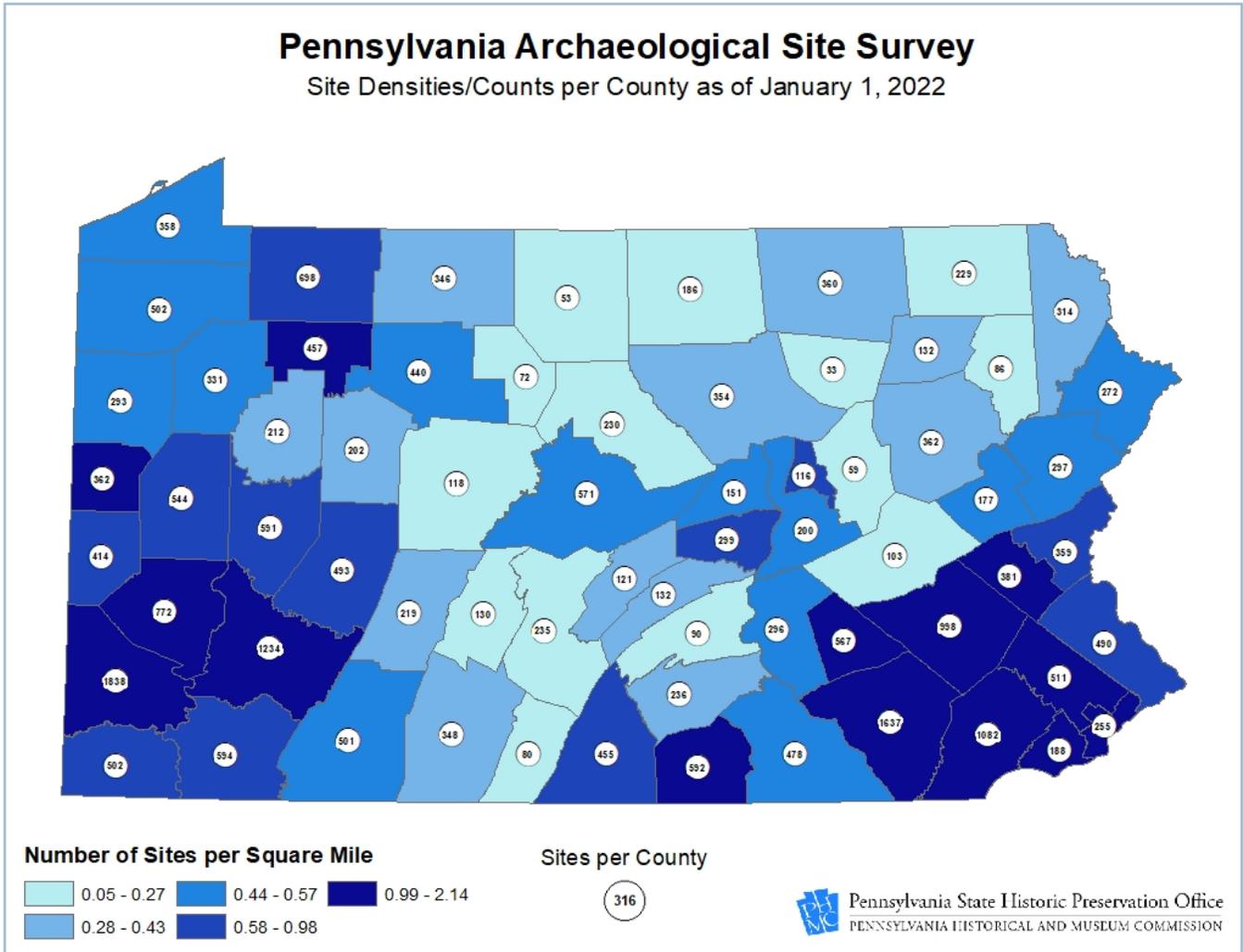
Ten Counties with the Greatest Increase in Sites during 2021

County	Number Recorded	% of Total Increase
Forest	59	18.67%
Westmoreland	27	8.54%
Dauphin	25	7.91%
Montour	22	6.96%
Mercer	17	5.37%
Bucks	17	5.37%
Chester	10	3.16%
Erie	9	2.84%
Luzerne	9	2.84%
Allegheny	9	2.84%
TOTAL:	204	64.50%

Ten Counties with the Greatest Density of Recorded Sites

County	Sites / Sq. Mile
Washington	2.14
Philadelphia	1.98
Lancaster	1.73
Lebanon	1.56
Chester	1.42
Westmoreland	1.21
Berks	1.16
Adams	1.13
Lehigh	1.09
Forest	1.09

Pennsylvania Archaeological Site Survey
Annual Site Reporting Activity in 2021



Map displaying site densities and total counts per county.

Pennsylvania Archaeological Site Survey
Annual Site Reporting Activity in 2021

Ten Counties with the Highest Numbers of Recorded Sites

County	Number	% of Total Sites
Washington	1,838	6.98%
Lancaster	1,637	6.22%
Westmoreland	1,234	4.69%
Chester	1,082	4.11%
Berks	998	3.79%
Allegheny	772	2.93%
Warren	698	2.65%
Fayette	594	2.26%
Adams	592	2.25%
Armstrong	591	2.24%
TOTAL	10,036	38.12%

Ten Counties with the Lowest Numbers of Recorded Sites

County	Number	% of Total Sites	Observations
Sullivan	33	0.13%	<i>No change from 2018</i>
Potter	53	0.20%	<i>No change from 2019</i>
Columbia	59	0.22%	<i>No change from 2017</i>
Cameron	72	0.27%	<i>No change from 2016</i>
Fulton	80	0.30%	<i>No change from 2018</i>
Lackawanna	86	0.33%	<i>No change from 2019</i>
Perry	90	0.34%	<i>No change from 2019</i>
Schuylkill	103	0.39%	
Montour	116	0.44%	
Clearfield	118	0.45%	
TOTAL	810	3.07%	